Supplemental Main Terminal
Phase II Site Investigation Report
Martin State Airport
701 Wilson Point Road
Middle River, Maryland

Prepared for:

Lockheed Martin Corporation

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ACRONYMS

ATC	anticipated typical concentration
BTEX	benzene, toluene, ethylbenzene, and xylenes
C.A.T.	cable-avoidance tool
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	chain of custody
CFR	Code of Federal Regulations
DO	dissolved oxygen
DPT	direct-push technology
DRO	diesel-range organics
EESH	energy, environment, safety, and health
EGIS	environmental geographic information system
FAA	Federal Aviation Administration
GIS	geographic information system
GPR	ground-penetrating radar
GPS	global positioning system
GRO	gasoline-range organics
GSP	Greater Strawberry Point
HASP	health and safety plan
IDW	investigation-derived waste
Lockheed Martin	Lockheed Martin Corporation
MAA	Maryland Aviation Administration
MDE	Maryland Department of the Environment
MDOT	Maryland Department of Transportation
µg/L	microgram(s) per liter
µg/kg	microgram(s) per kilogram
mg/L	milligram(s) per liter
mg/kg	milligram(s) per kilogram
MIP	membrane-interface probe
MSA	Martin State Airport
msl	mean sea level
MW	monitoring well
NPDES	National Pollutant Discharge Elimination System

ORP	oxidation-reduction potential
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PDF	portable document format
PID	photoionization detector
PM	project manager
PPE	personal protective equipment
PVC	polyvinyl chloride
REC	recognized environmental condition
SB	soil boring
SG	soil gas
SP	Strawberry Point
SPCCP	spill prevention control and countermeasures plan
SVOC	semivolatile organic compound
TCE	trichloroethene
TCLP	toxicity characteristic leaching procedure
Tetra Tech	Tetra Tech, Inc.
TPH	total petroleum hydrocarbons
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

Section 1
Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. (Tetra Tech) has prepared this report to document the approach and results of a supplemental Phase II environmental investigation of the Main Terminal Area of Martin State Airport (MSA) in Middle River, Maryland. This investigation supplements the previous 2011 Phase II site investigation of the Main Terminal Area. The Main Terminal Area includes the northwestern portion of Martin State Airport and covers approximately 280 acres east of Wilson Point Road and Dark Head Cove. The locations of Martin State Airport and the Main Terminal Area are shown in Figures 1-1 and 1-2. This supplemental Phase II investigation consisted of additional surface and subsurface explorations and tests to further assess soil and groundwater conditions near the main terminal, and evaluate whether petroleum and/or hazardous substances may be present as a result of past site operations. This investigation was conducted in accordance with the *Main Terminal Phase II Site Investigation Work Plan* (Tetra Tech, 2011).

The 2011 Phase II investigation focused on several recognized environmental condition (REC) areas at the main terminal that were first documented in two environmental reports prepared in 2010: the *Environmental Evaluation Report for Martin State Airport Main Terminal* (Tetra Tech, 2010a), and the *Environmental Evaluation Addendum, Martin State Airport Main Terminal* (Tetra Tech, 2010b). Identification of these recognized environmental conditions, which include hangars 1–6 and associated facilities, is based on review and evaluation of historical records and subsequent field verification. Several recognized environmental conditions pertain to operations dating back to the original airport construction in the late 1930s and early 1940s. The recognized environmental conditions specifically investigated as part of this supplemental Phase II investigation include:

- recognized environmental condition #2 (former fueling station B at hangar 6 apron)
- recognized environmental condition #3 (former fueling and defueling pits and fuel-oil underground storage tanks [USTs] at hangar 1)

- recognized environmental condition #9 (hangars 4 and 5 heating/boiler rooms)

- recognized environmental condition #21 (hangar 5 painting/stripping area and acid-neutralization system)

The investigation entailed the following activities, which are described in this report:

- obtained utility clearances, access arrangements, and associated permits for intrusive investigations from Lockheed Martin, Maryland State Airport, Maryland Aviation Administration (MAA), and the Federal Aviation Administration (FAA), as applicable, to conduct field activities

- advanced five soil borings and collected soil samples for chemical analysis using direct-push technology (DPT)

- installed six two-inch-diameter groundwater monitoring wells using a low-profile mini-sonic drill rig

- collected and analyzed groundwater samples and water levels from the six new wells and the six wells installed in 2011

- obtained synoptic groundwater-level measurements in the new and previously installed Main Terminal Area wells

- conducted professional surveys of locations for advancing soil borings and installing monitoring wells, using a Maryland-licensed surveyor

- collected, characterized, and stored investigation-derived waste (IDW) and disposed of such waste at an off-site, Lockheed Martin-approved, state-licensed treatment or disposal facility

- performed laboratory chemical analyses and chemical-data validation of soil and groundwater samples

- evaluated environmental sampling data

This report is organized as follows:

Section 2—Site Background: Briefly describes the site history, current conditions, and a summary of previous investigations.

Section 3—Investigation Approach and Methodology: Presents the technical approach to the investigation and describes the field methodologies used.

Section 4—Results: Presents and discusses the results of the field program.

Section 5—Summary and Recommendations: Summarizes the investigation program and findings and provides recommended courses of action.

Section 6—References: Cites references used to compile the report.

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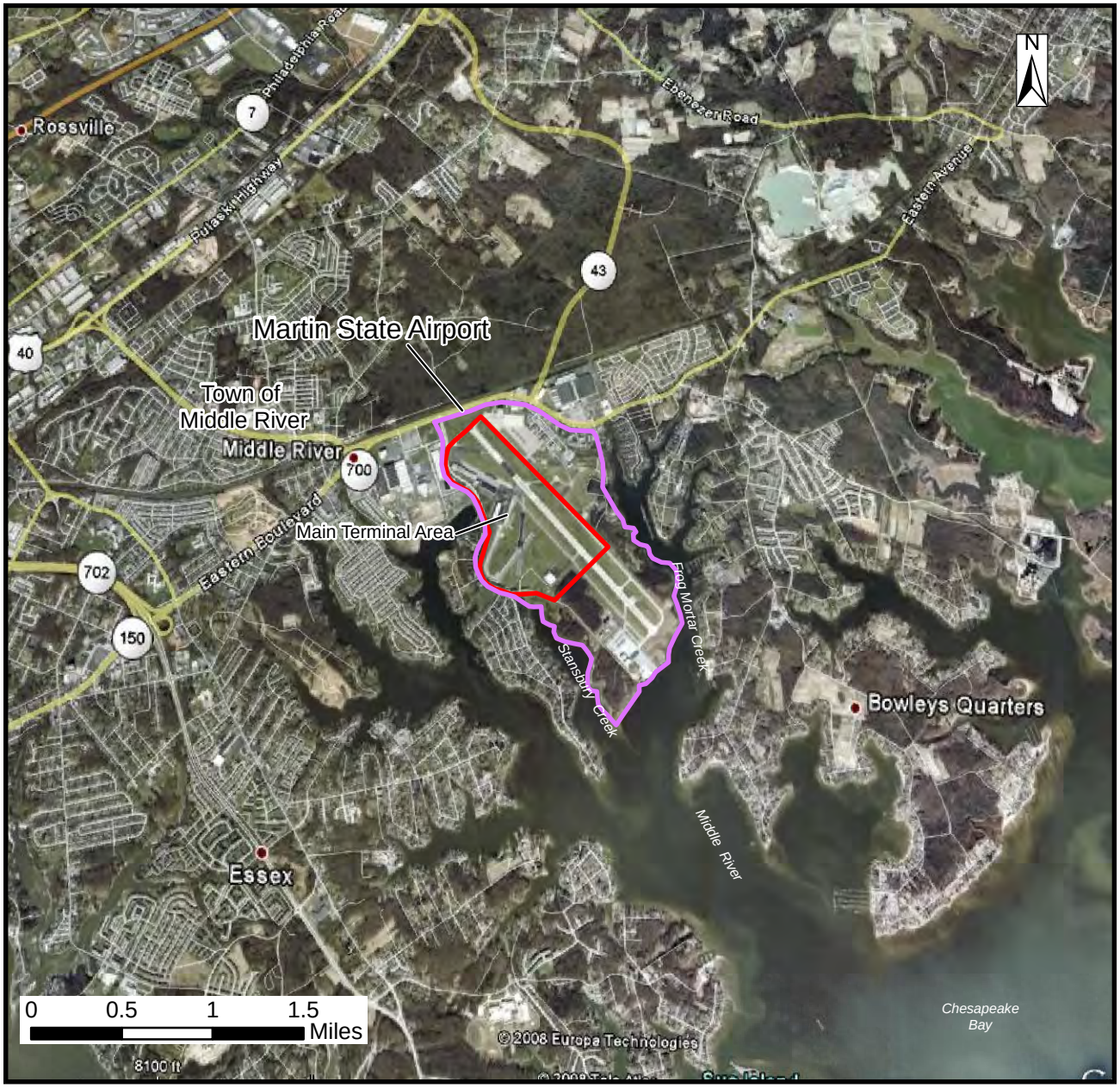

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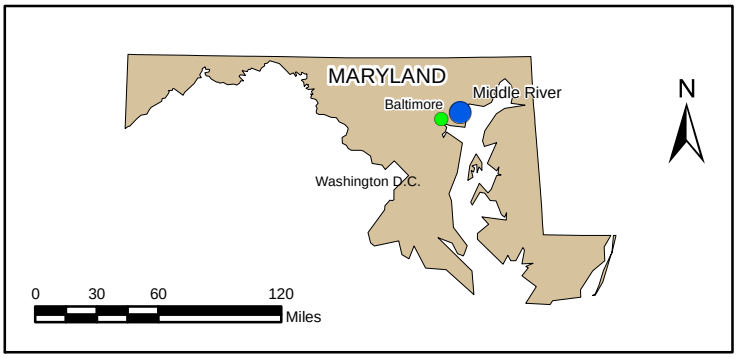

FIGURE 1-1

MARTIN STATE AIRPORT AND MAIN TERMINAL AREAS LOCATION MAP

Lockheed Martin, Martin State Airport
Middle River, Maryland

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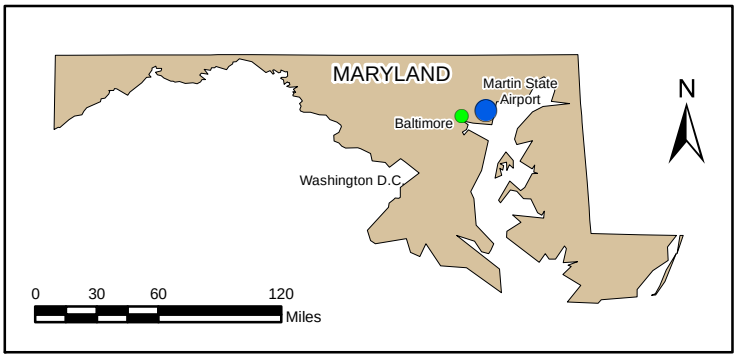

FIGURE 1-2

MARTIN STATE AIRPORT
MAIN TERMINAL BUILDINGS
AND SURROUNDING FEATURES

Lockheed Martin, Martin State Airport
Middle River, Maryland

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Section 2
Site Background

2.1 SITE DESCRIPTION

2.1.1 Location

Martin State Airport (MSA) is at 701 Wilson Point Road in Middle River, Maryland. It is bounded by Frog Mortar Creek to the east and Stansbury Creek to the west (see Figures 1-1 and 1-2). Both creeks are tidal tributaries of the Chesapeake Bay. The area under investigation is the Main Terminal Area of MSA. The main terminal comprises approximately 280 acres in the northwestern portion of MSA, east of Wilson Point Road and Dark Head Cove, and consists of the main terminal building, aircraft hangars, aircraft fueling stations, several taxiways, and the northern portion of the runway. The investigation documented in this report was conducted in only a portion of the Main Terminal Area, primarily around the terminal and hangar buildings.

2.1.2 History

The current MSA property (approximately 775 acres) was part of the Glenn L. Martin Company's approximately 1,260-acre property (including surrounding areas) containing manufacturing facilities. The Glenn L. Martin Company purchased six parcels of relatively undeveloped land from private landowners during the spring and summer of 1929. Nine additional parcels were acquired from private landowners in the 1940s and 1950s. Three runways, hangar 13, and the airport administration building were built in 1939–1940. Hangars 4 and 6 and the Strawberry Point (SP) hangar were completed in 1940–1941. In 1975, Martin Marietta Corporation transferred the properties that currently make up MSA to the State of Maryland.

In July 1955, the Maryland Air National Guard 104th Tactical Fighter Group began leasing property in the northwestern portion of MSA from the Glenn L. Martin Company. On April 1, 1960, the 135th Tactical Airlift, previously based in Baltimore, transferred to MSA, and by October 1962, the 104th Tactical Fighter Group had been reorganized and designated the

175th Tactical Fighter Group. The Glenn L. Martin Company consolidated with American Marietta Corporation in September 1961 to form the Martin Marietta Corporation.

A 1959 Factory Insurance Association map of the Main Terminal Area (Tetra Tech, 2010a) shows activities within the hangars, as well as utilities, oil-burning equipment, and petroleum storage facilities. The map also shows cross-sectional views of the hangars. Hangars 1–6 are shown with dimensions and layouts approximately consistent with their current configuration. Concrete aprons are shown along the northeastern edge of hangars 1–3, and along the southeastern edge of hangars 4–6. Fueling stations, each containing five 5,000-gallon underground storage tanks (USTs), are shown on opposite sides of the concrete aprons.

Other petroleum storage areas outside the hangars are also noted on the 1959 map. A fueling pit and defueling pit are shown near the northernmost corner of hangar 1, next to two fuel-oil USTs. Two USTs are also shown near the southern corner of hangar 3, while hangars 4 and 6 housed two fuel oil USTs. The 1959 map also shows a propeller cleaning area at hangar 1, a parachute drying area at hangar 4, and a machine gun cleaning and assembly area.

2.1.3 Current Conditions

The Maryland Aviation Administration (MAA) currently operates MSA on behalf of the Maryland Department of Transportation (MDOT). MSA occupies the administration building (Main Terminal building), aircraft hangars, a 7,000-foot long runway, several taxiways, and the Maryland state police hangar. MAA manages more than 130,000 square feet of heated hangar space and 190 smaller aircraft hangars. The southwestern portion of MSA contains numerous aboveground fuel storage tanks for Jet A and Avgas 100LL fuels. MSA is also home to more than 20 commercial tenants that provide fuels and lubricants, helicopter avionics repair, and flight instruction. MSA also hosts Baltimore County police aviation and marine units and the Glenn L. Martin Museum (MAA, 2009).

2.1.4 Land Use

MSA is generally characterized as a moderately developed tract in a largely suburbanized, moderate-density populated setting. Land use surrounding MSA is a combination of mixed suburban, industrial, and commercial lightly-to-moderately developed tracts and woodland tracts (see Figures 1-1 and 1-2). MSA is bordered on the north by Eastern Boulevard

(Maryland Route 150) and an AMTRAK railroad line. Undeveloped woodland tracts and low-density residential properties are north of Eastern Boulevard and the AMTRAK line. MSA's eastern, southern, and western boundaries are bordered by Frog Mortar Creek and Stansbury Creek. Lockheed Martin Corporation's (Lockheed Martin's) Middle River Complex lies along MSA's northwestern boundary. Low-to-medium density residential and light-commercial land uses (e.g., shopping centers, convenience stores, restaurants, etc.) characterize properties beyond the creeks east, south, and west of MSA. The high-density residential community of Bengies Corner lies farther east of MSA, and Hawthorne Park (another high-density residential community) lies farther west. The town of Middle River is approximately 1.5 miles northwest of MSA.

2.1.5 Climate

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

2.1.6 Physiography

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

2.1.7 Topography

Most of MSA's land surface is generally flat to gently sloping in the areas of the runway, taxiways, and surrounding support operations. The runway forms a northwest–southeast trending topographic ridge, or drainage divide, that slopes gently from the northwest end to the southeast end. Runway elevations range from slightly more than 20 feet above mean sea level (msl) at the northern end of the runway to slightly more than 10-feet above msl at the southern end of the runway. The land slopes away from the runway toward Frog Mortar Creek to the northeast and Stansbury Creek to the southwest. The Main Terminal Area is southwest of Taxiway Tango (labeled as "Taxiway T" on Figure 1-2). Site topography ranges from flat to gently sloping north, east, and south of hangars 1–6, and steeply sloping alongside the administration building and hangars.

2.1.8 Surface Water Hydrology

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

Surface drainage from the Main Terminal Area is discharged via multiple outfalls into Dark Head Cove. Outfall 07 has a drainage area of 30 acres and drains runway access, parking, commercial tenant buildings, private tenant hangars, and a wetland-mitigation site. The drainage area also includes grassy surfaces along Wilson Point Road and Strawberry Point Road. Impervious areas include taxi lane B and aircraft and vehicle parking areas. The airport's wetland-mitigation site and bordering vegetated areas cover this drainage area. Outfall 07 is at the exit of an existing 24-inch storm drain system. The outfall is monitored monthly for potential oil discharges to surface water. Secondary containment drains are also routinely inspected and emptied of storm water.

All storm water runoff originating from MSA discharges to outfall areas specified in the facility's general National Pollutant Discharge Elimination System (NPDES) permit No. MDR 05501,

"General Discharge" permit No. 05-SF-5501. The permit has an effective date of November 12, 2004 and expired on November 12, 2009. However, the Maryland Department of the Environment (MDE) has administratively extended the current permit and it remains in effect until MDE issues a new general permit.

The site's general industrial permit has no monitoring requirements. However, limited monitoring is performed as part of the "Municipal Separate Storm-Sewer System" permit issued by the City of Baltimore and required under NPDES (40 Code of Federal Regulations [CFR] Part 122) as part of the Illicit Discharge Detection and Elimination program. This limited monitoring includes laboratory analysis for ammonia, dissolved oxygen, surfactants, fecal coliform, potassium, water temperature, conductivity, pH, and fluoride concentrations; analysis is done in monitored outfalls during annual inspections. Visual inspections are performed routinely and annual reports are submitted to MDE.

2.1.9 Geology and Hydrogeology

MSA is in the western shore of the Coastal Plain physiographic province. Regional and local studies (Vroblesky and Fleck, 1991; Chapelle, 1985) indicate that the MSA lies on the Patapsco Formation, which consists of complex and interbedded mixtures of gray, brown, and red sands, silts, and clays originating from sediment deposition in a low coastal plain traversed by low-gradient meandering streams. Below the Patapsco Formation lies a regionally extensive, thick, clay confining-unit known as the Arundel Formation. This massive and probably impermeable unit underlies the site and surrounding area, outcrops northwest of the site, and dips and thickens to the southeast. The Arundel Formation extends as far east as Cambridge, Maryland, where it is more than 600 feet thick.

Regional lithologic information suggests that the Arundel Formation may be 150 feet thick at MSA (Vroblesky and Fleck, 1991; Chapelle, 1985). The formation probably acts as an impermeable barrier to the downward movement of any constituents found in the surficial-aquifer. The base of the Arundel Formation (i.e., the top surface of the deeper Patuxent Formation) is approximately 225-feet below msl near MSA (Vroblesky and Fleck, 1991; Chapelle, 1985). Consequently, the depth to the base of the Arundel Formation may range from 235–255-feet below grade at MSA.

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

2.1.10 Vicinity Subsurface Conditions

An extensive, ongoing, subsurface investigation has been conducted at MSA's Dump Road Area, located east of the Main Terminal Area and adjacent to Frog Mortar Creek. Less extensive environmental investigations have been conducted at SP and Greater Strawberry Point (GSP), located southeast of the Main Terminal Area. As part of the Dump Road Area investigation, numerous shallow and deep soil-borings have been advanced to collect soil samples for subsurface lithologic information. Synoptic water levels, single-well permeability tests, and pumping tests were conducted to characterize the subsurface hydraulic conditions at the Dump Road Area.

Studies at the Dump Road Area (Tetra Tech, 2010c) indicate that the subsurface hydrogeology consists of a surficial aquifer (i.e., the Patapsco Formation) containing highly heterogeneous mixtures of unconsolidated sand, silt, gravel/sand mixtures, and clay. A layer of fill consisting of heterogeneous sand, silt, and clay overlies these native sediments. For data evaluation and correlation, the surficial aquifer was divided into the upper, intermediate, and lower surficial-aquifer zones. The lower surficial-aquifer zone was encountered up to approximately 45–73 feet below msl and overlies at least several feet of stiff, dense clay. In a recent lithologic study of the area beneath the lower surficial-aquifer in the Dump Road Area (Tetra Tech, 2009), data from four deep wells indicate clay layers six to 40 feet thick, as well as alternating sand and silt aquifers and clay aquitards, referred to as deep confined-aquifer zones.

2.2 PREVIOUS INVESTIGATIONS

2.2.1 Preliminary Assessment

Numerous environmental investigations have been conducted at the Dump Road Area, SP area, and GSP area, beginning with MDE's preliminary assessment in 1989 that identified areas of

concern near a sand pit under the current Taxiway Tango. This area had reportedly been used by the Glenn L. Martin Aircraft Company from the 1930s through the 1950s to dump spent battery acid, acid-type strippers, and other acidic solutions, as well as dredge spoils and construction debris (MAA, 2009). In 1956, a second pit was constructed closer to Frog Mortar Creek, and the first pit was filled during construction of Taxiway Tango. These areas became subject to the federal Resource Conservation and Recovery Act regulations which were in effect at the time of the preliminary assessment. In addition, at the time of the preliminary assessment, the United States Environmental Protection Agency (USEPA) evaluated the sand pits near Taxiway Tango to assign a possible hazard ranking for further evaluation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). At that time, USEPA found no signs of waste disposal, and the site was classified as "No Further Remedial Action Planned" under CERCLA (MAA, 2009).

In July 1991, four drums were uncovered during installation of underground electric cables adjacent to Taxiway Tango and north of the Main Terminal Area. These drums contained dried zinc-chromate paint and were removed by the MAA. The discovery of these drums, and subsequent environmental sampling indicating chemical impacts to soil and groundwater, are the basis of the additional investigations being conducted at the Dump Road Area to date.

2.2.2 Main Terminal Environmental Evaluations

Investigations directly related to the Main Terminal Area include the *Environmental Evaluation Report for Martin State Airport Main Terminal* (Tetra Tech, 2010a) and the *Environmental Evaluation Addendum for Martin State Airport Main Terminal* (Tetra Tech, 2010b). These evaluations concentrated on environmental impacts to the site resulting from practices carried out during the period 1929–1975, when the Glenn L. Martin Company and Martin Marietta owned and operated on the property. Possible areas of environmental concern at the Main Terminal Area were identified through historical aerial photographs, facility records, local and federal library documents, museum records, regulatory data, environmental database reviews, interviews with former employees, and locating and reviewing environmental reports and data.

Several recognized environmental conditions (RECs) were identified at the site, based on the presence or likely presence of hazardous substances and/or petroleum products under conditions that could indicate a historical, existing, or potential release to the property's structures, soil,

groundwater, or surface water. The environmental evaluation identified nine RECs (RECs #1–9) and five potential RECs (RECs #10–14) in the Main Terminal Area. The addendum report (Tetra Tech, 2010b) identifies eight additional RECs (RECs #15–22) and provides supplemental details on 10 of the initial RECs and possible RECs. Additional information obtained during development of the addendum report led to upgrading potential REC #14 to a full REC, due to discovery that an UST that had once been at this location. Locations of the Main Terminal Area RECs, exclusive of potential RECs #10–13, are shown in Figure 2-1.

Four RECs pertain to former aircraft fueling operations (RECs #1–4). Two other RECs were identified in connection with former hangar operations before 1975 (RECs #5 and 6), and another four RECs relate to former heating equipment and related oil storage facilities for the hangars (RECs #8, 9, 14, 15, and part of REC #3). REC #7 pertains to a historical missile-engine testing area. REC #18 is associated with testing operations conducted in the hangars. RECs #16 and 17 were identified because it is possible these areas may have stored, disposed of, or used solvents and petroleum products. Part of REC #19 and REC #20 are associated with equipment housed in the hangars, and part of REC #19 and REC #21 relate to historical site operations in the hangars. REC #22 relates to the materials and operations involved in cleaning and drying parachutes, although the exact nature of those materials and operations remains unclear. The following sections detail the RECs identified by the environmental evaluations.

2.2.2.1 REC #1—Former Fueling Station "A" at Hangar 1 Apron

This REC area contained five 5,000 gallon USTs historically used to store gasoline or aviation fuel. Presumably, a fuel-pump island or similar dispensing equipment was also at this site. A 1977 letter from MDOT, which presented their initial spill prevention control and countermeasures plan (SPCCP; MDOT, 1977) to MSA, indicates that the north ramp fuel storage area had 14 USTs at that time. Whether the fuel storage area referenced in the 1977 SPCCP is consistent with fueling station "A" is unclear. No tank closure or removal records for the fueling station USTs were identified. No evidence of former fueling station "A" was identified during site reconnaissance. Former fueling station "A" is designated as a REC due to the unknown status of the USTs, their age (installed before 1942), and the possibility that a release may have occurred during refueling.

2.2.2.2 REC #2—Former Fueling Station "B" at Hangar 6 Apron

The 1959 facility drawing shows former fueling station "B" approximately 295 feet east-southeast of the center of hangars 4–6, just beyond the concrete apron present at that time (currently, the edge of the asphalt pavement). This area contained five 5,000-gallon USTs storing gasoline or aviation fuel. Presumably, a fuel-pump island or similar dispensing equipment was also at this site. As noted above, a 1977 SPCCP letter indicates that the north ramp fuel storage area had 14 USTs at that time (MDOT, 1977). Whether the fuel storage area referenced in the 1977 SPCCP is consistent with fueling station "B" is not clear from the records reviewed. No tank closure or removal records for the fueling station USTs were identified. However, during site reconnaissance, the asphalt surface at this location was found to be compromised, which may reflect the location of the former UST system. The former fuel station "B" is considered a REC due to the unknown status of the USTs, their age (installed before 1942), and the possibility of historical releases during refueling.

2.2.2.3 REC #3—Former Fueling and Defueling Pits and Fuel Oil USTs at Hangar 1

The 1959 facility drawing shows the former fueling and defueling pits approximately 50 feet northeast of the northern corner of hangar 1. Two fuel-oil USTs, (1,000- and 10,000-gallon) are shown adjacent to the fuel pits. No tank closure or removal records for these fuel-oil USTs were identified. An active UST system, capped with a concrete pad, was identified during site reconnaissance in the approximate location of the former fueling and defueling pits. An asphalt patch was observed surrounding the concrete pad; it may reflect the location of the former fueling and defueling pits. The hangar 1 fueling and defueling pits and nearby USTs are considered a REC due to the unknown status of the USTs, their age (installed before 1942), and the possibility of historical environmental releases.

2.2.2.4 REC #4—Hangar 3 Historical Gasoline USTs

The 1959 facility drawing shows two gasoline USTs (1,000- and 2,000-gallon) near the southern corner of hangar 3. An architect's drawing by Albert Kahn Associates, dated April 18, 1941 and updated in November 1945, shows two 4,000-gallon gasoline USTs at this location (Tetra Tech, 2010a). A February 1979 letter from MDE to MAA indicates that the gasoline USTs at hangar 3 have probably leaked (Tetra Tech, 2010a). No tank closure or removal records for

these USTs were identified. A depression in the ground and a monitoring well were identified near the apparent location of the former USTs. The hangar 3 historical gasoline USTs are considered a REC due to the unknown status of the USTs, their age (installed before 1945), and the possibility of historical releases.

2.2.2.5 REC #5—Hangar 1 Former Propeller Cleaning Area

The 1959 facility drawing shows a propeller hoist and cleaning area in the northwest corner of hangar 1. Although records documenting the dates or details of these activities are not available, industrial detergents, solvents, and dip tanks were typically used to clean propellers. Although a 2008 SPCCP letter reports that the hangars had no floor drains, trench drains are currently located at the garage-bay openings. No evidence of the former propeller cleaning operations was noted during site reconnaissance; the area is currently used for storage. No cracks or floor drains were observed in the concrete floor; however, the floor may have been recoated. The former propeller cleaning area is considered a REC due to the possibility of historical solvent spills and possible seepage through historical subsurface structures (e.g., trench drains, utilities, etc.).

2.2.2.6 REC #6—Hangar 4 Former Machine Gun Cleaning and Assembly Area

The 1959 facility drawing shows a machine gun cleaning and assembly operation in Hangar 4. Although records documenting the dates or details of these activities are not available, industrial detergents, solvents, and dip tanks may have been used to clean guns. The probable location of the former machine gun cleaning area was identified during site reconnaissance, but the area could not be inspected because it is currently occupied by an urgent-care medical facility. The former machine gun cleaning area is considered a REC due to the possibility of historical releases of solvents, and the possible presence of heavy metals and explosive compounds related to this operation.

2.2.2.7 REC #7—Missile Engine Test Area Circa 1959

The 1959 facility drawing shows a missile-engine test area at the northern end of the taxiway, exiting the southern end of the apron east of hangars 4–6. The 1959 drawing shows the test area as approximately 70 by 20 feet, located approximately 230 feet east–southeast of the southeastern corner of hangar 6. Although records documenting the dates or details of activities are not available, propellants and explosive compounds may have been released in this area. This

area was identified during site reconnaissance; it has a concrete pad consistent with other missile-engine testing facilities. This area is considered a REC due to the possible release of propellant and combustion byproducts.

2.2.2.8 REC #8—Hangar 2 Heating Room/Boiler

The condition and status of the hangar 2 boiler room could not be determined from available records. However, oil-burning equipment was used in this area for approximately 35 years during Lockheed Martin's tenancy. Deterioration or replacement of this equipment during this period is likely. The fuel source for this boiler is assumed to be the fuel oil USTs defined as part of REC #3. A release of 800 gallons of fuel oil in this boiler room was reported in February 2005 during removal or replacement of a pipe section, supporting the conclusion that the equipment had deteriorated (MAA, 2008). This area could not be located during site reconnaissance because access was not available. This area is considered a REC due to the documented 2005 fuel oil release, the possibility of other oil releases, and the room's unknown status.

2.2.2.9 REC #9—Hangars 4 and 5 Heating/Boiler Rooms

The condition and status of the hangar 4 and 5 boiler rooms could not be determined from available records. However, oil-burning equipment was operated in these rooms for approximately 35 years during Lockheed Martin's tenancy, and deterioration or replacement of the equipment during this time is likely. The hangar 5 heating/boiler room could not be located during site reconnaissance because access was not available. The heating/boiler room in hangar 4 was located during site reconnaissance, and remains in operation. The fuel source for the hangar 4 and 5 boilers is assumed to be the fuel oil USTs described under REC #15, below. The heating/boiler rooms in hangars 4 and 5 are considered a REC because fuel oil releases during operation and maintenance of this equipment were possible, and because of the room's unknown status.

2.2.2.10 Potential REC #10 Maintenance Storage

This building may have contained materials associated with activities that would normally require the storage of petroleum, oil, or lubricant products. Other hazardous substances that may have been stored at this facility include antifreeze/coolant, cleaning solvents, parts washers,

detergents, and herbicides. This location is considered a potential REC due to the absence of any records of the contents of this facility or its dates of use.

2.2.2.11 Potential REC #11—Organic Material Storage Shed

This building may have contained hazardous substances. The condition of the building at the time of demolition is unknown. This location is considered a potential REC.

2.2.2.12 Potential REC #12—Surplus Storage Shed

This building may have contained hazardous substances. The condition of the building at the time of demolition is unknown. This location is considered a potential REC due to the absence of any records regarding the contents of this facility or its dates of use.

2.2.2.13 Potential REC #13—Plating Material Storage

This building may have contained hazardous substances. The condition of the building at the time of demolition is unknown. This location is considered a potential REC due to the absence of any records regarding the contents of this facility or its dates of use.

2.2.2.14 REC #14—MAA Self Fueling Station and Historical Oil UST

The current MAA self-fueling station was identified as a potential REC (Tetra Tech, 2010a) because this fueling station may have been used before 1975. Additional records searched in preparation of the addendum report (Tetra Tech, 2010b) include the April 18, 1941, architect's drawing by Albert Kahn Associates (updated in November 1945) showing a 1,000-gallon oil UST at this location. Potential REC #14 has been upgraded to a REC due to the historical presence of a UST at this location and its unknown status.

2.2.2.15 REC #15—Former Fuel Oil USTs at Hangar 6

The 1959 facility drawing shows two fuel oil USTs (1,000- and 10,000-gallon) approximately 80 feet southeast of the southern corner of hangar 6. No tank closure or removal records for these fuel oil USTs were identified. A concrete drum-storage area was identified near the former fuel oil USTs during site reconnaissance. In addition, what are apparently vent pipes were observed on the southern exterior wall of hangar 6, near the location of the former fuel oil USTs. The hangar 6 former fuel oil USTs are considered a REC due to the unknown status of the USTs, their age (installed before 1959), and the possibility of historical releases.

2.2.2.16 REC #16—Hangar 2 Oil Room

Specific operations in this room could not be determined through historical site research. However, as the name of the room indicates, petroleum products were either stored or used in this room. The former oil room is currently used by a metal fabrication company. No cracks or floor drains were identified in the concrete floor of these areas during site reconnaissance; however, this floor may have been recoated. This area is considered a REC due to the possible presence of petroleum products and possible pathways to the subsurface (e.g., possible historical cracks and floor drains).

2.2.2.17 REC #17—Hangar 2 Solvent Booth

Specific operations in this room could not be determined during historical site research. However, the use or storage of solvents in this room is likely, as its name implies. The former solvent-booth is currently used by a metal fabrication company. No cracks or floor drains were identified in the concrete floor of these areas during site reconnaissance; however, this floor may have been recoated. This area is considered a REC due to the possible presence of solvents and possible pathways to the subsurface (e.g., possible historical cracks and floor drains).

2.2.2.18 REC #18—Hangar 2 Radar and Shielded Rooms

Specific operations in these rooms could not be determined during historical site research. The former radar room is currently used as an office and shop. The former shielded-room could not be inspected because access was not available during the October 14, 2010 site reconnaissance. Carpeting was found in the former radar room, so the presence of cracks or floor drains in the subfloor is unknown. This area is considered a REC due to the lack of information pertaining to its historical use.

2.2.2.19 REC #19—Hangar 3 Washing Area and Rotating Lift

Specific operations in this room could not be determined through historical site research; however, the suspected use of the area was to wash parts and equipment. Furthermore, the rotating lift is suspected of having used hydraulic oil in its operation. The approximate location of the rotating lift was identified during site reconnaissance. It is currently used for storage. Access to the washing area was not available. This area is considered a REC because transport of hazardous substances and/or petroleum products to the subsurface may have occurred, possibly

via wash water through historical cracks and floor drains, and due to the likely use of hydraulic oil in the rotating lift.

2.2.2.20 REC #20—Hangar 3 Compressor and Motor Room

Maintenance schedules or details of the equipment that was or may still be present at this location were not available during historical site research; however, routine maintenance and equipment malfunctions may have occurred when this equipment was in use. Access to this area was not available during site reconnaissance. This area is considered a REC because petroleum products could have been released from this equipment during routine maintenance and equipment malfunctions.

2.2.2.21 REC #21—Hangar 5 Painting/Stripping Area and Acid-Neutralization System

Details regarding chemicals used in this area were not identified through historical site research; however, solvents and industrial detergents were probably used in the stripping area. Furthermore, the acid-neutralization system may have used some type of caustic material in its process. The acid-neutralization system was in the basement of hangar 5 and appears to have been connected via piping to the main level, where the painting and stripping areas were located.

Floor drains or cracks were not observed in the main level of hangar 5; however, an employee noted that water had previously been observed leaking from the main level into the basement. Floor drains were observed in the area of the former acid-neutralization system. The main level and basement of hangar 5 are currently used as an aircraft hangar and storage/utility room, respectively. This area is considered a REC because deteriorating piping may have leaked in the past, resulting in a release of solvents, industrial detergents, and caustic materials into the subsurface via basement-floor cracks and drains. Releases may also have occurred via surface runoff from the main level, and from faulty equipment.

2.2.2.22 REC #22—Hangar 4 Parachute Drying Area

The 1959 facility drawing shows a parachute drying area in the basement of hangar 4. No details were obtained during historical site research regarding the cleaning methods used. Parachutes were most likely cleaned with an unknown product and then air-dried in the basement of hangar 4. The approximate location of the parachute drying area was identified during site reconnaissance, but the area could not be inspected because it is currently occupied by an

urgent-care medical facility. This area is considered a REC due to the lack of records concerning the cleaning methods used and to the engineered controls used in the drying method.

2.2.3 Main Terminal Phase II Investigation (2011)

The 2010 Main Terminal environmental evaluations, the records search, historical review, and site visits confirmed the presence of 18 RECs and four potential RECs within the Main Terminal Area (Tetra Tech, 2010a and 2010b). The May–July 2011 Phase II investigation included surface and subsurface explorations and testing to evaluate the presence of hazardous substances that may have been placed, leaked, or spilled in Main Terminal Area RECs #1–9 and #14–22 by historical operations (Tetra Tech, 2012).

A Phase II investigation was completed at the Main Terminal Area from May through July 2011, in accordance with the investigation work plan (Tetra Tech, 2011). Phase II activities consisted of surface and subsurface explorations and testing to investigate possible impacts from historical operations at 18 different RECs in the Main Terminal Area. Geophysical surveys were performed to locate USTs and other UST-related appurtenances (e.g., piping, sumps, etc.) in the areas of RECs #1–4, 7, and 14–15. Active soil-gas sampling was conducted at 25 locations throughout the Main Terminal RECs, exterior to the hangar structures. Soil gas samples were analyzed for volatile organic compounds (VOCs). Membrane-interface probe (MIP) profiling was completed at 25 locations near standalone RECs (e.g., RECs #1, 2, 4, 7, 14, and 15), and RECs near hangars 1–6, to investigate the possible presence of VOCs and petroleum hydrocarbons that may have been released to subsurface soils and groundwater from fuel USTs and hangar operations.

Sixteen soil borings were also advanced throughout these areas, and soil samples were collected and analyzed for VOCs, semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), total priority pollutant metals (including mercury), total petroleum hydrocarbon (TPH)-gasoline-range organics (GRO), and TPH-diesel-range organics (DRO). MIP profiles, soil gas results, and soil boring observations led to the installation of six shallow groundwater monitoring wells (MT-MW01S through MT-MW06S) to monitor groundwater quality in the areas of the standalone RECs around the perimeters of hangars 1–6. Groundwater samples from the six newly installed monitoring wells were analyzed for VOCs, SVOCs, 1,4-dioxane, PCBs, TPH-DRO, TPH-GRO, total and dissolved priority pollutant metals, perchlorate, and hexavalent chromium.

The 2011 Phase II results indicated petroleum hydrocarbon impacts to subsurface media in the area of REC #3, the former fueling/defueling pits, and fuel-oil underground storage tanks at the northwestern corner of hangar 1 (see Figure 4-6 of the *Supplemental Main Terminal Phase II Site Investigation Report* [Tetra Tech, 2012]). MIP screening results at MT-MIP04 indicated elevated petroleum hydrocarbons in the subsurface at depths from four to 30 feet below grade. GROs ranging from 2,480–9,710 micrograms per kilogram (µg/kg) were also detected in soil samples collected at MT-SB01 (to the north, at REC #1) and MT-SB02 at depths of six and 12 feet below grade. At REC #3 monitoring well MT-MW02S, detected concentrations of TPH-DRO and TPH-GRO (4,900 and 1,540 micrograms per liter [µg/L], respectively) exceeded their MDE comparison criteria, and benzene (50.5 µg/L) exceeded its MDE standard of 5 µg/L.

The results of the Phase II investigation also indicate petroleum hydrocarbon impacts to subsurface media in the area of REC #2. MIP screening results indicating highly elevated levels of petroleum hydrocarbons were detected at depths of 3.5–16 feet below grade at MT-MIP22 and MT-MIP23. GROs ranging from 2,270–3,330 µg/kg were also detected in soil samples collected at MT-SB15 at depths of six and 14 feet below grade. The MIP readings and TPH concentrations in soil are similar to levels reported for locations at REC #3. A groundwater monitoring well was not installed in the REC #2 area during the 2011 Phase II investigation.

At REC #15, elevated levels of petroleum hydrocarbons were detected in the subsurface at depths from 5.5 to 29 feet below grade, based on MIP screening results at MT-MIP16. Petroleum hydrocarbons were not detected at significant levels in a monitoring well installed approximately 100 feet downgradient (MT-MW04S). The 2011 Phase II results also indicate petroleum hydrocarbon impacts to subsurface media in the areas of RECs #9 (hangars 4 and 5 former boiler rooms) and #21 (hangar 5, the former painting, stripping and acid-neutralization area). Two MIP results (MT-MIP19 and MT-MIP20) at these RECs indicate elevated petroleum hydrocarbon levels in the subsurface soil at depths from 10–31 feet below grade. Petroleum hydrocarbon (as TPH-GRO) concentrations in soils ranging from 1,700–7,090 µg/kg were detected at depth (six to 20 feet below grade) in borings MT-SB13 and MT-SB14. These concentrations are similar to those reported for soil samples at REC #3. No groundwater monitoring wells were installed near hangar 5 REC areas during the 2011 Phase II investigation.

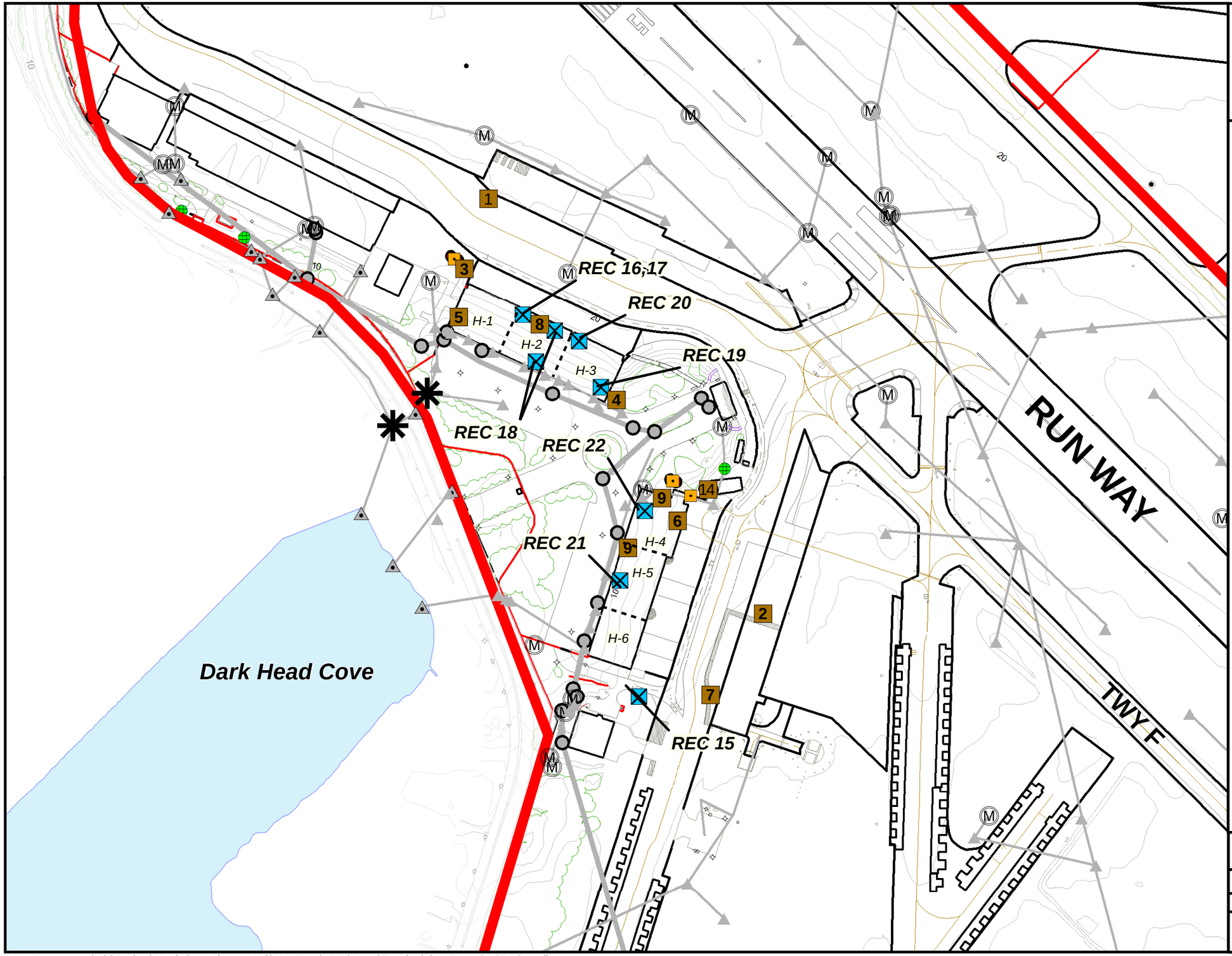

FIGURE 2-1

RECOGNIZED ENVIRONMENTAL CONDITIONS AT MSA MAIN TERMINAL

Legend

- REC Identified in Main Terminal Environmental Evaluation Report (Tetra Tech, 2010)
- Addendum REC
- TTNUS MSA 2008 Wells
- MTN_Infiltration_Trenches
- MSA Inlets
- MSA Manholes
- MSA Outfalls
- Sediment_Basin
- Trench Drain
- Sanitary MH
- MTN_Tanks
- MTN_WellsPipes
- Sanitary Pipes
- Storm Pipes
- Subject Property Boundaries
- Current Structures
- Electric Utilities
- H-1 Hangar No.

MSA – Martin State Airport
UST - Underground Storage Tank
MTN – Main Terminal
REC – Recognized Environmental Condition
MH - Manhole
TT- Tetra Tech

REC # REC Name
REC 1 - Former Fueling Station "A" near Hangar 1
REC 2 - Former Fueling Station "B" near Hangar 6
REC 3 - Former Fueling/De-Fueling Pits and Fuel Oil USTs at Hangar 1
REC 4 - Hangar 3 Historical Gasoline USTs
REC 5 - Hangar 1 Former Propeller Cleaning Area
REC 6 - Hangar 4 Former Machine Gun Cleaning/Assembly Area
REC 7 - Missile Engine Test Area c. 1959 (estimated location)
REC 8 - Hangar 2 Heating Room/Boiler
REC 9 - Hangar 4 and 5 Heating/Boiler Rooms
REC 14 - Current MAA Self-Fueling Station and Former 1,000 - gal oil UST
REC 15 - Hangar 6 Former Fuel Oil USTs
REC 16 - Hangar 2 Oil Room
REC 17 - Hangar 2 Solvent Booth
REC 18 - Hangar 2 Radar/shielded Rooms
REC 19 - Hangar 3 Washing Area/Rotating Lift
REC 20 - Hangar 3 Compressor/Motor Room
REC 21 - Hangar 5 Painting/Stripping, and Acid Neutralization Areas
REC 22 - Hangar 4 Parachute Drying Area

Main Terminal
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 100 200 400 Feet

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DATE MODIFIED: 3/1/12

CREATED BY: MP

Tetra Tech, Inc.

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Section 3
Investigation Approach and Methodology

Information obtained during the 2010 environmental evaluations (i.e., the records search, historical review, and site visits) confirmed the presence of 18 recognized environmental conditions (RECs) and four potential RECs within the Main Terminal Area of Martin State Airport (MSA) (Tetra Tech, Inc. [Tetra Tech], 2010a and 2010b). The Phase II investigation conducted during May–July 2011 included surface and subsurface explorations and testing to evaluate the presence of hazardous substances that may have resulted from historical operations; past practices may have resulted in hazardous substances being placed, leaked, or spilled in RECs #1–9 and REC #14–22 of the Main Terminal Area. The following Phase II supplemental activities were conducted from April through August 2012:

- obtained utility clearances and associated permits for intrusive investigations from Lockheed Martin, MSA, and Maryland Aviation Administration (MAA) (as applicable)
- advanced five soil borings to a terminal depth of 25 feet below ground surface and collected soil samples using direct-push technology (DPT) for chemical analyses. The proposed soil boring locations were selected based on a review of soil gas and membrane-interface probe (MIP) data collected in connection with the RECs (RECs #2, 3, 9, and 21) evaluated in the 2011 Phase II investigation. Soil samples were also collected for chemical analyses.
- installed six two-inch-diameter groundwater monitoring wells using a low-profile mini-sonic rig
- collected and analyzed groundwater samples and obtained water levels from the six new wells and the six wells installed in 2011
- surveyed soil boring and monitoring well locations using a Maryland-licensed surveyor
- collected, stored, and characterized investigation-derived waste (IDW) and disposed of the waste at an off-site Lockheed Martin-approved treatment or disposal facility
- performed laboratory chemical analyses and chemical data validation on soil and groundwater samples

- evaluated environmental sampling data

These activities are described in detail in the following sections.

3.1 MOBILIZATION/DEMOBILIZATION

Following approval of the work plan (Tetra Tech, 2012), Tetra Tech conducted mobilization and demobilization activities, including:

- coordinating site access with Lockheed Martin and MSA facilities personnel
- obtaining utility clearance for the proposed soil borings and groundwater monitoring wells, using both Miss Utility and a private utility-locating firm, as described in Section 3.2
- mobilizing subcontractors, equipment, and materials to the site
- implementing the following:
    - a site-specific health and safety plan (HASP)
    - an emergency response plan
    - a sampling and analysis plan
    - a waste management plan conforming to Lockheed Martin's *Corporate Energy, Environment, Safety, and Health (EESH) Remediation Waste Management Procedure No: EROP-03 (Revision 4, effective April 17, 2009)* (Lockheed Martin, 2009)
    - a quality assurance/quality control plan
    - a data management plan
- designating a decontamination area
- demobilizing equipment and materials from the site at work completion
- site cleanup and trash removal at work completion
- restoring surfaces and repairing landscaping as necessary at work completion
- managing IDW, as described in section 3.3.6

The field operations leader coordinated mobilization and demobilization, purchasing and leasing equipment, and staging of equipment for efficient loading and transport to and from the site before and after each field activity. Before field operations began, Tetra Tech personnel reviewed

the site-specific HASP and the respective safe work permits included in the HASP. Tetra Tech conducted mandatory daily health and safety tailgate meetings before all field events. Subcontractors present for that day's field activities were included in these meetings. The field operations leader or their designee documented those in attendance and the topics covered.

3.2 SITE ACCESS, PERMITS, AND UTILITY CLEARANCE

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

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

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

Each drilling location was screened for subsurface utilities. In addition to calling in a Miss Utility ticket, Enviroscan, Inc. (Enviroscan) was contracted to mark any underground utilities and subsurface geophysical anomalies. Enviroscan used typical utility-locating equipment representing the best available technology, including a Fisher TW-6 electromagnetic pipe and cable locator/tracer, a Radiodetection® cable-avoidance tool (C.A.T.) and Genny pipe and cable locator/tracer, a Radiodetection® model RD4000 multi-frequency pipe and cable tracer, and a

GSSI SIR-2000 ground-penetrating radar (GPR) system. All utilities within a 30-foot radius of each designated location were located and marked with paint on the ground.

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

3.3 FIELD METHODOLOGY

3.3.1 Soil Investigation

On July 9–10, 2012, Tetra Tech advanced five soil borings (MT-SB17 through MT-SB21) in targeted areas, including standalone RECs (e.g., RECs #2, 3, 9, and 21) and RECs near hangars 1, 4 and 5. Table 3-1 contains soil sampling details and rationales, and Figure 3-1 displays soil-sampling locations. Soil borings were drilled to a terminal depth of 25 feet below grade using a DPT drill-rig operated by a Maryland-licensed driller. Soil samples were collected continuously using a 1.5-inch-diameter, four-foot-long stainless-steel macro-core sampler fitted with a disposable acetate liner. The probe sampler was advanced to the target depth in four-foot increments. Retrieved soil samples were collected for soil screening, which included lithologic characterization and visual observations.

Soil samples were screened for volatile organic compounds (VOCs) using a portable photoionization detector (PID) and a consistent-headspace screening methodology (i.e., zip-top bag technique). The work plan specified collection of two soil samples for laboratory chemical analyses following field screening and visual inspection for possible contamination, such as staining, discoloration, and odors. Since no contamination was evident in any of the borings, soils from the depth interval near the ground surface (i.e., 0–2 feet) and the depth interval immediately above the groundwater interface (i.e., 8–10 feet) were submitted for laboratory chemical analyses. The groundwater table was determined by the moisture detected in the soil samples and from gauging nearby monitoring wells.

Backfilling the soil boreholes involved placing granular bentonite into the borehole annulus from the borehole bottom to the top of the soil matrix. The bentonite was hydrated using water from a local approved source (fire hydrant at MSA) to provide a low-permeability seal in the soil-boring annulus. In asphalt areas, the asphalt portion of the borehole was restored with an asphalt patch after the borehole backfilling/sealing were complete. The asphalt patch was finished smooth and flush with the existing grade. All pertinent information, including boring number, soil/lithology description, sample designation and depth, PID readings, sample collection time, etc., was recorded on boring-log and soil-sampling log sheets. Boring logs and soil-sampling log sheets are in Appendix B.

Eleven samples (two from each soil boring plus one additional sample for toxicity characteristic leaching procedure [TCLP] analysis) were collected and submitted to TestAmerica of North Canton, Ohio. Soil samples were analyzed for VOCs, semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), total metals (including mercury), total petroleum-hydrocarbon (TPH)-gasoline-range organics (GRO), TPH-diesel-range organics (DRO), and TCLP (one sample only), using the methods listed in Table 3-1. Trip blanks were used to monitor all shipments of VOC samples. No other quality assurance/quality control samples were collected in the field.

3.3.2 Groundwater Investigation

The groundwater investigation included the installation, development, and sampling of six shallow groundwater-monitoring wells (MT-MW07S through MT-MW12S) to further define the nature and extent of VOC and petroleum impacts identified in groundwater. These six new wells were installed based on the 2011 MIP profiles and analyses of groundwater samples collected in 2011 from the six existing wells (MT-MW01S through MT-MW06S). The six new wells were installed to assess the presence of chemicals possibly released from USTs or hangar operations, such as solvents, fuels, oils, or other hazardous chemicals, that may contaminate groundwater.

The groundwater monitoring well locations are presented in Figure 3-2. Table 3-2 presents additional details, and describes the rationale for the groundwater monitoring well installation and sampling program. The final locations of these wells were determined based on the locations of underground utilities and any airport permit restrictions. One well location (MT-MW08S) was offset approximately 10 feet north due to an automobile parked near the proposed location.

Groundwater samples from the new monitoring wells were submitted to an off-site laboratory for chemical analyses, as discussed in Section 3.3.5.5 and in Table 3-2.

3.3.2.1 Borehole Drilling and Monitoring Well Installation/Construction

Monitoring well boreholes were advanced using a low-profile mini-sonic rig operated by a Maryland-licensed well driller to characterize groundwater conditions in the areas of study. The roto-sonic method used a four-inch by six-inch drill-rod/override-casing setup with temporary casing to install the monitoring wells to the desired depths. Soil was continuously sampled during drilling using a 5-foot-core barrel. Soil samples were collected for soil screening, including lithologic characterization, visual observation (e.g., staining, discolorations, etc.), and odor. Soil samples were screened for VOCs using a portable PID and a consistent-headspace screening methodology (e.g., zip-top-bag headspace technique). An experienced Tetra Tech field geologist logged lithologic data. All pertinent information, including boring location, soil/lithology descriptions, and PID readings, was recorded on a soil-boring log form (Appendix B).

Monitoring wells were constructed of two-inch-diameter, flush-threaded, schedule 40 polyvinyl chloride (PVC) well-casing and manufactured PVC well-screens. Well screens were between 10 and 20 feet long depending on the geology encountered, with 0.010-inch slotted or wire-wrapped openings. Approximately two feet of screen was installed above the top of the static groundwater surface to assess the possibility of light non-aqueous-phase liquids (e.g., floating petroleum product). A sand filter-pack of washed #1 filter sand was placed around and to a minimum of two feet above the top of the well screens.

Following placement of the sand pack, vibration from the roto-sonic head of the drill rig settled the sand pack around the well screens. The depth to sand was measured using a weighted tape. If settlement of the sand pack was noticed, additional sand was added to return the sand pack to the desired depth. A two-foot-thick bentonite seal was installed above the sand pack and hydrated during installation. Grout consisting of Type II Portland cement and powdered bentonite gel was placed above the bentonite seal to approximately two feet below the ground surface. Grout was made by mixing a ratio of one 94-pound bag of Type II Portland cement to nine pounds of powdered sodium-bentonite, and no more than eight gallons of water per bag of cement. The

relative thicknesses of the bentonite seal, the surface seal, and grout were adjusted to accommodate the well depth relative to ground surface.

A protective flush-mounted well cover was secured over the well casing to protect the monitoring well. The PVC well-casing was cut below grade and made watertight by installing a locking, expandable sanitary-seal in the well-casing top. At these locations, concrete was installed above the grout in the annular space between the well borehole and outer well casing, up to approximately six-inches below grade, to provide a surface seal for the monitoring well and support for the flush-mounted cover.

The top of the PVC well-casing was cut flat using an external PVC pipe cutter. The flat surface of the top of the well casing was surveyed by the land surveyor (see Section 3.3.6) and used to measure the depth to groundwater at the well. Monitoring well construction details were recorded in the field logbook and on well-construction forms, which are in Appendix B.

3.3.2.2 Monitoring Well Development

Following well installations, each monitoring well was developed to remove fines from the well filter-pack and casing and to ensure a hydraulic connection between the well and the geologic formation. Wells were developed as soon as possible after installation, once a minimum of 24 hours had elapsed to allow the grout to set up. Monitoring wells were developed by hand bailing to remove heavy sediments and by gentle surging and purging with a submersible pump to remove fines and sediment from the sand pack and well screens. Development began at the bottom of the well screen, progressed to the top of the screened interval, and then incrementally back to the bottom of the well. Wells that did not produce sufficient water to allow sustained pumping (e.g., MT-MW09S) were only hand bailed.

During well development, water-level-drawdown measurements and groundwater parameters (including pH, temperature, specific conductance, dissolved oxygen [DO], and oxidation-reduction potential [ORP]) were collected periodically until pumping was complete and recorded in the appropriate site-specific logbook and on a well-development record. Water-quality parameters were measured using a water-quality meter. Water-turbidity readings were also collected using a separate turbidity meter and recorded in the field logbook and a well-development record.

Development was considered complete when the monitored water-quality parameters stabilized (in accordance with the description in the next paragraph), when three saturated well-casing volumes had been removed, or when the well had been purged dry. Well-development pumping/surging did not exceed two hours on any well. Well development logs are in Appendix B.

Stabilization was considered achieved when three consecutive readings, taken at five-minute intervals, were within ±0.1 standard units for pH, ±3% for specific conductance and temperature, ±10% for DO and ORP, and less than 50 nephalometric turbidity-units for turbidity. If a well was purged dry, the water level was allowed to recover a minimum of 80% of its initial static water level before reinitiating development. All development water was collected in United States Department of Transportation (USDOT)-approved 55-gallon steel drums that were staged in a location approved by MSA personnel.

3.3.2.3 Synoptic Water-Level Measurements

Groundwater levels were measured on August 21–22, 2012 (during groundwater sampling) and on October 4, 2012 (during a full site-wide groundwater monitoring event) using an electronic water-level meter with gradations to 0.01-foot. Water level data provide information on groundwater flow characteristics for the lower surficial-aquifer. An audible tone, made once the meter's probe reached the air/water interface in the well, indicated that the depth to water had been reached, at which point the measurement on the water-level meter was recorded to the nearest 0.01 foot from the marked location on the top of the PVC well-casing.

Water-level measurements were recorded in the appropriate site-specific logbook and on a form for groundwater-level measurements. The total depth of each well was also recorded on this form when synoptic water-level measurements were collected. Groundwater levels were used to calculate groundwater elevations, which were then used to construct a groundwater contour map for the surficial aquifer. The October 4, 2012 water level records are in Appendix C, and the August 21–22, 2012 water level data are included on the groundwater sample record sheets in Appendix D.

3.3.2.4 Monitoring Well Groundwater Sampling

Groundwater samples were collected from each of the six new monitoring wells (MT-MW07S through MT-MW12S) on August 21–22, 2012. In addition, the six monitoring wells (MT-MW01S through MT-MW06S) installed during the 2011 Main Terminal Phase II site investigation were sampled from April 23–25, 2012 as part of the MSA annual groundwater monitoring program. Data from these wells are included in this report and discussed in Section 4.2. Sampling was conducted using low-flow/purging methods and a submersible pump. Groundwater was withdrawn at flow rates of approximately 100 milliliters per minute.

The groundwater-quality parameters of pH, temperature, conductivity, ORP, DO, and turbidity were monitored using a Horiba U-52 water-quality meter and recorded every five minutes. Purging continued until these parameters stabilized. Stabilization was considered achieved when three consecutive readings were within ±0.1 standard unit for pH, ±3% for conductivity, ±10 millivolts for ORP, and ±10% for turbidity. All purged water was collected in USDOT-approved 55-gallon steel drums staged in an area approved by MSA facility personnel. Well purging and sampling records are in Appendix D.

3.3.2.5 Groundwater Chemical Analyses

Groundwater samples from wells MT-MW07S through MT-MW012S collected on August 21-22, 2012 were analyzed for the following parameters (see Table 3-2):

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

Groundwater samples from wells MT-MW01S through MT-MW06S collected on April 23-25, 2012 as part of the MSA annual monitoring program were analyzed for the following parameters:

- VOCs by SW846 Method 8260C
- 1,4-dioxane by SW846 Method 8270D

- TPH-GRO and TPH-DRO by SW846 Method 8015
- total and dissolved priority pollutant metals by SW846 Method 6010C/7470A
- perchlorate SW846 Method 6850
- hexavalent chromium SW846 Method 218.6

Groundwater samples for VOCs and TPH-GRO were collected first, followed by SVOCs/1,4-dioxane, TPH-DRO, and metals. Groundwater samples analyzed for dissolved metals were filtered in the field before sample preservation using a dedicated, disposable, 0.45-micron filter and a peristaltic pump. Trip blanks were analyzed at a rate of one per cooler containing VOC samples; no other quality assurance/quality control samples were collected. Groundwater samples were submitted for chemical analyses to TestAmerica of North Canton, Ohio.

3.3.3 Surveying

Subsequent to well installation, a qualified Maryland-licensed land-surveying chief and surveying crew (Tetra Tech, Newark, Delaware) provided horizontal and vertical coordinates for each new well location. Surveyed locations were accurate to the nearest 0.01-foot for vertical elevations using the North American Vertical Datum 1988 and 0.1-foot horizontal coordinates at the top of the well casings.

The surveyed point of each well was permanently marked in the field. Flush-mounted cover and ground elevations were also surveyed, with a vertical accuracy of 0.01-foot. A Tetra Tech geologist accompanied the survey crew to conduct site safety briefings and ensure that all wells were located, properly marked, and surveyed. Enviroscan, Inc. provided horizontal coordinates for the soil-boring sampling locations. The survey reports and global positioning system (GPS) coordinates for monitoring wells are in Appendix E, and the GPS coordinates for soil borings are in Appendix A.

3.3.4 General Sampling Documentation, Nomenclature, and Handling

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

- Soil samples received a sample-identification tag consisting of the designation MT-SS (Main Terminal soil sample) for soil samples, followed by the boring number, followed by the sample's collection depth. For example, MT-SS20-8-10 designates that the soil sample was collected from the Main Terminal Area at soil boring location 20 at a depth of eight to 10 feet below grade.

- Groundwater-monitoring-well samples are designated MT-MW (main terminal monitoring well), followed by the location number and a six-digit number indicating the date the sample was collected. For example, a groundwater sample collected on August 21, 2012 from the Main Terminal Area monitoring well MT-MW12S would be labeled MT-MW12S-082112.

- Trip blanks are labeled with a TB prefix, followed by a six-digit submittal date (e.g., TB082112).

Sample handling includes field-related considerations concerning the selection of sample containers, preservatives, allowable holding times, and analyses requested. Proper custody procedures were followed throughout all phases of sample collection and handling. Chain of custody (COC) protocols were used throughout sample handling to establish the evidentiary integrity of sample containers. These protocols demonstrate that the samples were handled and transferred in a manner that would eliminate or detect possible tampering.

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

3.3.5 Equipment Decontamination

Well drilling and DPT equipment at each boring location was cleaned using a high-pressure steam cleaner. For well drilling, a decontamination pad was set up at the site. After steam cleaning, the decontamination water was transferred to USDOT-approved 55-gallon steel drums for storage. All well drilling and DPT equipment was also cleaned before beginning work, between drilling locations, and at the conclusion of the drilling/DPT program. During groundwater sampling, reusable groundwater-level measuring and sampling equipment

(e.g., water-level meter, pumps, and wire) were decontaminated before and after each use. Dedicated and disposable equipment (such as pump tubing) was used for groundwater purging and sampling. Decontamination of reusable small equipment consisted of the following steps:

- Alconox® and potable-water wash
- potable-water rinse
- air drying

All decontamination fluids were collected in USDOT-approved 55-gallon steel drums, which were stored in an area approved by MSA facility personnel.

3.3.6 Waste Management

IDW for this project consisted of soil cuttings from drilling and soil sampling, decontamination-rinsate water, well-development water, groundwater-sampling purge water, and used personal protective equipment (PPE). PPE IDW was brushed off, placed in trash bags, and disposed of in an MSA trash receptacle designated by facility personnel. Soil cuttings from drilling, rinsates from decontamination, well-development water, and groundwater-sampling purge water were stored in USDOT-approved 55-gallon steel drums. After task completion, drums were moved to a staging area identified by MSA facility personnel.

After completing the field investigation, 24 drums of IDW were removed from the site on October 12, 2012 under a nonhazardous waste profile by a Lockheed Martin-approved waste contractor (Clean Harbors of Baltimore, Maryland), and properly disposed of in accordance with federal, state, and local regulations. A representative from Lockheed Martin was on-site to oversee the drum removal, inspect the trucks, and sign the bills of lading. IDW disposal records are in Appendix F.

3.3.7 Site Restoration

Site restoration to match original conditions was completed as necessary and as required by MSA operations or MAA following completion of the field investigation. Site restoration included patching boreholes advanced through the asphalt.

3.4 DATA MANAGEMENT

Laboratory data-handling procedures met the requirements of the laboratory subcontract. All analytical and field data were maintained in Tetra Tech project files and include copies of the COC forms, sample log forms, sampling location maps, and documentation of quality assurance and quality control.

3.4.1 Data Tracking and Control

A cradle-to-grave sample-tracking system was used from the beginning to the end of the sampling event. Before field mobilization, the field operations leader coordinated and initiated the sample-tracking process. Sample labels were handwritten in the field or preprinted before entering the field. Labels were reviewed for accuracy and to ensure their adherence to the work plan. The project manager (PM) coordinated with the analytical laboratory to ensure that they were aware of the number and type of samples and analyses they would receive.

When field sampling was underway, the field operations leader forwarded COC forms to the PM or designee and to the laboratory for each day that samples were collected; the PM or designee confirmed that the COC forms provided the information required by the work plan. This data-tracking system ensured early detection of field errors so that adjustments could be made while the field team was still mobilized. After completion of all requested analyses, the laboratory submitted an electronic deliverable for every sample delivery group. When all electronic deliverables had been received from the laboratory, the PM or designee ensured that the laboratory had performed all requested analyses, and noted any discrepancies early enough so that all samples could be analyzed within the prescribed holding times.

3.4.2 Sample Information

Field measurement data were recorded on appropriate log sheets. Reducing field data entails summarizing and presenting these data in tabular form. Reducing laboratory data entails manipulating raw data-instrument output into reportable results. Field data such as temperature readings were verified daily by the field operations leader. Laboratory data were verified by the group supervisor and then by the laboratory's quality control/documentation department.

3.4.3 Project Data Compilation

The analytical laboratory generated an Adobe *Acrobat*® portable document file (PDF) of the analytical data-packages, as well as electronic-database deliverables. The electronic database was checked against the PDF file provided by the laboratory and updated as required, based on data-qualifier flags applied during data validation. Data generated during groundwater monitoring were incorporated into the MSA environmental geographical information system (EGIS) database. All data, such as units of measure and chemical nomenclature, were organized to assure consistency across the project database.

3.4.4 Geographical Information System

Data pertaining to the MSA sites (Dump Road Area, Strawberry Point [SP], Greater Strawberry Point [GSP], and Main Terminal Area) were managed to relate environmental information with a geographical information system (GIS). The relational database, collectively referred to as the EGIS, stores chemical, geological, hydrogeologic, and other environmental data collected during environmental investigations. Sample, chemical, and positional data were compiled and incorporated into the EGIS, and the EGIS then generated a variety of maps depicting Main Terminal Area data, including site locations, sampling locations, and contaminant tags, as needed.

3.4.5 Data Validation

Data validation entails having a party independent of the analytical laboratory review the analytical data to ensure that specific criteria have been met. These criteria are concerned with specifications that are not sample dependent; they specify performance requirements that should be fully under a laboratory's control. For organic data analyses, specific validation areas include blanks, performance-evaluation standard materials, and instrument performance checks. For inorganic data analyses, specific validation areas include blanks, calibration standards, calibration/verification standards, laboratory control standards, and interference check standards.

Chemical data were supplied by the laboratory as hard-copy reports and electronic databases. Following the investigation, chemical data were validated in accordance with established United States Environmental Protection Agency (USEPA) protocols to assess data reliability and accuracy. The data review was based on USEPA Region 3 modifications to the National

Functional Guidelines for data review (USEPA, 1993 and 1994) and the specifics of the analytical method employed. The data quality review is in Appendix G. Data-validation reports that include complete COC forms are also in Appendix G (on compact disc).

Table 3-1

Soil Sampling Details and Rationales
Main Terminal Area Phase II Investigation, Martin State Airport, Middle River, Maryland

Soil boring number	Soil boring location[1]	Number of borings/number of samples	Sampling depth (feet below grade[2])	Analysis (method)[3]	Rationale/purpose
MT-SB17	South of REC #3; northwest of hangar 1	1/2	0–2 8–10	VOCs (8260B); SVOCs (8270D); PCBs (8082A); TPH-GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To further delineate spatial distribution of petroleum hydrocarbons and benzene detected in REC #3 area based on 2011 MIP screening (MT-MIP04) and groundwater sampling (MT-MW02S) results (Tetra Tech, 2012). Boring was downgradient of the former fueling/defueling pits and fuel oil USTs, and farther downgradient from existing well MT-MW02S. To provide definitive chemical soil data to screen against human health and ecological risk criteria.
MT-SB18	Southwest of REC #2; east of hangar 5	1/2	0–2 8–10	VOCs (8260B); SVOCs (8270D); PCBs (8082A); TPH GRO/DRO (8015D); priority pollutant metals (6010C, 7471A); toxicity characteristic leaching procedure (TCLP; 1311)	To further delineate spatial distribution of petroleum hydrocarbons detected in REC #2 area based on 2011 MIP screening (MT-MIP22 and MT-MIP23) results. Boring was downgradient of the former fueling station and the 2011 MIP explorations. To provide definitive chemical soil data to screen against human health and ecological risk criteria.
MT-SB19	Southwest of REC #21; southwest corner of hangar 5	1/2	0–2 8–10	VOCs (8260B); SVOCs (8270D); PCBs (8082A); TPH GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To further delineate spatial distribution of petroleum hydrocarbons based on 2011 MIP screening (MT-MIP19) and BTEX in soil gas (MT-SG19) downgradient of REC #21. To provide definitive chemical data for soil to screen against human health and ecological risk criteria.
MT-SB20 MT-SB21	West and southwest of hangar 4 boiler room (REC #9)	2/4	0–2 8–10	VOCs (8260B); SVOCs (8270D); PCBs (8082A); TPH GRO/DRO (8015D); priority pollutant metals (6010C, 7471A)	To further delineate spatial distribution of VOCs detected in northern REC #9 (hangar 4 boiler room) and REC #22 (parachute drying) areas, based on a 2011 elevated MIP-screening result (MT-MIP21). Also, to help define the source of elevated TPH levels detected in groundwater downgradient of this area (MT-MW06S) and elevated soil gas volatiles (MT-SG20). To provide definitive chemical data for soil to screen against human health and ecological risk criteria.

Abbreviations:

BTEX— benzene, toluene, ethylbenzene, xylenes
DRO— diesel-range organics
GRO— gasoline-range organics
MIP— membrane-interface probe
PCBs— polychlorinated biphenyls
REC— recognized environmental condition
SB— soil boring
SG— soil gas
SVOC— semivolatile organic compound
TCLP— toxicity characteristic leaching procedure
TPH— total petroleum hydrocarbons
UST— underground storage tank
VOCs— volatile organic compounds

[1]Sampling locations shown on Figure 3-1 were determined in the field based on the results of the soil-gas sampling and membrane-interface probes.

[2]Sampling depths adjusted in the field based on indications of contamination based on elevated photoionization detector readings, or the presence of sludge, debris, stained soils, or chemical odors.

[3]TCLP analysis performed on one select soil sample only, at MT-SB18, from eight to 10 feet below ground surface. Soil samples were obtained and containers for TCLP were filled from each boring. The sample exhibiting the greatest evidence of contamination based on field observations (e.g., staining, odors, etc.) was selected and submitted for TCLP analysis (one sample/one depth from one boring only).

Table 3-2

Groundwater Monitoring Well Details and Rationales
Main Terminal Area Phase II Investigation, Martin State Airport, Middle River, Maryland
Page 1 of 2

Well number	Location[1]	Bottom well depth (feet)	Sample analysis (method)	Rationale/purpose
MT-MW07S MT-MW08S	REC #3 area northwest of hangars 1-3	35	VOCs (8260B) SVOCs (8270D) 1,4-dioxane (8270D) Priority pollutant metals—total and dissolved (6010C and 7470A) TPH-GRO/DRO (8015D)	Provide risk-assessment-level groundwater-monitoring chemical data for the REC #3 area northwest of hangars 1–3. One well northwest of the former fueling/de-fueling pits and monitoring well MT-MW02S was installed in 2011. The well location is considered hydraulically upgradient and provides background groundwater-quality data relative to MT-MW02S, REC #3, and hangars 1–3. A second well provides additional data on groundwater quality cross-gradient of MT-MW02S and downgradient of the former REC #3 USTs and pits. These wells will supplement the existing monitoring well network at the Main Terminal Area to help estimate groundwater flow direction and rates.
MT-MW09S	West of REC #2; east of hangars 5	55	VOCs (8260B) SVOCs (8270D) 1,4-dioxane (8270D) Priority pollutant metals—total and dissolved (6010C and 7470A) TPH-GRO/DRO (8015D)	Provide risk-assessment-level groundwater-monitoring chemical data west (downgradient) of REC #2. This well provides data on groundwater possibly impacted by the former Fueling Station "B," based on elevated petroleum hydrocarbon levels detected in 2011 MIP explorations (MT-MIP22 and MT-MIP23). This well supplements the existing monitoring well network at the Main Terminal Area, to help estimate groundwater flow direction and rates.
MT-MW10S	REC #15 area, south of hangar 6	40	VOCs (8260B) SVOCs (8270D) 1,4-dioxane (8270D) Priority pollutant metals—total and dissolved (6010C and 7470A) TPH-GRO/DRO (8015D)	Provide risk-assessment-level groundwater-monitoring chemical data for the area near MIP-16, a 2011 MIP location where elevated petroleum hydrocarbon levels have been detected. The well helps estimate groundwater flow direction and rates, in conjunction with existing Main Terminal Area monitoring wells.

Table 3-2

Groundwater Monitoring Well Details and Rationales
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland
Page 2 of 2

Well number	Location[1]	Bottom well depth (feet)	Sample analysis (method)	Rationale/purpose
MT-MW11S	West of REC #21	49	VOCs (8260B) SVOCs (8270D) 1,4-dioxane (8270D) Priority pollutant metals—total and dissolved (6010C and 7470A) TPH-GRO/DRO (8015D)	Provide risk-assessment-level groundwater-monitoring chemical data downgradient of hangar 5 and REC #21. This well provides groundwater quality data in an area where 2011 MIP screening results (MT-MIP19) indicate elevated levels of petroleum hydrocarbons. This well supplements the existing monitoring well network at the Main Terminal Area to help estimate groundwater flow direction and rates.
MT-MW12S	West of hangar 5 Boiler Room/REC #9	35	VOCs (8260B) SVOCs (8270D) 1,4-dioxane (8270D) Priority pollutant metals—total and dissolved (6010C and 7470A) TPH-GRO/DRO (8015D)	Provide risk-assessment-level groundwater-monitoring chemical data downgradient of hangar 5 and REC #9. This well provides groundwater quality data in an area where 2011 Phase II data indicate elevated levels of VOCs in soil gas (MT-SG20) and of petroleum hydrocarbons (MT-MIP20). This well supplements the existing monitoring well network at the Main Terminal Area to help estimate groundwater flow direction and rates.

Abbreviations:

DRO— diesel-range organics
GRO— gasoline-range organics
MIP— membrane-interface probe
REC— recognized environmental condition
SVOC— semivolatile organic compound
TPH— total petroleum hydrocarbons
UST— underground storage tank
VOC— volatile organic compound

[1]Well locations were adjusted in the field based on utility locations and/or permit restrictions.

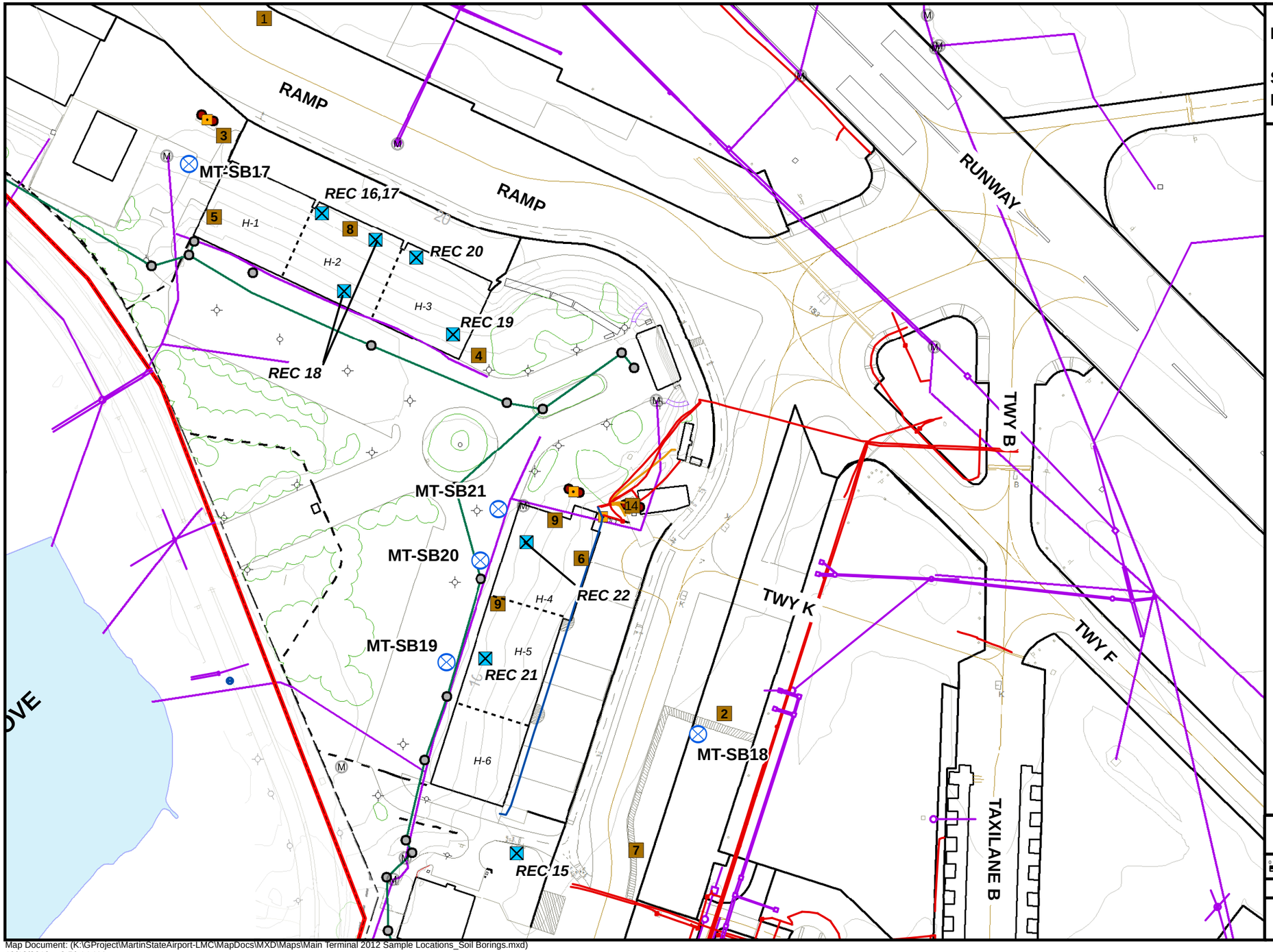

FIGURE 3-1

SOIL BORING LOCATION MAP
MAIN TERMINAL AREA

Legend

- Soil Boring (2012)
- REC Identified in Main Terminal Environmental Evaluation Report (Tetra Tech, 2010)
- Addendum REC
- MSA Manholes
- Sanitary MH
- MTN_Tanks
- MTN_WellsPipes
- Gas
- Sanitary Line
- Storm
- Water
- Electricity
- Telephone Line
- Subject Property Boundaries
- Electric Utilities
- H-1 Hangar No.

MSA – Martin State Airport
UST - Underground Storage Tank
MTN – Main Terminal
REC – Recognized Environmental Condition
MH - Manhole

REC #	REC Name
REC 1	- Former Fueling Station "A" near Hangar 1
REC 2	- Former Fueling Station "B" near Hangar 6
REC 3	- Former Fueling/De-Fueling Pits and Fuel Oil USTs at Hangar 1
REC 4	- Hangar 3 Historical Gasoline USTs
REC 5	- Hangar 1 Former Propeller Cleaning Area
REC 6	- Hangar 4 Former Machine Gun Cleaning/Assembly Area
REC 7	- Missile Engine Test Area c. 1959 (estimated location)
REC 8	- Hangar 2 Heating Room/Boiler
REC 9	- Hangar 4 and 5 Heating/Boiler Rooms
REC 14	- Current MAA Self-Fueling Station and Former 1,000 - gal oil UST
REC 15	- Hangar 6 Former Fuel Oil USTs
REC 16	- Hangar 2 Oil Room
REC 17	- Hangar 2 Solvent Booth
REC 18	- Hangar 2 Radar/shielded Rooms
REC 19	- Hangar 3 Washing Area/Rotating Lift
REC 20	- Hangar 3 Compressor/Motor Room
REC 21	- Hangar 5 Painting/Stripping, and Acid Neutralization Areas
REC 22	- Hangar 4 Parachute Drying Area

Main Terminal Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 60 120 240 Feet

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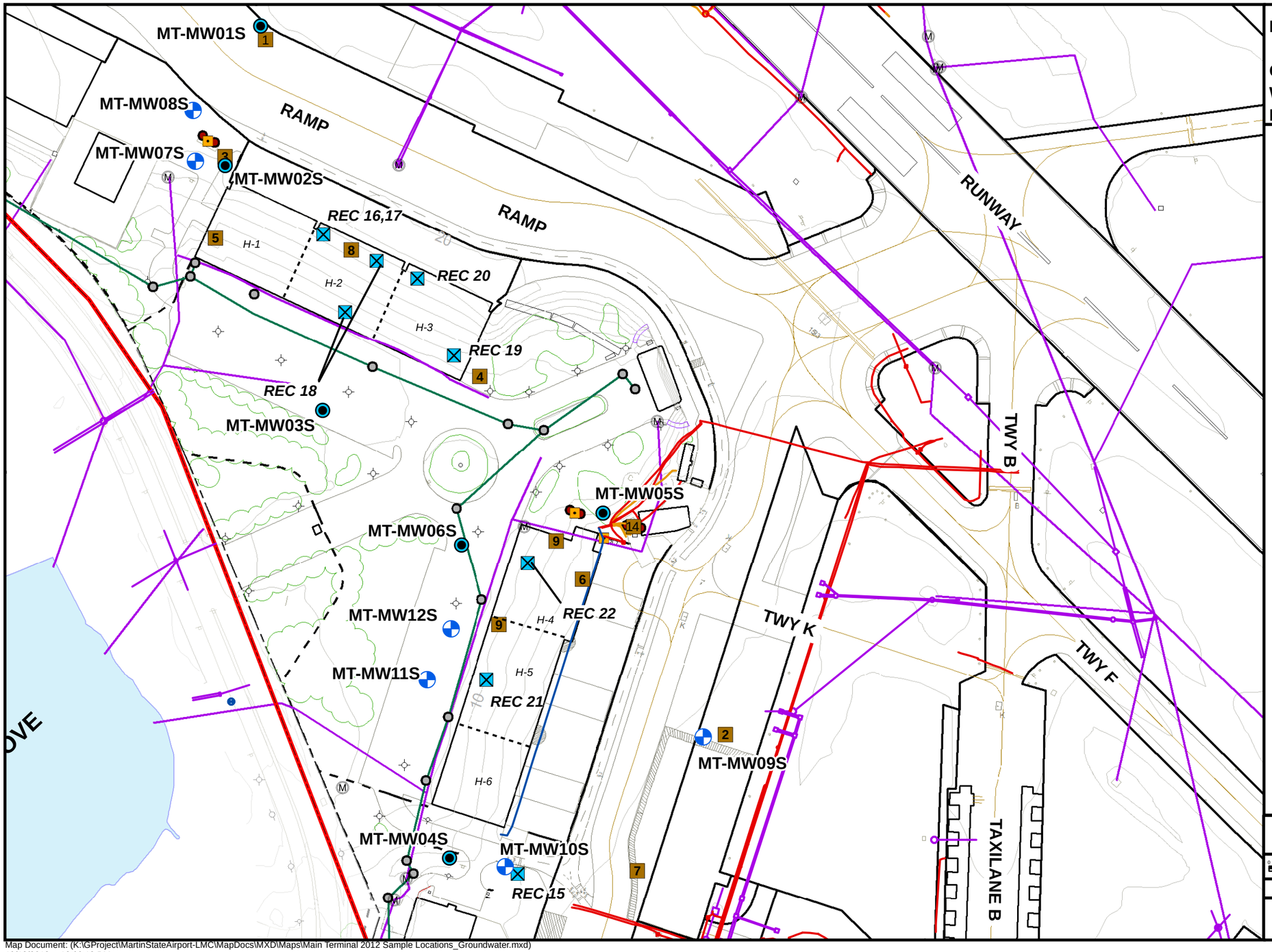

FIGURE 3-2

GROUNDWATER MONITORING WELL LOCATION MAP MAIN TERMINAL AREA

Legend

- Groundwater Monitoring Well (2012)
- Groundwater Monitoring Well (2011)
- REC Identified in Main Terminal Environmental Evaluation Report (Tetra Tech, 2010)
- Addendum REC
- MSA Manholes
- Gas
- Sanitary Line
- Storm
- Water
- Electricity
- Telephone Line
- Subject Property Boundaries
- Sanitary MH
- MTN_Tanks
- MTN_WellsPipes
- Electric Utilities
- H-1 Hangar No.

MSA – Martin State Airport
UST - Underground Storage Tank
MTN – Main Terminal
REC – Recognized Environmental Condition
MH - Manhole

REC #	REC Name
REC 1	Former Fueling Station "A" near Hangar 1
REC 2	Former Fueling Station "B" near Hangar 6
REC 3	Former Fueling/De-Fueling Pits and Fuel Oil USTs at Hangar 1
REC 4	Hangar 3 Historical Gasoline USTs
REC 5	Hangar 1 Former Propeller Cleaning Area
REC 6	Hangar 4 Former Machine Gun Cleaning/Assembly Area
REC 7	Missile Engine Test Area c. 1959 (estimated location)
REC 8	Hangar 2 Heating Room/Boiler
REC 9	Hangar 4 and 5 Heating/Boiler Rooms
REC 14	Current MAA Self-Fueling Station and Former 1,000 - gal oil UST
REC 15	Hangar 6 Former Fuel Oil USTs
REC 16	Hangar 2 Oil Room
REC 17	Hangar 2 Solvent Booth
REC 18	Hangar 2 Radar/shielded Rooms
REC 19	Hangar 3 Washing Area/Rotating Lift
REC 20	Hangar 3 Compressor/Motor Room
REC 21	Hangar 5 Painting/Stripping, and Acid Neutralization Areas
REC 22	Hangar 4 Parachute Drying Area

Main Terminal Area
Lockheed Martin, Martin State Airport
Middle River, Maryland

0 60 120 240 Feet

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DATE MODIFIED: 10/18/12

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Section 4
Results

This section presents the results of the supplemental Phase II main terminal soil sampling and groundwater investigation, along with the groundwater data collected from the six monitoring wells (MT-MW01S through MT-MW06S) installed during the 2011 main terminal Phase II site investigation that were sampled from April 23–25, 2012 as part of the Martin State Airport (MSA) annual groundwater monitoring program. This investigation included additional surface and subsurface explorations and testing to evaluate the presence of hazardous substances that may have been placed, leaked, or spilled during historical operations in the following recognized environmental conditions (RECs) in the Main Terminal Area: REC #2 (former fueling station B at hangar 6 apron); REC #3 (former fueling and defueling pits and fuel-oil underground storage tanks [USTs] at hangar 1); REC #9 (hangars 4 and 5 heating/boiler rooms); REC #15 (former fuel oil USTs at hangar 6); and REC #21 (hangar 5 painting/stripping area and acid-neutralization system). This investigation supplements the previous 2011 Phase II site investigation of the Main Terminal Area.

4.1 SOIL SAMPLING RESULTS

Samples were collected at two depth intervals (zero to two feet and eight to 10 feet) from five soil borings advanced in target areas to evaluate possible surface- and subsurface-soil chemical impacts. Ten soil samples (two per boring) were collected and chemically analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total metals (including mercury), total petroleum hydrocarbon (TPH)-diesel-range organics (DRO), and TPH-gasoline-range organics (GRO). One additional sample (MT-TCLP-8-10) was collected from eight to 10 feet deep in boring MT-SB18 and analyzed by toxicity characteristic leaching procedure (TCLP). The validated data results were used to generate a summary table (Table 4-1) listing the concentrations of chemical analytes detected in the soil samples (a “positive hits” table).

Some data in Table 4-1 are qualified as estimated (*J*-qualified), indicating that although the analyte was positively identified in the sample, its concentration was below the laboratory quantitation limit and is therefore estimated. Several soil samples also had metals concentrations that were qualified with an "*L*" or a "*K*," indicating that the actual metal concentration in the sample may be either higher (*L*-qualified, or biased low) or lower (*K*-qualified, or biased high) than the concentration reported. Qualified data results are noted in Table 4-1. Appendix H includes a table of all chemical results, including non-detected values. Data-validation reports are included in Appendix G.

The analytical data obtained from these soil samples were compared to Maryland Department of the Environment (MDE) screening level standards for residential and non-residential land use (MDE, 2008). Residential standards were used for comparative purposes only, since access to the site is limited. Nonresidential screening criteria are the most appropriate screening levels for the current and projected future use of the property (i.e., continued use as an airport). Gray shading in Table 4-1 indicates results that exceed MDE residential soil standards only; black shading indicates results that exceed both residential and non-residential criteria.

VOCs were detected at low concentrations in five of the 10 soil samples, with all detected concentrations less than the residential soil standards. Trichloroethene (TCE) was detected in one soil sample (MT-SS21-8-10) at a concentration (110 micrograms per kilogram [µg/kg]) well below its residential soil standard (1,600 µg/kg). Benzene was detected in one soil sample (MT-SS18-8-10) at a concentration of 5.4 µg/kg, well below its residential soil standard (12,000 µg/kg).

Two samples (MT-SS17-0-2 and MT-SS17-8-10) from the same boring had SVOCs concentrations exceeding residential soil standards, but no samples had SVOCs results exceeding non-residential standards. In sample MT-SS17-0-2, concentrations of benzo(a)pyrene (150 µg/kg), benzo(a)pyrene equivalents (219 µg/kg), and dibenzo(a,h)anthracene (28 µg/kg) all exceed residential soil criteria. In sample MT-SS17-8-10, concentrations of benzo(a)anthracene (240 µg/kg), benzo(a)pyrene (310 µg/kg), benzo(a)pyrene equivalents (466 µg/kg), benzo(a)fluoranthene (440 µg/kg), dibenzo(a,h)anthracene (62 µg/kg), and indeno(1,2,3-cd)pyrene (230 µg/kg) all exceed residential soil criteria, but only the benzo(a)pyrene equivalents also exceed non-residential standards.

Six polycyclic aromatic hydrocarbons (PAHs) [benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, di-n-butyl phthalate, fluoranthene, and pyrene] were detected in subsurface soil sample MT-SB19-8-10, but all at concentrations below MDE residential and industrial soil screening levels. No SVOCs were detected above laboratory detection limits in the surface soil sample (MT-SS19-0-2) from the same boring. The results from boring MT-SB20 are similar; 10 PAHs were detected at low concentrations (below MDE screening criteria) in the deep sample (at eight to 10 feet), whereas three PAHs were detected in the surface sample (zero to two feet). In boring MT-SB21, SVOCs were detected at low concentrations (below MDE screening criteria in both surface and subsurface soil samples, with only seven and eight PAHs detected in each sample, respectively.

Three PAHs [bis(2-ethylhexyl)phthalate, di(n)butylphthalate, and fluoranthene] were detected in the surface soil sample (zero to two feet deep) at MT-SB18, but only one PAH [bis(2-ethylhexyl)phthalate] was detected in the deep sample (eight to10 feet); all concentrations are well below residential standards. Some of these detected constituents may be contaminants introduced during field sampling, as they are common laboratory equipment contaminants; bis(2-ethylhexyl)phthalate was qualified as a "laboratory blank contaminant" in four of 11 soil samples. 1,4-Dioxane, an emerging chemical of concern at the site, was not detected in these soil samples.

TPH-DRO exceeded its residential standard (230 milligram per kilogram [mg/kg]) in one sample (MT-SS17-0-2 at 240 mg/kg). The TPH-DRO concentration in MT-SS19-0-2 was qualified "*B*" by the laboratory, indicating laboratory blank contamination. TPH-GRO was detected in two samples (MT-SS17-0-2 and MT-SS18-0-2) at concentrations well below residential and non-residential screening criteria (230,000 µg/kg and 620,000 µg/kg, respectively). These results support the earlier conclusion that significant petroleum contamination is not present in this area (Tetra Tech, 2011). PCBs were not detected in any of the soil samples collected in the July 2012 main terminal investigation.

Concentrations of arsenic, chromium, and vanadium exceeded residential soil standards in one or more samples, as illustrated in Figures 4-1, 4-2, and 4-3, respectively. Past investigations in the Main Terminal Area have indicated that naturally occurring levels of arsenic, chromium, and vanadium in site soils commonly exceed residential and nonresidential risk-based concentrations.

Therefore, soil results for these three metals were also compared to MDE eastern Maryland region anticipated typical concentrations (ATC): 3.6 milligrams per kilogram (mg/kg), 28 mg/kg, and 30 mg/kg, for arsenic, chromium, and vanadium, respectively. MDE derived the ATCs to represent reference levels or background concentrations for seven metals in three geologic regions of Maryland. MDE allows the proposed use of an ATC concentration as an alternative to a (residential) risk-derived soil standard, provided the ATC exceeds the risk-derived standard.

Arsenic concentrations exceed the residential soil standard in 10 soil samples, and exceed the non-residential soil standard in nine of those 10 samples. Concentrations of arsenic detected in these samples range from an estimated (*J*-qualified) 1.0 mg/kg (MT-SS18-8-10) to 6.7 mg/kg (MT-SS18-0-2), with an average detected concentration of 4.64 mg/kg. However, arsenic in soil at these concentrations is not considered a concern, as it is a naturally occurring element that is ubiquitous in soil throughout this region of Maryland.

All but two arsenic concentrations (MT-SS17-8-10 [1.0 mg/kg] and MT-SS17-8-10 [2.4 mg/kg]) reported during this investigation exceed the MDE eastern region ATC (3.6 mg/kg). However, all arsenic concentrations are within the same order of magnitude or less than the MDE eastern region ATC. Since significant impacts from other metals or organic compounds are absent, the levels of arsenic detected in these soil samples are not likely the result of historical site-related industrial activities.

Total chromium and total vanadium concentrations exceed the residential soil standard in approximately half of all samples; however, none of the concentrations detected exceed non-residential soil standards. Total chromium concentrations detected in soil samples range from 19 mg/kg (MT-SS17-0-2) to 29 mg/kg (MT-SS18-0-2), with an average concentration of 22.9 mg/kg. Chromium was detected in five samples (MT-SS17-8-10, MT-SS18-02, MT-SS19-0-2, MT-SS20-8-10, and MT-SS21-0-2) at total concentrations that exceed its residential standard (23 mg/kg), but none of these concentrations exceeds the non-residential standard (310 mg/kg). Only one of five total chromium exceedances (MT- 29 mg/kg, at SS18-0-2) exceeds the ATC for chromium (28 mg/kg). Vanadium concentrations range from 14 mg/kg to 80 mg/kg, with an average concentration of 38.1 mg/kg. Vanadium exceeds its residential standard (7.8 mg/kg) in all 10 soil samples analyzed for total metals. Seven samples

also exceed the ATC for vanadium (30 mg/kg), but no sample concentration exceeds the non-residential standard (100 mg/kg).

Concentrations of total arsenic, vanadium, and chromium are more likely related to natural background rather than to historical industrial activities on site. The lack of organic compounds detected in these soil samples supports this conclusion. Other metals were also detected in these samples, but at concentrations that do not exceed regulatory standards. These metals include barium, beryllium, cobalt, copper, lead, nickel, selenium, and zinc.

One sample (MT-TCLP-8-10) from the eight- to 10-foot interval of soil boring MT-SB18 was submitted to a laboratory for toxicity characteristic leaching procedure (TCLP) analysis. Four TCLP metals were detected: barium (0.17 milligrams per liter [mg/L]), cadmium (0.0013 mg/L), chromium (0.0047 mg/L), and lead (0.05 mg/L). The low concentrations of metals detected in the TCLP analysis are all estimated, and do not exceed United States Environmental Protection Agency (USEPA) maximum contaminant concentration levels (i.e., the "D" list) for these metals (100 mg/L, 1.0 mg/L, 5 mg/L, and 5 mg/L, respectively). These results indicate that leaching of metals from soils (or sediments) to groundwater does not appear to be occurring in this area.

4.2 GROUNDWATER

The field program measured static groundwater levels (two events) and collected groundwater samples for laboratory chemical analyses from the six newly installed main terminal monitoring wells, along with the six previously installed main terminal monitoring wells. This section presents groundwater elevation data collected on August 21–22, 2012 (during groundwater sampling), and on October 4, 2012 (during a full site-wide groundwater monitoring event). The chemical results from the April 23–25, 2012 and August 21–22, 2012 groundwater sampling events are also presented. Groundwater samples from wells MT-MW01S through MT-MW06S were analyzed for VOCs, 1,4-dioxane, total and dissolved metals, TPH-DRO and TPH-GRO, perchlorate, and hexavalent chromium. Groundwater samples from wells MT-MW07S through MT-MW12S were analyzed for VOCs, SVOCs, 1,4-dioxane, total and dissolved metals, TPH-DRO, and TPH-GRO.

4.2.1 Groundwater Level Data

Table 4-2 presents the August and October 2012 groundwater level measurements and computed elevations for the six newly installed Main Terminal Area monitoring wells (MT-MW07S to MT-MW12S), along with the six wells (MT-MW01S to MT-MW06S) installed as part of the 2011 investigation. Figure 4-4 presents a groundwater-elevation contour map for the upper ("S") surficial-aquifer wells during the October 2012 monitoring event. Depth to groundwater in October 2012 ranged from 2.19 feet below top of casing at well MT-MW06S to 14.19 feet below top of casing at well MT-MW02S. The water level in monitoring well MT-MW03S was not recorded because the water level at the time of monitoring was above the top of the casing. The water level in monitoring well MT-MW11S was not recorded because an automobile was parked over the well and it could not be accessed. From the Main Terminal Area, groundwater flows southwest and west toward Dark Head Cove.

4.2.2 Groundwater Chemical Data

Validated chemical data for groundwater samples were used to generate a summary table (Table 4-3) of the analytes detected in the Main Terminal Area groundwater samples collected from April 23–25, 2012 and on August 21 and 22, 2012. Gray shading indicates results that exceed MDE groundwater standards. The data validation reports are in Appendix G; Appendix H contains a table of all chemical results, including non-detects. Figure 4-5 illustrates metals exceedances detected during the two groundwater sampling events. The following sections discuss the results of the groundwater chemical analyses.

4.2.2.1 VOCs and SVOCs

During the April 2012 sampling event (MT-MW-01S through MT-MW-06S), one VOC (benzene) exceeded the MDE groundwater standard in groundwater samples collected from the Main Terminal Area. Benzene was detected at a concentration of 87 µg/L in well MW-02S, which is consistent with the concentration of 50.5 µg/L detected during the previous June 2011 sampling event. Eight different VOCs (acetone, benzene, carbon disulfide, carbon tetrachloride, chloroform, chloromethane, naphthalene, and toluene) were detected in groundwater samples collected from the Main Terminal Area during the August 2012 sampling event (MT-MW-07S through MT-MW-12S). None of the detected VOC concentrations exceeds their respective MDE groundwater standards.

Two different SVOCs [bis(2-ethylhexyl)phthalate and caprolactam] were detected in groundwater samples collected from the Main Terminal Area during the August 2012 sampling event. Bis(2-ethylhexyl)phthalate was detected in five of six groundwater samples at concentrations below MDE screening criteria, and caprolactam was detected in only two samples (MDE has no groundwater standard for caprolactam). These constituents are recognized as possible laboratory equipment or method-blank contaminants. 1,4-Dioxane was not detected in any groundwater samples from the April or August 2012 sampling events.

4.2.2.2 Metals

Groundwater samples were analyzed for both total (i.e., unfiltered) and dissolved (i.e., filtered) metals. Thirteen metals were detected at varying concentrations in groundwater samples collected from the previously installed monitoring wells (MW-01S through MW-06S), and 14 metals were detected at varying concentrations in groundwater samples collected from the newly installed monitoring wells (MW-07S through MW-12S). Three metals (beryllium, nickel and vanadium) were detected at concentrations exceeding MDE groundwater standards.

Beryllium exceeded the MDE standard (4 µg/L) in four unfiltered samples: MT-MW05S (36 µg/L), MT-MW06S (81 µg/L), MT-MW10S (23 µg/L) and MT-MW12S (4.9 µg/L); and in three filtered samples: MT-MW05S (36 µg/L), MT-MW06S (80 µg/L), and MT-MW10S (22 µg/L). Nickel exceeded its standard (73 µg/L) in both unfiltered and filtered samples collected from the following wells:

Well ID:	Total nickel (µg/L)	Filtered nickel (µg/L)
MT-MW-04S	330	320
MT-MW-05S	870	870
MT-MW-06S	1,200	1,200
MT-MW-10S	380	370
MT-MW-11S	140	83
MT-MW-12S	690	680

Vanadium exceeded the MDE standard (3.7 µg/L) in one unfiltered sample (MT-MW03S) at an estimated concentration of 6.0 µg/L. Concentrations of these three metals detected in wells

MT-MW01S through MT-MW06S are consistent with the concentrations detected during the previous June 2011 sampling event.

4.2.2.3 Petroleum Hydrocarbons

TPH-GRO was detected in one well (MT-MW02S) at a concentration of 1,400 µg/L, which is more than 30 times its MDE groundwater standard (47 µg/L). This concentration is similar to the 1,540 µg/L detected during the previous June 2011 sampling event. TPH-DRO was also detected in one well (MT-MW02S) at a concentration of 3,700 µg/L, which is approximately 80 times its MDE groundwater standard (47 µg/L). This concentration is similar to the 4,900 µg/L detected during the previous June 2011 sampling event. The remaining total petroleum hydrocarbon fraction results are qualified because of contamination in the associated laboratory-method preparation blanks. Concentrations in environmental samples, which were qualified with a *B* data validation flag, are comparable to those reported in the associated method blanks and are within a factor of five times the concentration present in the method blanks. Therefore, these reported TPH-GRO and TPH-DRO concentrations do not appear representative of the actual sample concentrations.

4.2.2.4 Hexavalent Chromium and Perchlorate

Samples from monitoring wells MT-MW-01S through MT-MW06S, sampled in April 2012, were analyzed for hexavalent chromium and perchlorate. Hexavalent chromium was not detected in any of the six samples. Perchlorate was detected in one sample (MT-MW06S) at an estimated concentration of 0.16 µg/L.

Table 4-1

Analytes Detected in Soil Samples, July 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID: / SAMPLE DATE: / LOCATION:	MDE RESIDENTIAL SOIL CRITERIA	MDE NON-RESIDENTIAL SOIL CRITERIA	MDE EASTERN REGION ATC	MT-SS17-0-2 7/10/2012 MT-SB17	MT-SS17-8-10 7/10/2012 MT-SB17	MT-SS18-0-2 7/10/2012 MT-SB18
VOLATILE ORGANIC COMPOUNDS (µg/kg)						
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	1.9 J	--	33 J
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	2.3 J	--	34 J
2-BUTANONE	4700000	61000000	NA	4.1 J	3 J	--
4-ISOPROPYLTOLUENE	NA	NA	NA	1.3 J	--	26 J
ACETONE	7000000	92000000	NA	42	65	--
BENZENE	12000	52000	NA	--	--	--
CARBON DISULFIDE	780000	10000000	NA	3 J	--	--
CARBON TETRACHLORIDE	4900	22000	NA	--	--	490
CHLOROFORM	78000	1000000	NA	--	--	55 J
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	5.2	--	--
ETHYLBENZENE	780000	10000000	NA	0.34 J	--	27 J
ISOPROPYLBENZENE	780000	10000000	NA	0.24 J	--	8.3 J
M+P-XYLENES	NA	NA	NA	--	--	67 J
METHYLENE CHLORIDE	85000	380000	NA	--	--	--
NAPHTHALENE	160000	2000000	NA	0.62 B	--	23 J
O-XYLENE	NA	NA	NA	0.46 J	--	49 J
SEC-BUTYLBENZENE	NA	NA	NA	0.64 J	--	--
TERT-BUTYLBENZENE	NA	NA	NA	--	--	--
TOLUENE	630000	8200000	NA	0.49 J	0.28 J	--
TOTAL XYLENES	1600000	20000000	NA	--	--	120 J
TRICHLOROETHENE	1600	7200	NA	--	--	--
VINYL CHLORIDE	90	4000	NA	2.5 J	--	--
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)						
2,4-DIMETHYLPHENOL	160000	2000000	NA	25 J	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	18	--	--
ACENAPHTHYLENE	470000	6100000	NA	15	17	--
ACETOPHENONE	NA	NA	NA	25 J	--	--
ANTHRACENE	2300000	31000000	NA	25	39	--
BAP EQUIVALENT-HALFND	22	390	NA	218.95	465.65	--
BAP EQUIVALENT-POS	22	390	NA	218.95	465.65	--
BENZO(A)ANTHRACENE	220	3900	NA	110	240	--
BENZO(A)PYRENE	22	390	NA	150	310	--
BENZO(B)FLUORANTHENE	220	3900	NA	190	440	--
BENZO(G,H,I)PERYLENE	230000	3100000	NA	130	280	--
BENZO(K)FLUORANTHENE	2200	39000	NA	99	230	--
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	38 J	58 J	34 J
CHRYSENE	22000	390000	NA	160	350	--
DIBENZO(A,H)ANTHRACENE	22	390	NA	28	62	--

Table 4-1

Analytes Detected in Soil Samples, July 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID: / SAMPLE DATE: / LOCATION:	MDE RESIDENTIAL SOIL CRITERIA	MDE NON-RESIDENTIAL SOIL CRITERIA	MDE EASTERN REGION ATC	MT-SS17-0-2 7/10/2012 MT-SB17	MT-SS17-8-10 7/10/2012 MT-SB17	MT-SS18-0-2 7/10/2012 MT-SB18
DI-N-BUTYL PHTHALATE	780000	10000000	NA	35 J	29 J	20 J
FLUORANTHENE	310000	4100000	NA	190	510	8.7
FLUORENE	310000	4100000	NA	--	10	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	98	230	--
NAPHTHALENE	160000	2000000	NA	30	--	--
PHENANTHRENE	2300000	31000000	NA	65	150	--
PHENOL	2300000	31000000	NA	37 J	--	--
PYRENE	230000	3100000	NA	210	450	--
TOTAL METALS (mg/kg)						
ARSENIC	0.43	1.9	3.6	5.7*	2.4 L	6.7*
BARIUM	1600	20000	NA	20 J	13 J	9.3 J
BERYLLIUM	16	200	NA	2.4	1.8	2.4
CHROMIUM	23	310	28	19	25	29
COBALT	NA	NA	NA	9.7	4.7	7
COPPER	310	4100	NA	17	13	36
LEAD	400	1000	NA	7.8	5.2	1.9
NICKEL	160	2000	NA	22	17	16
SELENIUM	39	510	NA	--	--	0.98 J
VANADIUM	7.8	100	30	28	46	80
ZINC	2300	31000	NA	79	17	20
PETROLEUM HYDROCARBONS (mg/kg)						
DIESEL RANGE ORGANICS	230	620	NA	240	28	--
PETROLEUM HYDROCARBONS (µg/kg)						
GASOLINE RANGE ORGANICS	230000	620000	NA	130	--	380
TOXICITY CHARACTERISTIC LEACHING PROCEDURE METALS (mg/L)						
BARIUM	NA	NA	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	NA	NA

Table 4-1

Analytes Detected in Soil Samples, July 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID:	MDE RESIDENTIAL SOIL CRITERIA	MDE NON-RESIDENTIAL SOIL CRITERIA	MDE EASTERN REGION ATC	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE:				7/10/2012	7/9/2012	7/9/2012
LOCATION:				MT-SB18	MT-SB19	MT-SB19
VOLATILE ORGANIC COMPOUNDS (µg/kg)						
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	3.9 J	--	--
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	--	--	--
2-BUTANONE	4700000	61000000	NA	--	--	--
4-ISOPROPYLTOLUENE	NA	NA	NA	--	--	--
ACETONE	7000000	92000000	NA	--	--	--
BENZENE	12000	52000	NA	5.4	--	--
CARBON DISULFIDE	780000	10000000	NA	4.2 J	--	--
CARBON TETRACHLORIDE	4900	22000	NA	78	--	--
CHLOROFORM	78000	1000000	NA	32	--	--
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	--	--	--
ETHYLBENZENE	780000	10000000	NA	--	--	--
ISOPROPYLBENZENE	780000	10000000	NA	0.95 J	--	--
M+P-XYLENES	NA	NA	NA	--	--	--
METHYLENE CHLORIDE	85000	380000	NA	0.71 J	1.9 B	3 B
NAPHTHALENE	160000	2000000	NA	1.1 B	--	1.6 B
O-XYLENE	NA	NA	NA	2.5 J	--	--
SEC-BUTYLBENZENE	NA	NA	NA	0.54 J	--	--
TERT-BUTYLBENZENE	NA	NA	NA	0.45 J	--	--
TOLUENE	630000	8200000	NA	0.48 J	--	--
TOTAL XYLENES	1600000	20000000	NA	2.5 J	--	--
TRICHLOROETHENE	1600	7200	NA	--	--	--
VINYL CHLORIDE	90	4000	NA	--	--	--
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)						
2,4-DIMETHYLPHENOL	160000	2000000	NA	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	--	--	--
ACENAPHTHYLENE	470000	6100000	NA	--	--	--
ACETOPHENONE	NA	NA	NA	--	--	--
ANTHRACENE	2300000	31000000	NA	--	--	--
BAP EQUIVALENT-HALFND	22	390	NA	--	--	9.55965
BAP EQUIVALENT-POS	22	390	NA	--	--	7.279
BENZO(A)ANTHRACENE	220	3900	NA	--	--	--
BENZO(A)PYRENE	22	390	NA	--	--	6.6 J
BENZO(B)FLUORANTHENE	220	3900	NA	--	--	6.3 J
BENZO(G,H,I)PERYLENE	230000	3100000	NA	--	--	--
BENZO(K)FLUORANTHENE	2200	39000	NA	--	--	4.9 J
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	25 J	--	26 B
CHRYSENE	22000	390000	NA	--	--	--
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	--	--

Table 4-1

Analytes Detected in Soil Samples, July 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID:	MDE RESIDENTIAL SOIL CRITERIA	MDE NON-RESIDENTIAL SOIL CRITERIA	MDE EASTERN REGION ATC	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE:				7/10/2012	7/9/2012	7/9/2012
LOCATION:				MT-SB18	MT-SB19	MT-SB19
DI-N-BUTYL PHTHALATE	780000	10000000	NA	--	--	34 J
FLUORANTHENE	310000	4100000	NA	--	--	15
FLUORENE	310000	4100000	NA	--	--	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	--	--	--
NAPHTHALENE	160000	2000000	NA	--	--	--
PHENANTHRENE	2300000	31000000	NA	--	--	--
PHENOL	2300000	31000000	NA	--	--	--
PYRENE	230000	3100000	NA	--	--	16
TOTAL METALS (mg/kg)						
ARSENIC	0.43	1.9	3.6	1 J	6.2*	6.4*
BARIUM	1600	20000	NA	10 J	13 J	13 J
BERYLLIUM	16	200	NA	0.44 B	1.6	2.7
CHROMIUM	23	310	28	20	24 L	23 L
COBALT	NA	NA	NA	1.8 L	7.5	14
COPPER	310	4100	NA	4.7	33	25
LEAD	400	1000	NA	1 J	6.7	3.8
NICKEL	160	2000	NA	3.3 J	30 J	52 J
SELENIUM	39	510	NA	--	--	--
VANADIUM	7.8	100	30	14	43 L	29 L
ZINC	2300	31000	NA	4.9 J	38	72
PETROLEUM HYDROCARBONS (mg/kg)						
DIESEL RANGE ORGANICS	230	620	NA	--	11 B	--
PETROLEUM HYDROCARBONS (µg/kg)						
GASOLINE RANGE ORGANICS	230000	620000	NA	--	--	--
TOXICITY CHARACTERISTIC LEACHING PROCEDURE METALS (mg/L)						
BARIUM	NA	NA	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	NA	NA

Table 4-1

Analytes Detected in Soil Samples, July 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID: / SAMPLE DATE: / LOCATION:	MDE RESIDENTIAL SOIL CRITERIA	MDE NON-RESIDENTIAL SOIL CRITERIA	MDE EASTERN REGION ATC	MT-SS20-0-2 7/9/2012 MT-SB20	MT-SS20-8-10 7/9/2012 MT-SB20	MT-SS21-0-2 7/9/2012 MT-SB21
VOLATILE ORGANIC COMPOUNDS (µg/kg)						
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	--	--	--
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	--	--	--
2-BUTANONE	4700000	61000000	NA	--	--	--
4-ISOPROPYLTOLUENE	NA	NA	NA	--	--	--
ACETONE	7000000	92000000	NA	--	--	--
BENZENE	12000	52000	NA	--	--	--
CARBON DISULFIDE	780000	10000000	NA	--	--	--
CARBON TETRACHLORIDE	4900	22000	NA	--	--	--
CHLOROFORM	78000	1000000	NA	--	--	--
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	--	--	--
ETHYLBENZENE	780000	10000000	NA	--	--	--
ISOPROPYLBENZENE	780000	10000000	NA	--	--	--
M+P-XYLENES	NA	NA	NA	--	--	--
METHYLENE CHLORIDE	85000	380000	NA	1.7 B	0.78 B	1 B
NAPHTHALENE	160000	2000000	NA	0.24 B	--	--
O-XYLENE	NA	NA	NA	--	--	--
SEC-BUTYLBENZENE	NA	NA	NA	--	--	--
TERT-BUTYLBENZENE	NA	NA	NA	--	--	--
TOLUENE	630000	8200000	NA	--	--	--
TOTAL XYLENES	1600000	20000000	NA	--	--	--
TRICHLOROETHENE	1600	7200	NA	--	--	--
VINYL CHLORIDE	90	4000	NA	--	--	--
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)						
2,4-DIMETHYLPHENOL	160000	2000000	NA	--	--	--
2-METHYLNAPHTHALENE	31000	410000	NA	--	--	--
ACENAPHTHYLENE	470000	6100000	NA	--	--	--
ACETOPHENONE	NA	NA	NA	--	--	--
ANTHRACENE	2300000	31000000	NA	--	--	--
BAP EQUIVALENT-HALFND	22	390	NA	--	21.683	8.2315
BAP EQUIVALENT-POS	22	390	NA	--	19.683	6.067
BENZO(A)ANTHRACENE	220	3900	NA	--	11	6 J
BENZO(A)PYRENE	22	390	NA	--	16	4.9 J
BENZO(B)FLUORANTHENE	220	3900	NA	--	15	5.6 J
BENZO(G,H,I)PERYLENE	230000	3100000	NA	--	15	--
BENZO(K)FLUORANTHENE	2200	39000	NA	--	7.2 J	--
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	34 B	28 B	24 B
CHRYSENE	22000	390000	NA	--	11	7 J
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	--	--

Table 4-1

Analytes Detected in Soil Samples, July 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID: / SAMPLE DATE: / LOCATION:	MDE RESIDENTIAL SOIL CRITERIA	MDE NON-RESIDENTIAL SOIL CRITERIA	MDE EASTERN REGION ATC	MT-SS20-0-2 7/9/2012 MT-SB20	MT-SS20-8-10 7/9/2012 MT-SB20	MT-SS21-0-2 7/9/2012 MT-SB21
DI-N-BUTYL PHTHALATE	780000	10000000	NA	24 J	--	--
FLUORANTHENE	310000	4100000	NA	5.7 J	13	14
FLUORENE	310000	4100000	NA	--	--	--
INDENO(1,2,3-CD)PYRENE	220	3900	NA	--	10	--
NAPHTHALENE	160000	2000000	NA	--	--	--
PHENANTHRENE	2300000	31000000	NA	--	9.4	11
PHENOL	2300000	31000000	NA	--	--	--
PYRENE	230000	3100000	NA	4.8 J	19	14
TOTAL METALS (mg/kg)						
ARSENIC	0.43	1.9	3.6	3.9*	5*	4.4*
BARIUM	1600	20000	NA	19 J	18 J	16 J
BERYLLIUM	16	200	NA	2.9	4	3.8
CHROMIUM	23	310	28	20 L	24 L	24 L
COBALT	NA	NA	NA	14	13	10
COPPER	310	4100	NA	24	38	15
LEAD	400	1000	NA	4.4	6.3	4.1
NICKEL	160	2000	NA	45 J	44 J	34 J
SELENIUM	39	510	NA	--	--	--
VANADIUM	7.8	100	30	31 L	38 L	36 L
ZINC	2300	31000	NA	69	73	49
PETROLEUM HYDROCARBONS (mg/kg)						
DIESEL RANGE ORGANICS	230	620	NA	--	--	--
PETROLEUM HYDROCARBONS (µg/kg)						
GASOLINE RANGE ORGANICS	230000	620000	NA	--	--	--
TOXICITY CHARACTERISTIC LEACHING PROCEDURE METALS (mg/L)						
BARIUM	NA	NA	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	NA	NA

Table 4-1

Analytes Detected in Soil Samples, July 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID: / SAMPLE DATE: / LOCATION:	MDE RESIDENTIAL SOIL CRITERIA	MDE NON-RESIDENTIAL SOIL CRITERIA	MDE EASTERN REGION ATC	MT-SS21-8-10 7/9/2012 MT-SB21	MT-TCLP-8-10 7/10/2012 MT-TCLP
VOLATILE ORGANIC COMPOUNDS (µg/kg)					
1,2,3-TRIMETHYLBENZENE	NA	NA	NA	--	NA
1,2,4-TRIMETHYLBENZENE	NA	NA	NA	--	NA
2-BUTANONE	4700000	61000000	NA	--	NA
4-ISOPROPYLTOLUENE	NA	NA	NA	--	NA
ACETONE	7000000	92000000	NA	--	NA
BENZENE	12000	52000	NA	--	NA
CARBON DISULFIDE	780000	10000000	NA	--	NA
CARBON TETRACHLORIDE	4900	22000	NA	4.4 J	NA
CHLOROFORM	78000	1000000	NA	--	NA
CIS-1,2-DICHLOROETHENE	78000	1000000	NA	--	NA
ETHYLBENZENE	780000	10000000	NA	--	NA
ISOPROPYLBENZENE	780000	10000000	NA	--	NA
M+P-XYLENES	NA	NA	NA	--	NA
METHYLENE CHLORIDE	85000	380000	NA	0.66 B	NA
NAPHTHALENE	160000	2000000	NA	--	NA
O-XYLENE	NA	NA	NA	--	NA
SEC-BUTYLBENZENE	NA	NA	NA	--	NA
TERT-BUTYLBENZENE	NA	NA	NA	--	NA
TOLUENE	630000	8200000	NA	--	NA
TOTAL XYLENES	1600000	20000000	NA	--	NA
TRICHLOROETHENE	1600	7200	NA	110	NA
VINYL CHLORIDE	90	4000	NA	--	NA
SEMIVOLATILE ORGANIC COMPOUNDS (µg/kg)					
2,4-DIMETHYLPHENOL	160000	2000000	NA	--	NA
2-METHYLNAPHTHALENE	31000	410000	NA	--	NA
ACENAPHTHYLENE	470000	6100000	NA	--	NA
ACETOPHENONE	NA	NA	NA	--	NA
ANTHRACENE	2300000	31000000	NA	--	NA
BAP EQUIVALENT-HALFND	22	390	NA	12.1729	NA
BAP EQUIVALENT-POS	22	390	NA	10.0084	NA
BENZO(A)ANTHRACENE	220	3900	NA	9.3	NA
BENZO(A)PYRENE	22	390	NA	8.2	NA
BENZO(B)FLUORANTHENE	220	3900	NA	8.7	NA
BENZO(G,H,I)PERYLENE	230000	3100000	NA	5.4 J	NA
BENZO(K)FLUORANTHENE	2200	39000	NA	--	NA
BIS(2-ETHYLHEXYL)PHTHALATE	46000	200000	NA	--	NA
CHRYSENE	22000	390000	NA	8.4	NA
DIBENZO(A,H)ANTHRACENE	22	390	NA	--	NA

Table 4-1

Analytes Detected in Soil Samples, July 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID:	MDE RESIDENTIAL SOIL CRITERIA	MDE NON-RESIDENTIAL SOIL CRITERIA	MDE EASTERN REGION ATC	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE:				7/9/2012	7/10/2012
LOCATION:				MT-SB21	MT-TCLP
DI-N-BUTYL PHTHALATE	780000	10000000	NA	--	NA
FLUORANTHENE	310000	4100000	NA	11	NA
FLUORENE	310000	4100000	NA	--	NA
INDENO(1,2,3-CD)PYRENE	220	3900	NA	--	NA
NAPHTHALENE	160000	2000000	NA	--	NA
PHENANTHRENE	2300000	31000000	NA	6.9 J	NA
PHENOL	2300000	31000000	NA	--	NA
PYRENE	230000	3100000	NA	18	NA
TOTAL METALS (mg/kg)					
ARSENIC	0.43	1.9	3.6	4.7*	NA
BARIUM	1600	20000	NA	12 J	NA
BERYLLIUM	16	200	NA	5.8	NA
CHROMIUM	23	310	28	21 L	NA
COBALT	NA	NA	NA	14	NA
COPPER	310	4100	NA	19	NA
LEAD	400	1000	NA	5.1	NA
NICKEL	160	2000	NA	49 J	NA
SELENIUM	39	510	NA	--	NA
VANADIUM	7.8	100	30	36 L	NA
ZINC	2300	31000	NA	78	NA
PETROLEUM HYDROCARBONS (mg/kg)					
DIESEL RANGE ORGANICS	230	620	NA	--	NA
PETROLEUM HYDROCARBONS (µg/kg)					
GASOLINE RANGE ORGANICS	230000	620000	NA	--	NA
TOXICITY CHARACTERISTIC LEACHING PROCEDURE METALS (mg/L)					
BARIUM	NA	NA	NA	NA	0.17 J
CADMIUM	NA	NA	NA	NA	0.0013 J
CHROMIUM	NA	NA	NA	NA	0.0047 J
LEAD	NA	NA	NA	NA	0.05 J

MDE - Maryland Department of the Environment, June 2008
ATC- antipated typical concentration
-- not detected at listed detection limit
B - laboratory blank contamination
J - positive result considered estimated as a result of technical noncompliance
K - result biased high due to technical noncompliance
L - result biased low due to technical noncompliance
NA - Not Applicable/Analyzed
NJ - compound is tentatively identified; result is estimated
µg/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
mg/L - milligrams per liter
Gray shaded values exceed MDE residential screening criteria.
Black shaded values exceed MDE industrial and residential soil criteria.
* Asterisk indicates metals concentration exceeds the Eastern Maryland ATC.
BaPEq Pos - Benzo(a)pyrene equiavalents calculated based on postive detections only.
BaPEq HalfND- Benzo(a)pyrene equiavalents calculated using tabulated values for non-detects.
Chromium concentration reported is total chromium.

Table 4-2

Groundwater Levels and Elevations, August and October 2012
Main Terminal Area
Martin State Airport, Middle River, Maryland

Well ID:	Top of Casing Elevation (Feet)	Total Well Depth (Feet)	Water Level Reading (Feet Below Top of Casing) August 21-22, 2012	Groundwater Level Elevation August 21-22, 2012	Water Level Reading (Feet Below Top of Casing) October 4, 2012	Groundwater Level Elevation October 4, 2012
MT-MW01S	17.61	18	NM	NM	5.45	12.16
MT-MW02S	17.76	18	NM	NM	14.19	3.57
MT-MW03S	3.68	30	NM	NM	*NM	NM
MT-MW04S	12.59	25	NM	NM	8.99	3.60
MT-MW05S	12.37	25	NM	NM	5.32	7.05
MT-MW06S	6.79	16	NM	NM	2.19	4.60
MT-MW07S	16.89	35	9.34	7.55	9.79	7.10
MT-MW08S	18.19	35	9.35	8.84	10.75	7.44
MT-MW09S	15.33	55	11.83	3.50	4.98	10.35
MT-MW10S	15.1	40	10.94	4.16	12.05	3.05
MT-MW11S	7.33	49	1.05	6.28	NM	NM
MT-MW12S	7.55	35	2.52	5.03	3.98	3.57

* - water level above top of casing
NM-Not measured

Table 4-3

Analytes Detected in Groundwater Samples, August 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID:	MDE	MT-MW01S-042512	MT-MW02S-043012	MT-MW03S-042512
SAMPLE DATE:	GROUNDWATER	20120425	20120430	20120425
LOCATION:	STANDARD	MT-MW01S	MT-MW02S	MT-MW03S
VOLATILES (UG/L)				
1,2,3-TRIMETHYLBENZENE	NA	--	2.4 J	--
1,2,4-TRIMETHYLBENZENE	NA	--	9.2	--
1,2-DICHLOROETHANE	5	--	3.8 J	--
4-ISOPROPYLTOLUENE	NA	--	1.6 J	--
4-METHYL-2-PENTANONE	630	--	2.5 J	--
ACETONE	550	--	90	--
BENZENE	5	0.13 J	87	--
CARBON DISULFIDE	100	--	--	0.51 J
CARBON TETRACHLORIDE	5	--	--	--
CHLOROFORM	80	--	--	--
CHLOROMETHANE	19	--	--	--
CIS-1,2-DICHLOROETHENE	70	--	4.8 J	--
ETHYLBENZENE	700	--	180	--
ISOPROPYLBENZENE	66	--	31	--
M+P-XYLENES	NA	--	50	--
NAPHTHALENE	0.65	--	--	--
N-PROPYLBENZENE	NA	--	9.7	--
O-XYLENE	NA	--	22	--
SEC-BUTYLBENZENE	NA	--	0.75 J	--
TOLUENE	1000	0.29 J	--	--
TOTAL XYLENES	10000	--	72	--
TRICHLOROETHENE	5	--	--	--
SEMIVOLATILES (UG/L)				
BIS(2-ETHYLHEXYL)PHTHALATE	6	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA

Table 4-3

Analytes Detected in Groundwater Samples, August 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland
Page 2 of 6

SAMPLE ID:	MDE	MT-MW01S-042512	MT-MW02S-043012	MT-MW03S-042512
SAMPLE DATE:	GROUNDWATER	20120425	20120430	20120425
LOCATION:	STANDARD	MT-MW01S	MT-MW02S	MT-MW03S
METALS (UG/L)				
ANTIMONY	6	--	--	0.21 J
ARSENIC	10	4.7 J	2.3 J	1.9 J
BARIUM	2000	110	120	26
BERYLLIUM	4	0.59 J	0.74 J	0.41 J
CADMIUM	5	--	--	--
CHROMIUM	100	--	--	5.3
COBALT	NA	140	30	2.3
COPPER	1300	0.6 B	1.4 B	7.3
LEAD	15	0.26 B	1.3 K	2.6
MERCURY	2	--	--	--
NICKEL	73	67	48	5.9
SELENIUM	50	--	--	--
VANADIUM	3.7	0.94 J	--	6 J
ZINC	5000	12 B	100	640
FILTERED METALS (UG/L)				
ANTIMONY	6	--	--	--
ARSENIC	10	5 K	1.7 J	0.86 J
BARIUM	2000	120	110	20
BERYLLIUM	4	0.36 J	0.68 J	--
CADMIUM	5	--	--	--
COBALT	NA	120	23	1.1
COPPER	1300	0.4 B	0.62 B	--
LEAD	15	--	1 K	--
NICKEL	73	55	39	1.7 J
SELENIUM	50	--	--	--
TUNGSTEN	NA	--	--	--
VANADIUM	3.7	0.65 J	--	--
ZINC	5000	8.3 B	57	860
MISCELLANEOUS PARAMETERS (UG/L)				
PERCHLORATE	2.6	--	--	--
PETROLEUM HYDROCARBONS (UG/L)				
TPH (C06-C10)	47	64 B	1400	49 B
TPH (C10-C32)	47	540 B	3700	290 B

Table 4-3

Analytes Detected in Groundwater Samples, August 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID:	MDE	MT-MW04S-042412	MT-MW05S-042512	MT-MW06S-042412	MT-MW07S-082212
SAMPLE DATE:	GROUNDWATER	20120424	20120425	20120424	20120822
LOCATION:	STANDARD	MT-MW04S	MT-MW05S	MT-MW06S	MT-MW07S
VOLATILES (UG/L)					
1,2,3-TRIMETHYLBENZENE	NA	--	--	--	--
1,2,4-TRIMETHYLBENZENE	NA	--	--	--	--
1,2-DICHLOROETHANE	5	--	--	--	--
4-ISOPROPYLTOLUENE	NA	--	--	--	--
4-METHYL-2-PENTANONE	630	--	--	--	--
ACETONE	550	--	--	--	--
BENZENE	5	--	--	--	--
CARBON DISULFIDE	100	--	--	--	0.16 J
CARBON TETRACHLORIDE	5	--	--	--	--
CHLOROFORM	80	0.62 J	--	--	--
CHLOROMETHANE	19	--	0.35 J	0.47 J	--
CIS-1,2-DICHLOROETHENE	70	--	--	--	--
ETHYLBENZENE	700	--	--	--	--
ISOPROPYLBENZENE	66	--	--	--	--
M+P-XYLENES	NA	--	--	--	--
NAPHTHALENE	0.65	--	--	--	--
N-PROPYLBENZENE	NA	--	--	--	--
O-XYLENE	NA	--	--	--	--
SEC-BUTYLBENZENE	NA	--	--	--	--
TOLUENE	1000	--	--	--	--
TOTAL XYLENES	10000	--	--	--	--
TRICHLOROETHENE	5	--	0.35 J	--	--
SEMIVOLATILES (UG/L)					
BIS(2-ETHYLHEXYL)PHTHALATE	6	NA	NA	NA	0.91 J
CAPROLACTAM	NA	NA	NA	NA	--

Table 4-3

Analytes Detected in Groundwater Samples, August 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID:	MDE	MT-MW04S-042412	MT-MW05S-042512	MT-MW06S-042412	MT-MW07S-082212
SAMPLE DATE:	GROUNDWATER	20120424	20120425	20120424	20120822
LOCATION:	STANDARD	MT-MW04S	MT-MW05S	MT-MW06S	MT-MW07S
METALS (UG/L)					
ANTIMONY	6	--	--	--	0.17 J
ARSENIC	10	0.71 J	1 J	1.5 J	--
BARIUM	2000	76	20	96	20
BERYLLIUM	4	3.3	36	81	3
CADMIUM	5	0.14 J	0.85 J	2	--
CHROMIUM	100	--	--	--	5.2
COBALT	NA	210	430	540	20
COPPER	1300	43	32	46	3.4 K
LEAD	15	0.71 B	1.3 B	2.3	0.55 J
MERCURY	2	--	--	--	0.39
NICKEL	73	330	870	1200	31
SELENIUM	50	--	0.74 J	1.2 J	--
VANADIUM	3.7	--	--	--	2.4 J
ZINC	5000	340	2500	1900	53
FILTERED METALS (UG/L)					
ANTIMONY	6	0.21 B	--	--	0.13 J
ARSENIC	10	0.69 J	1.2 J	1.3 J	--
BARIUM	2000	76	20	94	17
BERYLLIUM	4	3.1	36	80	2.9
CADMIUM	5	0.23 J	0.9 J	2.1	--
COBALT	NA	200	430	530	21
COPPER	1300	44	35	48	1.5 B
LEAD	15	0.64 B	1.3 B	2.3	--
NICKEL	73	320	870	1200	31
SELENIUM	50	--	--	0.63 J	--
TUNGSTEN	NA	0.78 J	--	--	NA
VANADIUM	3.7	--	--	--	--
ZINC	5000	330	2500	1900	51
MISCELLANEOUS PARAMETERS (UG/L)					
PERCHLORATE	2.6	--	--	0.16 J	NA
PETROLEUM HYDROCARBONS (UG/L)					
TPH (C06-C10)	47	49 B	52 B	64 B	36 B
TPH (C10-C32)	47	440 B	430 B	480 B	400 B

Table 4-3

Analytes Detected in Groundwater Samples, August 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID:	MDE	MT-MW08S-082212	MT-MW09S-082112	MT-MW10S-082212	MT-MW11S-082112	MT-MW12S-082112
SAMPLE DATE:	GROUNDWATER	20120822	20120821	20120822	20120821	20120821
LOCATION:	STANDARD	MT-MW08S	MT-MW09S	MT-MW10S	MT-MW11S	MT-MW12S
VOLATILES (UG/L)						
1,2,3-TRIMETHYLBENZENE	NA	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	NA	--	--	--	--	--
1,2-DICHLOROETHANE	5	--	--	--	--	--
4-ISOPROPYLTOLUENE	NA	--	--	--	--	--
4-METHYL-2-PENTANONE	630	--	--	--	--	--
ACETONE	550	2.8 J	1.9 J	--	2.8 J	--
BENZENE	5	--	--	1.9	--	--
CARBON DISULFIDE	100	1.3	2.9	0.67 J	0.46 J	--
CARBON TETRACHLORIDE	5	--	--	--	--	0.34 J
CHLOROFORM	80	--	--	--	0.36 J	11
CHLOROMETHANE	19	0.37 J	--	--	--	--
CIS-1,2-DICHLOROETHENE	70	--	--	--	--	--
ETHYLBENZENE	700	--	--	--	--	--
ISOPROPYLBENZENE	66	--	--	--	--	--
M+P-XYLENES	NA	--	--	--	--	--
NAPHTHALENE	0.65	--	--	--	--	0.54 J
N-PROPYLBENZENE	NA	--	--	--	--	--
O-XYLENE	NA	--	--	--	--	--
SEC-BUTYLBENZENE	NA	--	--	--	--	--
TOLUENE	1000	0.16 J	--	0.27 J	--	--
TOTAL XYLENES	10000	--	--	--	--	--
TRICHLOROETHENE	5	--	--	--	--	--
SEMIVOLATILES (UG/L)						
BIS(2-ETHYLHEXYL)PHTHALATE	6	0.79 J	1.5 J	--	1.5 J	1.1 J
CAPROLACTAM	NA	0.78 J	1.7 J	--	--	--

Table 4-3

Analytes Detected in Groundwater Samples, August 2012
Main Terminal Area Phase II Investigation
Martin State Airport, Middle River, Maryland

SAMPLE ID:	MDE	MT-MW08S-082212	MT-MW09S-082112	MT-MW10S-082212	MT-MW11S-082112	MT-MW12S-082112
SAMPLE DATE:	GROUNDWATER	20120822	20120821	20120822	20120821	20120821
LOCATION:	STANDARD	MT-MW08S	MT-MW09S	MT-MW10S	MT-MW11S	MT-MW12S
METALS (UG/L)						
ANTIMONY	6	0.4 J	1.9 J	0.15 J	1.3 J	0.49 J
ARSENIC	10	--	0.6 J	0.56 J	1.2 J	0.75 J
BARIUM	2000	63	59	63	120	100
BERYLLIUM	4	--	1.8	23	0.44 J	4.9
CADMIUM	5	--	--	--	--	0.75 J
CHROMIUM	100	1.8 J	1.8 J	2.5	21	1.2 J
COBALT	NA	5.9	7.6	250	86	390
COPPER	1300	2.1 B	2.2 B	1.5 B	2.8 K	12
LEAD	15	0.29 J	0.79 J	0.44 J	0.76 J	0.54 J
MERCURY	2	--	--	--	--	0.12 J
NICKEL	73	11	12	380	140	690
SELENIUM	50	--	0.62 J	--	--	0.79 J
VANADIUM	3.7	0.61 J	0.84 J	0.53 J	2.6 J	0.87 J
ZINC	5000	12 B	43	370	160	670
FILTERED METALS (UG/L)						
ANTIMONY	6	0.31 J	3	0.14 J	1.1 J	0.28 J
ARSENIC	10	--	0.52 J	--	0.74 J	--
BARIUM	2000	62	47	62	110	110
BERYLLIUM	4	--	1.7	22	--	1.9
CADMIUM	5	--	--	--	--	0.42 J
COBALT	NA	5.5	7.5	250	54	400
COPPER	1300	1.4 B	0.41 B	0.29 B	0.39 B	0.31 B
LEAD	15	--	--	--	--	--
NICKEL	73	11	12	370	83	680
SELENIUM	50	--	--	--	--	--
TUNGSTEN	NA	NA	NA	NA	NA	NA
VANADIUM	3.7	--	--	--	0.89 J	--
ZINC	5000	12 B	43	360	11 B	580
MISCELLANEOUS PARAMETERS (UG/L)						
PERCHLORATE	2.6	NA	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)						
TPH (C06-C10)	47	40 B	56 B	41 B	61 B	64 B
TPH (C10-C32)	47	--	470 B	330 B	410 B	240 B

MDE - Maryland Department of the Environment, June 2008
-- - Not detected at listed detection limit
B - Laboratory blank contamination
J - Positive result is considered estimated as a result of technical noncompliance.
K - Positive result is considered to be biased high as a result of technical noncompliance.
Gray shading indicates the value exceeds screening criteria.

u g/L - microgram per liter
NA - not available

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Figure 4-1

Figure 4-2

Figure 4-3

Figure 4-4

Figure 4-5

Table 4-1

Table 4-2

Table 4-3

Section 5
Summary and Recommendations

A supplemental Phase II investigation of the Main Terminal Area of Martin State Airport (MSA) was conducted in July and August 2012 to identify and characterize possible chemical contamination in soil and groundwater. The soil boring and well locations were completed based on the results of the soil gas, membrane-interface probes (MIPs), and groundwater analyses obtained during the 2011 Main Terminal Phase II investigation. The recognized environmental conditions (RECs) specifically investigated as part of this supplemental Phase II investigation include: REC #2 (former fueling station B at hangar 6 apron); REC #3 (former fueling and defueling pits and fuel-oil underground storage tanks [USTs] at hangar 1); REC #9 (hangars 4 and 5 Heating/Boiler Rooms); REC #15 (former fuel oil USTs at hangar 6); and REC #21 (hangar 5 painting/stripping area and acid-neutralization system). In addition, the six wells installed as part of the main terminal Phase II site investigation were sampled during the Martin State Airport annual monitoring program.

5.1 SUMMARY

Here is a summary of the 2012 main terminal characterization activities:

- obtained utility clearances and associated permits for intrusive investigations from Lockheed Martin Corporation, Martin State Airport, and Maryland Aviation Administration (MAA) (as applicable)

- advanced five soil borings to a terminal depth of 25 feet below ground surface and collected soil samples using direct-push technology (DPT) to assess chemical impacts in soil. The proposed soil boring locations were selected based on a review of soil gas and membrane-interface probe data collected and evaluated from the RECs (RECs #2, 3, 9, and 21) in the 2011 Phase II investigation. Soil samples were collected for chemical analyses.

- installed six two-inch-diameter groundwater monitoring wells using a low-profile mini-sonic rig

- collected and analyzed groundwater samples and water levels from the six new wells and the six wells installed in 2011

- surveyed soil boring and monitoring well locations using a Maryland-licensed surveyor

- collected, stored, and characterized investigation-derived waste (IDW) and disposed of it at an off-site Lockheed Martin Corporation-approved treatment or disposal facility

- performed laboratory chemical analyses and chemical-data validation on soil and groundwater samples

A summary of the 2012 findings follows:

- Volatile organic compounds were detected at low concentrations in five of 10 soil samples. All detected concentrations are less than residential soil standards.

- Two soil samples from boring SB-17 (MT-SS17-0-2 and MT-SS17-8-10) had semivolatile organic compound concentrations exceeding Maryland Department of the Environment (MDE) residential soil standards, but no samples had results exceeding non-residential standards. Because these concentrations do not exceed non-residential standards, these results support the conclusion that significant petroleum contamination has not been detected in this area.

- Total petroleum hydrocarbons (TPH)-diesel-range organic (DRO) results exceed its residential standard (230 milligram per kilogram [mg/kg]) in one soil sample (MT-SS17-0-2 at 240 mg/kg), whereas concentrations of TPH-gasoline-range organics (GRO) are below screening criteria in all samples. These results support the conclusion that significant petroleum contamination has not been detected in this area.

- Although detected total concentrations of arsenic, vanadium, and chromium in some soil samples exceed regulatory standards, these relatively high concentrations are more likely related to natural background rather than historical industrial activities conducted on site.

- Other metals were detected in these samples, but at concentrations not exceeding regulatory standards. These metals include barium, beryllium, cobalt, copper, lead, nickel, selenium, and zinc.

- During the April 2012 sampling event, one VOC (benzene) exceeded the MDE groundwater standard. Benzene was detected at a concentration of 87 micrograms per liter (µg/L) in well MW-02S, which is consistent with the concentration of 50.5 µg/L detected during the previous June 2011 sampling event.

- Eight different VOCs (acetone, benzene, carbon disulfide, carbon tetrachloride, chloroform, chloromethane, naphthalene, and toluene) were detected in groundwater samples during the August 2012 sampling event. None of the detected volatile organic compounds concentrations exceeds its respective Maryland Department of the Environment groundwater standard.

- During the August 2012 sampling event, no semivolatile organic compounds were detected above their respective Maryland Department of the Environment groundwater standards. 1,4-Dioxane was not detected in any groundwater samples from the April or August 2012 sampling events.

- Groundwater samples were analyzed for both total (i.e., unfiltered) and dissolved (i.e., filtered) metals. Thirteen metals were detected at varying concentrations in groundwater samples collected from the previously installed monitoring wells (MW-01S through MW-06S), and 14 metals were detected at varying concentrations in groundwater samples collected from the newly installed monitoring wells (MW-07S through MW-12S). Three metals (beryllium, nickel and vanadium) were detected at concentrations exceeding Maryland Department of the Environment groundwater standards.

- Beryllium exceeded the Maryland Department of the Environment standard (4 µg/L) in four unfiltered samples: MT-MW05S (36 µg/L), MT-MW06S (81 µg/L), MT-MW10S (23 µg/L) and MT-MW12S (4.9 µg/L); and in three filtered samples: MT-MW05S (36 µg/L), MT-MW06S (80 µg/L), and MT-MW10S (22 µg/L).

- Nickel exceeded its standard (73 µg/L) in both unfiltered and filtered samples collected from wells MT-MW-04S (330 µg/L and 320 µg/L, respectively), MT-MW-05S (870 µg/L and 870 µg/L, respectively), MT-MW-06S (1,200 µg/L and 1,200 µg/L, respectively), MT-MW-10S (380 µg/L and 370 µg/L, respectively), MT-MW-11S (140 µg/L and 83 µg/L, respectively), and MT-MW-12S (690µg/L and 680µg/L, respectively).

- Vanadium exceeded the Maryland Department of the Environment standard (3.7 µg/L) in one unfiltered sample (MT-MW03S), at an estimated concentration of 6.0 µg/L.

- TPH-GRO was detected in one well (MT-MW02S) at a concentration of 1,400 µg/L, which is more than 30 times its Maryland Department of the Environment groundwater standard (47 µg/L). This concentration is similar to the 1,540 µg/L detected during the previous June 2011 sampling event. TPH-DRO was also detected in one well (MT-MW02S) at a concentration of 3,700 µg/L, which is approximately 80 times its Maryland Department of the Environment groundwater standard (47 µg/L). This concentration is similar to the 4,900 µg/L detected during the previous June 2011 sampling event.

- Samples from monitoring wells MT-MW-01S through MT-MW06S sampled in April 2012 were analyzed for hexavalent chromium and perchlorate. Hexavalent chromium was not detected in any of the six samples, and perchlorate was detected in one sample (MT-MW06S) at an estimated concentration of 0.16 µg/L.

5.2 RECOMMENDATIONS

Supplemental data collected at the Main Terminal Area during July–August 2012 do not reveal any significant additional contamination in RECs #2, 3, 9, 15, and 21. Based on the findings summarized in Section 4, we recommend no further site characterization; however, we also recommend future monitoring of existing groundwater monitoring wells to document chemical concentrations over time.

Section 6
References

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3. Glaser, J. D., 1969. "Petrology and Origin of Potomac and Magothy (Cretaceous) Sediments, Middle Atlantic Coastal Plain," *Maryland Geological Survey Reports of Investigations No. 11*. Maryland Geological Survey, Baltimore, Maryland. 102 pp.

4. Hansen, H. J., and J. Edwards, 1986. "The Lithology and Distribution of PreCretaceous Basement Rocks beneath the Maryland Coastal Plain." *Maryland Geological Survey Report of Investigations No. 44*. 27 pp.

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6. Maryland Aviation Administration (MAA), 2008. *Spill Prevention, Control, and Countermeasure Plan for Martin State Airport*. Report prepared for MAA Facilities Development and Engineering, Linthicum, Maryland, by EA Engineering, Science, and Technology, Inc. Sparks, Maryland. December.

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9. Maryland Department of the Environment (MDE), 2008. *MDE Cleanup Standards for Soil and Groundwater, 2008, Interim Final Guidance, Update No. 2.1*. June.

10. Tetra Tech, Inc. (Tetra Tech), 2009. *Deep Groundwater Investigation Report, Martin State Airport, Middle River, Maryland*. Report prepared by Tetra Tech, Inc., Germantown, Maryland for Lockheed Martin Corporation, Bethesda, Maryland. April.

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12. Tetra Tech, Inc. (Tetra Tech), 2010b. *Environmental Evaluation Addendum, Martin State Airport Main Terminal, 701 Wilson Point Road, Middle River, Maryland*. Report prepared by Tetra Tech, Inc., Germantown, Maryland for Lockheed Martin Corporation, Bethesda, Maryland. December.

13. Tetra Tech, Inc. (Tetra Tech), 2010c. *Remedial Investigation Report, Martin State Airport, 701 Wilson Point Road, Middle River, Maryland*. Report prepared by Tetra Tech, Inc., Germantown, Maryland for Lockheed Martin Corporation, Bethesda, Maryland. November.

14. Tetra Tech, Inc. (Tetra Tech), 2011. *Main Terminal Phase II Site Investigation Work Plan, Martin State Airport, 701 Wilson Point Road, Middle River, Maryland*. Report prepared by Tetra Tech, Inc., Germantown, Maryland for Lockheed Martin Corporation, Bethesda, Maryland. April.

15. Tetra Tech, Inc. (Tetra Tech), 2012. *Main Terminal Supplemental Phase II Site Investigation Work Plan, Martin State Airport, 701 Wilson Point Road, Middle River, Maryland*. Report prepared by Tetra Tech, Inc., Germantown, Maryland for Lockheed Martin Corporation, Bethesda, Maryland. April.

16. United States Environmental Protection Agency (USEPA), Region 3, 1993. *Region III Modifications to the Laboratory Data-Validation Functional Guidelines for Evaluating Inorganics Analyses*. April.

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18. Vroblesky, D. A and W. B. Fleck, 1991. *Hydrogeologic Framework of the Coastal Plain of Maryland, Delaware, and the District of Columbia Regional Aquifer System Analysis, Northern Atlantic Coastal Plain.* U.S. Geological Survey Professional Paper 1404E. U.S. Government Printing Office, Washington, D.C. 45 pp.

APPENDIX A—
PERMITS, MISS UTILITY CLEARANCE, AND UTILITY-CLEARANCE REPORT

Maryland Aviation Administration

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Beverley K. Swaim-Staley
Secretary

Paul J. Wiedefeld
Executive Director

June 8, 2012

Mr. Tony Apanavage
Tetra Tech
20251 Century Boulevard Suite 200
Germantown, Maryland 20874

Dear Mr. Apanavage:

SUBJECT: Permit BP-12-023 Geotechnical Investigations for Martin State Airport Main Terminal Areas

Please find enclosed the approved Permit for the above referenced project. Permit approval is subject to compliance with provisions and stipulations contained in the Permits Information Guide and Tenant Directive 007.01. The issuance or granting of this permit shall not be construed to be an approval of any violation of other Maryland Aviation Administration (MAA) or Code of Maryland (COMAR) regulations. MAA reserves the right to suspend or revoke the permit whenever it is deemed to be issued on the basis of incorrect, inaccurate or incomplete information provided by the applicant.

Please see the attached list of MAA departments and offices that need to be contacted prior to the start of work. Also, please refer to the Permits Information Guide to see if any other permit or authorization is required. The approved Permit, Permit Plan Set and Permit Comments shall be kept at the project location until the completion of the project. Revisions to design shall be submitted to and approved by MAA Division of Document & Permits prior to construction. ***As Built Drawings are to be received no later than 70 days from Final Inspection acceptance.***

This permit shall become invalid unless the work on the site authorized by this permit is commenced within 180 days after issuance, or if the work is suspended or abandoned for a period of 180 days after the work is commenced. The issuance of this permit shall not relieve the applicant from his/her responsibility to ensure proper design and construction of this project.

Sincerely,

Syed Shariq R.A., Manager
Division of Documents & Permits

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND AVIATION ADMINISTRATION

CONSTRUCTION PERMIT

X	**Building Permit**
	Installation Permit
	Single Trade Permit
	Demolition Permit

Permit Information

Project Name: **Geotechnical Investigation at MTN**	Airport:		BWI
		X	MTN
Project Location: **Main Terminal Areas Hangars 1,4,5 &6**	Tenant Space No.		
Permit Issued to: **Lockheed Martin / Tetra Tech**	Tel.: 301-233-8230		
	E-mail: tony.apanavage@tetratech.com		
Contact Person: **Tony Appanavage**	Tel.:301-233-8230		
	E-mail:		
Mailing Address: **20251 Century Boulevard Suite 200 Germantown MD 20874**	Emergency Tel. Number: **301-233-8230**		

Contractor/ Installer

Construction Company/Organization: **Boart Longyear**	MD Const. License No: MWD 575
	Expiration: 6-1-2013
Address:	Tel: 740-373-2190
	E-mail:
Contact Person: **Larry Hunsberger/Jim McCombs**	Emergency Tel. Number:740-350-6611
	E-mail: jim.mccombs@boartlongyear.com

Additional Permits/Authorizations Required Prior to Start of Work

Airport Zoning Permit	X if applicable	**Hot Work/Welding Permit/ Hydrant Use Permit**	X
Contact MAA Fac. Planning: 410-859-7793		Contact BWI Fire & Rescue: 410-859-7511	
Utility Modification/Digging Authorization	X	**Department of Health Approval**	
Contact MAA Inspections: 410-859-7796		*Contact AA County DOH: 410-222-7238*	
Confined Space Entry Permit		**Liquor License**	
Contact MAA Inspections: 410-859-7796		*Contact AA County Liquor Board: 410-222-1148*	
State Highway Admin. Access Permit		**MAA Tenant Advisory**	X
Contact State Highway Administration		*Contact MAA Operations: 410-859-7974*	

Call MAA Division of Documents & Permits to schedule a Preconstruction Meeting Before Start of Work

Approval	Permit No. **BP-12-023**
Syed Sharif, R.A. Manager, Division of Documents & Permits	Date Issued: 6-8-12

THIS PERMIT IS ISSUED BY MARYLAND AVIATION ADMINISTRATION AS AUTHORIZATION TO PERFORM APPROVED CONSTRUCTION ACTIVITIES AS DESCRIBED AND SHOWN ON APPROVED PERMIT PLANS AND SPECIFICATIONS

Building Permit No. BP-12-023 is ***approved as noted*** and subject to compliance with the applicable codes, MAA Design Standards and the follow comments:

1. Contact Airport Operations 48 hours prior to working on or near Taxilane "K" or disrupting any landside traffic flow

GENERAL COMMENTS

1. Applicable Codes & Regulations as per Tenant Directive 007.1 apply.
2. Display MAA Permit on site at all times
3. Secure all tools and equipment in public/sterile areas and ensure that all doors are locked when no one is present in the construction area. No tools are to be left unattended. Follow proper escort procedures in the SIDA.
4. All loose debris/trash, on or about AOA, shall be deposited in an acceptable, covered trash receptacle. No debris/trash shall be left about roof; spaces open to the AOA, conveyance, or near open trash receptacles at any time.
5. Firestop penetrations through fire rated assemblies and seal all unused/abandoned openings using appropriate UL-listed firestopping systems.
6. Sleeves:
   - Sleeves shall be installed for cable and raceway penetrations of concrete slabs, masonry and fire rated gypsum walls and other floor and wall assemblies.
   - Sleeves will be installed during erection of concrete and masonry walls.
   - Sleeves shall be installed in concrete slabs supported by pan decking to ensure full sealing of the uneven lower surface around the pan.
   - New concrete slabs are acceptable to be poured with the concrete surrounding the new conduit without the use of sleeves.
7. Provide support to structural member for any mechanical, electrical or other building elements not scheduled for removal but attached to items being demolished.

8. Core drilling, concrete floor cutting or other removal methods (on-grade, elevated, and post tensioned) shall be preceded by NDT to show that no embedded conduits or structural reinforcing will be disturbed in the proposed locations. The MAA Design Standard DST 2007-01 Core Drilling of Concrete Floors shall be used as reference.

9. Electrical:
   - Electrical, communication, security or fire safety wiring/systems shall not be interrupted without notification and coordination with authority having jurisdiction and written approval by said authority.
   - MC/FMC ¾ inch minimum size, 6 foot maximum length; except as allowed to fish existing walls per MAA Design Standards. Cont'
   - Raceway size shall be ¾" minimum.
   - All conduit fittings shall be steel.
   - All wire/cable shall be plenum rated.
   - Only brushed stainless steel device covers allowed.
   - Exothermic weld required for electrical grounding to building steel per MAA-DST.
   - Install expansion joints at points required.
10. Mechanical/Plumbing:
    - Roof mounted equipment issues:
      -Gas pipe exposure on the roof shall be minimized.
      -Roof mounted equipment condensate drains shall be routed to the nearest roof drain.
      -Condensate drains shall not rest directly on the roof.
      -Existing roof warranties shall be maintained.
    - High pressure stainless steel couplings shall be used on all sanitary waste and vent piping.
11. Hot Work & Welding:
    - Open flame welding and cutting shall not be allowed without burning permit as issued.
    - During flame welding and flame/mechanical cutting operations install protective weld screens and non-flammable fire protection blankets.

Maryland Aviation Administration

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Beverley K. Swaim-Staley
Secretary

Paul J. Wiedefeld, A.A.E.
Executive Director

June 12, 2012

Sent VIA Email: tony.apanavage@tetratech.com
Mr. Tony Apanavage
Tetra Tech
20251 Century Boulevard, Suite 200
Germantown MD 20874

Dear Mr. Apanavage:

SUBJECT: Airport Zoning Permit No. 12-111 (Drilling Rig Operation at Martin State Airport (MTN), Terminal Location)

Maryland Aviation Administration's (MAA) Office of Planning and Environmental Services (OPES) has received and reviewed the subject Airport Zoning Permit and determined that the proposed project lies within the MTN Airport Zoning District. To ensure the safety of the traveling public, the Code of Maryland Regulations (COMAR) authorizes MAA to review each project proposed within the Airport Zoning District, which is defined as the area within 3.3 miles of a fixed point on MTN.

The MAA has reviewed the application to ensure that the proposed project poses no hazard to the airspace surrounding MTN. The MAA analysis revealed that the drilling rig operation of 35 feet AGL/49 feet MSL would not be an obstruction to the Federal Aviation Regulations (FAR) Part 77 surfaces.

The MAA hereby approves application No. 12-111 for the drilling rig operation of 35 feet AGL/49 feet MSL. If you have any questions concerning this review, please contact me at 410-859-7692.

Sincerely,

J. Richard Shepley, Airport Planner
Division of Airport Facilities Planning

Enclosures

cc: Mr. Charles Baublitz, Chief, Airport Operations, MTN, **Sent VIA Email Only**

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND AVIATION ADMINISTRATION

APPLICATION FOR AIRPORT ZONING PERMIT

Approval of this application is not a substitute for any other permits or approvals required by the State or Local Jurisdiction.

Section I: *Administrative Use Only*

PERMIT NO. 12-111 MARYLAND AIRPORT ZONING PERMIT

Application No.:

Date Received: 6-6-12 Date Issued: 6-12-12

Airport: ☐ BWI ☐ Martin State ☐ Other

County: ☐ Anne Arundel ☐ Howard ☐ Baltimore ☐ Other

Approval Required: ☐ Noise Zone ☐ Obstructions

Section II: ***Applicant Information*** MAIN TERMINAL

1.) Application for (Check One)
(For the purposes of this form antenna, satellite dish, HVAC equipment, etc., should be considered "structures.")

☐ New Subdivision (Plat Approval) Subdivision No.: _____

☐ Structure Only ☐ Structure + Crane County Permit No.: _____

☒ Crane Only, for construction or installation that will not add height to an existing structure.

RECEIVED JUN - 6 2012 MD Aviation Administration PLANNING & ENGINEERING

2.) Location: **Required:** ADC Map reference Martin State Airport

In addition, please complete at least one of the following types.

a) Tax Map, Grid _____, Parcel _____, Lot/block (if any) _____

b) Street Address 701 Wilson Point Road, Baltimore, MD 21220

c) N.S.E.W. side of _____, @ _____ ft. from intersection with _____

_____

For Structures

3.) Type of improvement: ☐ New Building ☐ Addition ☐ Alteration ☐ Repair ☒ Other

4.) Contract price or estimated value of improvement: $100,000

5.) Proposed Use(s):

a) Residential: ☐ One family ☐ Two Family ☐ Multi-family (No. units _____) ☐ Other

b) Non-residential:

☐ Hospital, Nursing Home, Institution

☐ School, Library, Church, Place of Assembly

☐ Hotel, Motel, Transient Lodging

☐ Outdoor Spectator Sports, Park, Playground

☐ Office, Store, Theater, Restaurant

☐ Agriculture, Industry: type: _____

☐ Tower, Tank: type: _____

☒ Other Environmental Investigation

_____

6.) Describe proposed structures: No permanent structures will be installed above grade for this project

_____

7.) Present use if different from proposed: _____

8.) Size of Structure: Height _____, Length _____, Width _____

A site plan showing the property boundaries and the location of any existing/proposed structures is required with application.

Elevations

*MLS=Mean Sea Level. All height restrictions in the vicinity of the airport use MSL as a reference point. If you do not know the elevation of your site, you can obtain this information at the County Office of Planning & Code Enforcement, Map Room.

9.) Ground elevation of site: 9 ft MSL*

10.) Maximum elevation: (Height of structure + elevation of site) 9 ft (all permanent work will be finished at or below grade) _____ MSL*

For Cranes

11.) Ground elevation at crane location: Drill rig mast 9 ft MSL@ Martin State Airport

12.) Height of crane(s) 35 ft

13.) Maximum elevation: (ground elevation + height of crane) 44 ft MSL*

The applicant hereby certified and agrees as follows: 1) that he/she is authorized to make this application; 2) that the information is correct; 3) that he/she will comply with all regulations that are applicable hereto; and 4) that he/she will perform no work on the subject property not specifically described in this application.

APPLICANT (Please Print)

Tetra Tech on behalf of Lockheed Martin

Address: 20251 Century Blvd, Suite 200

City	State	Zipcode
Germantown	MD	20874

Phone No.: 301-528-3021 office 301-233-8230 cell

Signature: [signature] 5/15/12

Connection to Property: Environmental consultant to Lockheed Martin

PROPERTY OWNER (Please Print)

Martin State Airport

Address: 701 Wilson Point Road

City	State	Zipcode
Baltimore	MD	21220

Section III *Approvals*

Obstruction: ☑ Approved for maximum height of 49' MSL ☐ Denied ☐ N/A

By: J. Kirk Shipley Date: 6-12-12

Noise: ☐ Approved ☐ Denied ☑ N/A

By: J. Kirk Shipley Date: 6-12-12

Approval of this application, if granted, will terminate if construction does not begin within one year of approved date.
Approval of this permit does not preclude disturbance of applicant or occupants from aircraft operations. Please return application to: Maryland Aviation Administration, Aircraft Noise & Abatement Office, P.O. Box 8766, BWI Airport, MD 21240. Please direct inquiries to 410-859-7070.

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND AVIATION ADMINISTRATION

Division of Documents & Permits
P.O. Box 8766, BWI Airport
Maryland 21240-0766
Tel. 410-859-7796
Fax: 410-859-5440

APPLICATION FOR BUILDING PERMIT

GENERAL INFORMATION (To be completed by the applicant, please print)

Project Name: Main Terminal Investigation	Airport: ☐ BWI X MTN
Project Location (Bldg./Terminal, Level, Holdroom, Room No. etc.): Near Hangars 1, 4, 5 and 6 and near TWY K	Tenant Space No.:
Name of Tenant: On behalf of Lockheed Martin	Tel.: 301-233-8230
	E-mail: tony.apanavage@tetratech.com
Applicant/Contact Person: Tony Apanavage	Tel.: 301-528-3021
Representing: Tetra Tech on behalf of Lockheed Martin	Cell No.: 301-233-8230
Mailing Address: 20251 Century Blvd, Suite 200, Germantown, MD 20874	Fax: 301-528-3000
	E-mail: tony.apanavage@tetratech.com
Brief Description of Project: 5 soil borings and 6 groundwater monitoring wells will be installed for an environmental investigation.	**Check Appropriate Box:** MAA ☐ Funding Source: Existing Tenant X New Tenant ☐
Estimated Cost of Construction (**Required**): $100,000	
Name of Architect/Engineer: Tetra Tech	Tel.: 301-233-8230
Address: 20251 Century Blvd, Suite 200, Germantown, MD 20874	Fax: 302-528-3000
	E-mail: tony.apanavage@tetratech.com
Name of Contact: Tony Apanavage	
Name of Contractor: Boart Longyear	Tel.: 740-373-2190
	Cell/Emergency No: 740-350-6611
Name of Contact: Larry Hunsberger/Jim McCombs	E-mail: Jim.Mccombs@boartlongyear.com
Maryland Contractor's License Number: MWD575	Expiration Date: 06/01/2013
* Attach Photocopy of Current MD Contractors License and Insurance Certificate.	

Maryland Aviation Administration
AIRPORT FIRE & RESCUE DEPARTMENT
FIRE PREVENTION DIVISION
☐ REJECTED W[illegible]
☐ REVISE AS NOTED AND RESUBMIT AS REQUIRED
☐ APPROVED WITH REQUIRED REVISIONS
☐ APPROVED AS SUBMITTED 5/30/12
BY [signature] AM-11

Check Appropriate Box:

	Yes	No		Yes	No
Will a crane be used during construction?	☐	X	Will the work be done in a "Confined Space"?	☐	X
Will the work involve "Hot Work/Welding"?	☐	X	Will the work involve Trenching and Excavation?	☐	X
Will rooftop equipment be provided?	☐	X			

If the answer to any of these questions is Yes, additional permits or authorizations may be required. (See Permit Information & Guidelines for definitions and list of supplementary permits).

Applicant's Signature: [signature] Date: 5/15/12

FOR OFFICE USE ONLY

	Yes	No		Yes	No
Complete Application Form	☐	☐	Safety Plan	☐	☐
Insurance Certification	☐	☐	Commercial Management Authorization	☐	☐
Copy of Contractor's License	☐	☐	Check List	☐	☐
Dwgs. Stamped by Licensed Architect/Engineer	☐	☐	CD	☐	☐

RECEIVED
MAY 23 2012
DIVISION OF DOCUMENTS & PERMITS

Permit Coordinator:	Date:
Date Received:	BP Number: BP 12 023
Date of Meeting:	
Date of Release:	

MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND AVIATION ADMINISTRATION

UTILITY MODIFICATION/DIGGING AUTHORIZATION

Tenant Improvements Section
P.O. Box 8766, BWI Airport
Maryland 21240-0766
Tel.: 410-859-7796
Fax: 410-859-5440
E-mail address:
MAATIS@Bwiairport.com

GENERAL INFORMATION (To be completed by the applicant, please print)

Project Name: Soil and groundwater environmental investigations

Airport: ☐ BWI ☒ MTN

Project Location (Bldg./Terminal, Level, Holdroom, Room No. etc.):
Main Terminal near hangars 1, 4, 5, 6 and tax

Tenant Space No.:
NA

Name of Tenant:
Lockheed Martin

Tel.:
E-mail:

Applicant/Contact Person: Tony Apanavage

Tel.: 301-528-3021

Contractor: Tetra Tech

Cell: 301-233-8230

Mailing Address:

Fax:

E-mail:

STEP 1

Scope: *(Define Scope and Boundaries of Proposed Work. Attach Drawings or Sketches as Required.)*
Reference Fire Marshal approved drawings 5/30/2012

Utilities: List all Utilities as Identified in Contract Drawings	**Contract Drawing Reference**

STEP 2 *Gray areas to be filled out by MAA Inspector*

MAA Utilities*	Name: [illegible]	Signature: Charles Baublitz	Date: 6/14/12
MAA Design*	Name:	Signature:	Date:
MAA IT*	Name:	Signature:	Date:
FAA *	Name:	Signature:	Date:
BGE	Name:	Signature:	Date:
MISS UTILITY	Name:	Signature:	Date:

List additional utilities identified by MAA/PB/FAA/BGE/Miss Utility/Others

STEP 3

The following utilities have been test pitted, located, and identified (Digging authorization is subject to resubmission if utilities require re-marking and re-test pitting due to removal or disturbance of identifying markers)

Signature of Contractor: **Date:**

*MAA/FAA sign off does not necessarily indicate accuracy of information but rather denotes that there are no known utilities other than those that may be listed. MAA/FAA and their employees and authorized agents are not liable for accurately identifying or locating any or all utilities. MAA/FAA sign-offs do not relieve the Contractor of responsibility for locating and protecting all utilities near the work. Contractor should use extreme caution for all underground work; cutting or damaging utilities could result in, among other things, disruption of service at the airport.

FOR OFFICE USE ONLY

Signature of Inspector **Date:**

Name of Inspector: *Print*
Date Application Received:
Date Application Approved/Denied:

BP/IP Number: BP-12-023

ENVIROSCAN, INC.

Final Report
Geophysical Survey
Utility/Structure Clearance for 5 Soil Borings and 6 Monitoring Wells
RFP # 357691 Martin State Airport
Middle River, MD
Enviroscan Reference Number 071202

Prepared For: Tetra Tech NUS, Inc.
Prepared By: Enviroscan, Inc.
July 27, 2012

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ENVIROSCAN, INC.

July 27, 2012

Mr. Tony Apanavage
Tetra Tech NUS, Inc.
20251 Century Boulevard
Suite 200
Germantown, MD 20874-7114

RE: Geophysical Survey
Utility/Structure Clearance for 5 Soil Borings and 6 Monitoring Wells
RFP # 357691 Martin State Airport
Middle River, MD
Enviroscan Reference Number 071202

Dear Mr. Apanavage,

Pursuant to the specifications of our proposal, dated July 2, 2012, Enviroscan, Inc. conducted a multi-technique geophysical survey at the above-referenced site on July 3, 2012. The purpose of the survey was to perform utility clearance for 11 proposed soil borings.

Methods

The utility survey was completed using standard and/or routinely accepted practices of the geophysical industry and equipment representing the best available technology, including:

- a Radiodetection RD8000 Multi-Frequency pipe and cable tracer;
- a Radiodetection C.A.T. and Genny pipe and cable locator/tracer;
- a Fisher TW-6 electromagnetic (EM) pipe and cable locator/tracer;
- a GSSI SIR-2000 ground penetrating radar (GPR) system.

The principles of these techniques are detailed below.

RD8000

Utility tracing was conducted using a Radiodetection RD8000 digital cable and pipe tracer. The transmitter can be directly coupled to exposed portions of a metallic pipe, cable, or wire or indirectly (inductively) to a subsurface metallic utility of known location/orientation. The transmitter remains stationary and energizes the metallic utility at a frequency selected by the operator (512 Hz, 8 kHz, 33 kHz, or 65 kHz), which is received at the ground surface by the digital locator. When the transmitter is directly coupled to the metallic utility, the digital receiver can also calculate the depth of the utility to an accuracy of ±10% of the actual depth of the utility. Please note the close proximity to bends in the traced line or poor signal strength can result in erroneous depth estimations.

C.A.T. and Genny

The survey areas were also scanned with a Radiodetection C.A.T. and Genny pipe and cable locator and tracer. In Power mode, the C.A.T. detects the 50 to 60 Hertz (Hz) electromagnetic field generated by live power cables and other metallic utilities to which a live line is grounded. In Radio mode, the C.A.T. detects buried conductors (cables or metallic pipes) as they conduct and re-transmit commercial broadcast radio energy. In Genny mode, the C.A.T. detects signal generated by the Genny transmitter. The Genny transmitter can be coupled directly (conductively) to exposed portions of a metallic pipe, cable, or wire or inductively to a subsurface metallic utility with known location and orientation.

TW-6

In order to detect unknown utilities, Enviroscan employed a Fisher TW-6 pipe and cable locator and tracer. In pipe and cable search mode, the TW-6 is essentially a deep-sensing metal detector that detects any highly electrically conductive materials (e.g. metals) by creating an electromagnetic field with a transmitting coil. A receiving coil at a fixed separation from the transmitter measures the field strength. As the instrument is swept along the ground surface, subsurface metallic bodies distort the transmitted field. The change in field strength/orientation is sensed by the receiver, setting off an audible alarm and/or causing deflection of an analog meter. The TW-6 can nominally detect a 2-inch metal pipe to a depth of 8 feet and a 10-inch metal pipe to a depth of 14 feet.

In pipe and cable tracing mode, the TW-6 transmitter can be coupled directly (conductively) to exposed portions of a metallic pipe, cable, or wire or inductively to a subsurface metallic utility with known location and orientation. The transmitter remains stationary and energizes or excites the metallic utility to be traced with an 81.92-kilohertz signal that can be traced at the ground surface using the mobile TW-6 receiver wand or probe.

GPR

GPR systems produce cross-sectional images of subsurface features and layers by continuously emitting pulses of radar-frequency energy from a scanning antenna as it is towed along a survey profile. The radar pulses are reflected by interfaces between materials with differing dielectric properties. The reflections return to the antenna and are displayed on a video monitor as a continuous cross section in real time. Since the electrical properties of metal are distinctly different from soil and backfill materials, metallic pipes and other structures commonly produce dramatic and characteristic reflections. Fiberglass, plastic, concrete, and terra-cotta pipes and structures also produce recognizable, but less dramatic reflections. Scanning was performed using a GSSI SIR-2000 GPR controller with an internal hard drive and a color display, and both a high-frequency, high-resolution 500 megaHertz (MHz) antenna or transducer, and a lower frequency deep-penetrating 200 MHz transducer.

Results Summary

The utility clearance survey results are depicted in four separate panels in Figure 1 for the borings around the Main Terminal Area. The mapped utilities located during the survey are overlain on a basemap of the site. Several proposed borings needed to be relocated due to nearby utilities. These new locations are noted in Table 1. Please note that the new coordinates of boring locations moved during geoprobing (by others) to avoid marked utilities or obstructions to drilling do not appear on Table 1.

Limitations

The above-referenced geophysical survey was completed using standard and/or routinely accepted practices of the geophysical industry and equipment representing the best available technology. Enviroscan does not accept responsibility for survey limitations due to inherent technological limitations or unforeseen site-specific conditions. However, we make every effort to identify and notify the client of such limitations or conditions. In particular, please note the following specific limitations and recommendations:

- Enviroscan's field markings should be considered accurate to within approximately +/-18 inches for single lines. In contrast, since electromagnetic tracing of duct banks provides only a centerline, the bank itself may extend for 2 to 3 feet beyond the marked trace.

- The completion of this survey does not relieve any party of applicable legal obligations to notify the appropriate One-Call center prior to digging or drilling.

As always, we appreciate this opportunity to have worked with you. If you have any questions, please do not hesitate to contact me.

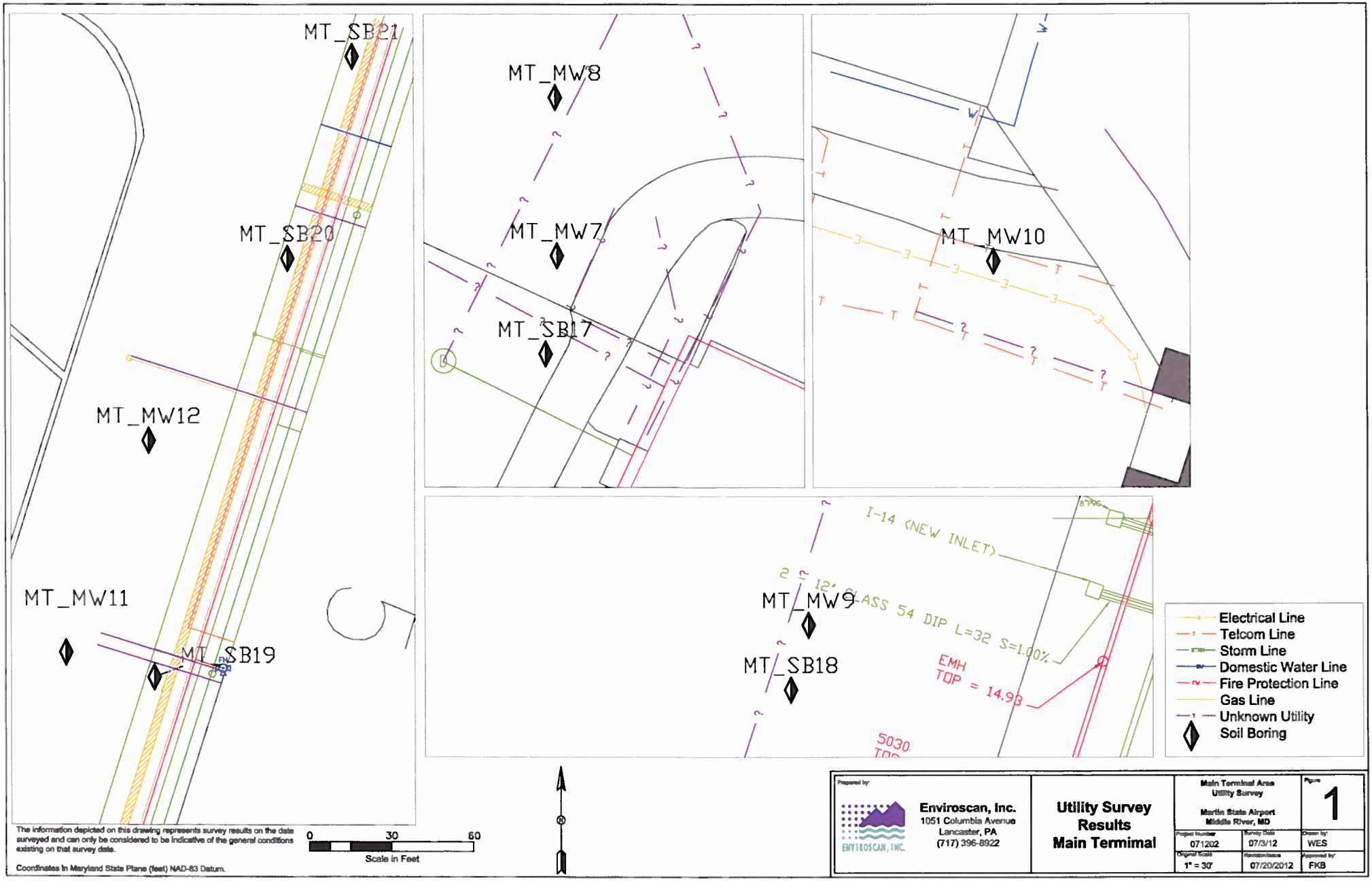
Sincerely,
Enviroscan, Inc.

William E. Steinhart III, M.Sc., P.G.
Principal Geophysicist

Technical Review By:
Enviroscan, Inc.

Felicia Kegel Bechtel, M.Sc., P.G.
President

enc.: Figure 1 Utility Survey Results Main Terminal
Table 1 – Utility Clearance Results Main Terminal Area



The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on that survey date.

Coordinates in Maryland State Plane (feet) NAD-83 Datum.

0 30 60

Scale in Feet

Prepared by:

Enviroscan, Inc.
1051 Columbia Avenue
Lancaster, PA
(717) 396-8922

Utility Survey Results Main Termimal

Main Terminal Area Utility Survey

Martin State Airport
Middle River, MD

Figure 1

Project Number	Survey Date	Drawn by:
071202	07/3/12	WES
Original Scale	Revision/Issue	Approved by:
1" = 30'	07/20/2012	FKB

Table 1
Utility Clearance Results
Main Terminal Area

Boring ID	Final Easting	Final Northing	Boring Moved due to Utility or Obstruction
MT_MW10	605210	1475841	
MT_MW11	605506.504	1475717.233	X
MT_MW12	605593	1475751	
MT_MW7	606343.334	1475339.583	X
MT_MW8	606408	1475339	
MT_MW9	605416.347	1476159.227	X
MT_SB17	606303.213	1475334.876	X
MT_SB18	605390	1476152	
MT_SB19	605505.357	1475747.991	X
MT_SB20	605668.258	1475802.582	X
MT_SB21	605749.993	1475831.432	X

MISS UTILITY

The Greater Chesapeake Damage Prevention Training Conference November 7-9 2012

HOME
SELECT YOUR STATE
SEARCH & STATUS
ITIC
FACILITY OWNERS
EXCAVATORS
TRAINING & SAFETY
HOMEOWNERS
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Before you dig, every dig. It's the law. 1.800.257.7777

HOMEOWNERS Click Here for an Internet Locate Request!

811 Know what's below. Call before you dig.

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: Search & Status

Miss Utility Ticket No: 123[illegible]453

VIEW STATUS HISTORY

Company Name	District Code	Status	Date/Time
AT&T TRANSMISSION	ATM01	Clear/No conflict	07/18/2012 10:04:04
BALT CO GOVT/S&N LOC	BCGOIT	Clear/No conflict	07/18/2012 10:56:38
BGE ELECTRIC-UTILIQUEST	BGEBA	Clear/No conflict	07/20/2012 13:20:54
BGE GAS-UTILIQUEST	BGEBAG	Clear/No conflict	07/20/2012 13:20:54
BALTIMORE CITY DPW-OCCLS	CBW04	Marked up to privately owned utility	07/20/2012 11:05:54
COMCAST - UTILIQUEST	CTV01	Clear/No conflict	07/20/2012 13:20:54
COMCAST- FIBER/UTILIQUEST	HTV02	Clear/No conflict	07/24/2012 10:10:16
MD AVIATION ADMINISTRATION	MAA02	Not complete/In progress REQUIRES PRIVATE LOCATOR	07/19/2012 10:52:48
QWEST COMMUNICATIONS	QWESTM01	Clear/No conflict	07/18/2012 11:10:49
VERIZON - LAMBERT CABLE	VBT	Clear/No conflict	07/20/2012 13:20:54

Facility Owner-Members/Locator Contact Information

CODE	DEFINITION
1	Clear/No Conflict. ***Maryland***:Clear/No Conflict: Owner-member has reported that they have no underground facilities in the vicinity of the excavation or demolition.
2	Marked. ***Maryland***: Marked: Owner-member has reported that the excavation/demolition may proceed in a careful and prudent manner.
3	24-hour delay - Member requested a 24-hour locate extension.
4	48-hour delay - Member requested a 48-hour locate extension.
5	Not Complete/In Progress: Locator has spoken to excavator and they have agreed to this message.
6	Locate discrepancy.
7	Not Complete/In Progress: Dispute.
8	Utility Locator has not yet responded.
9	Marked up to privately owned utility.
10/A	Incorrect address information. Please call Miss Utility to reschedule.
11/B (Delaware only)	Installation, Maps or other documentation has been provided.
12/C (Delaware only)	Locator could not gain access to property.
13/D (Delaware only)	No Locate - Contractor work completed.
14/E (Delaware only)	No Locate - Locator requests meeting with excavator.
15/F (Delaware only)	No Locate - Locator requests white lining of area due to large scope of work or unclear extent of work.

Choose your state:
List of States GO

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Apanavage, Tony

From: ticketcheck@managetickets.com
Sent: Tuesday, July 24, 2012 10:15 AM
To: Apanavage, Tony
Subject: Ticket Check Status for MD Ticket 12369453

Ticket Number: **12369453**
Location: UNNAMED PARKING LOT MIDDLE RIVER, MD

As of **07/24/2012 10:15:00 EST**, participating facility owners have responded to Ticket Check as follows:

District Code	Status
AT&T TRANSMISSION	Clear/No conflict
BALT CO GOVT/S&N LOC	Clear/No conflict
BGE ELECTRIC-UTILIQUEST	Clear/No conflict
BGE GAS-UTILIQUEST	Clear/No conflict
BALTIMORE CITY DPW-OCCLS	Marked up to privately owned utility
COMCAST - UTILIQUEST	Clear/No conflict
COMCAST-FIBER/UTILIQUEST	Clear/No conflict
MD AVIATION ADMINISTRATION	Not complete/In progress
QWEST COMMUNICATIONS	Clear/No conflict
VERIZON - LAMBERT CABLE	Clear/No conflict To review this ticket in its entirety, visit Search and Status® on **www.managetickets.com**.

Does not participate in Ticket Check: This member does not post their positive response status back to this system. It does not mean that they were not notified of the request to excavate.

Please direct all questions and concerns to your one call center.

APPENDIX B—
SOIL BORINGS, WELL CONSTRUCTION DIAGRAMS, AND WELL DEVELOPMENT RECORDS

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Main Terminal
Project No.: 112IC04054 - 04

Sample ID No.: MT-SB17
Sample Location:
Sampled By: S.Cameron / W. Pryor
C.O.C. No.:

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
7/10/12	1025	0-2	brn-red/brn	Sandy SILT + CLAY w/trace organics.
Method:				Slightly moist.
Grab				
Monitor Readings	1030	8-10	light brn	Low plasticity silty CLAY w/
(Range in ppm):				trace fine grained sand.
0.0				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3 - 40 mL vials / 1 - 4 oz Jar	✓	
SVOCs	1 - 4 oz Jar	✓	
Metals	1 - 4 oz Jar	✓	
TPH-GRO	1 - 4 oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

S. Cameron

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Main Terminal Phase II
BORING No.: MT-SB 17
PROJECT NUMBER: 112IC04054 - 04
DATE: 7/10/12
DRILLING COMPANY: Ground Zero
GEOLOGIST: S. Cameron
DRILLING RIG: DPT
DRILLER: G. Sorto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
	0-0.5			Soft	Dark brn		Fine grained sandy SILT w/	Slightly moist,	0-2' 0.0
							trace organics (grass & roots).	(Topsoil)	2-4' 0.0
	0.5-1			loose	Gray		Sandy GRAVEL w/ trace silt.	Slightly Moist	4-6' 0.0
	1-2.5			Soft	red/brn		Low plasticity silty CLAY w/	moist	6-8' 0.0
							trace organics to 1.5'.		8-10' 0.0
	2.5-5						No Recovery		10-12' 0.0
	5-8			Soft	red/brn		Low plasticity silty CLAY	moist	12-14' 0.0
	8-10			Soft	light brn		Low plasticity silty CLAY	moist	14-16' 0.0
							w/ trace fine grained sand.		16-18' 0.0
	10-15			Hard	red/brn		Medium plasticity CLAY w/	Slightly moist	18-20' 0.0
					mottled cream		some silt.		20-22' 0.0
	15-17			Soft	red/brn		Medium plasticity CLAY w/	Slightly moist	22-24' 0.0
							some silt & trace gravel		24-25' 0.0
	17-22			Soft	light brn		Low plasticity silty CLAY.	Slightly moist	
					mottled red/brn			(wet in 20-25 sleeve)	
	22-25			Hard	red/brn		Medium plasticity CLAY w/	Slightly Moist.	
					mottled cream		some silt.		

Remarks: Sample intervals of 0-2 & 8-10.

Drilling Area Background (PPM): 0.0

Convert to Well: Yes: No: x

Well I.D. #:

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Main Terminal
Project No.: 112IC04054 - 04

Sample ID No.: MT-SB18
Sample Location: SB18
Sampled By: S.Cameron / W. Pryor
C.O.C. No.:

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:			
Method:			
Grab			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
7/10/12	0915	0-2	brn/red mottled	Medium plasticity CLAY W/ trace
Method:			Cream	Silt, hard, slightly moist.
Grab				
Monitor Readings	0920	8-10	Same as above	Same as above
(Range in ppm):				
1.2-53.8	0925	8-10		Collected for TCLP analysis

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3 - 40 mL vials / 1 - 4 oz Jar	✓	
SVOCs	1 - 4 oz Jar	✓	
Metals	1 - 4 oz Jar	✓	
TPH-GRO	1 - 4 oz Jar	✓	
TCLP	1-4oz Jar / 1-32oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

S. Cameron

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Main Terminal Phase II
BORING No.: MT-SB18
PROJECT NUMBER: 112IC04054 - 04
DATE: 7-10-12
DRILLING COMPANY: Ground Zero
GEOLOGIST: S. Cameron
DRILLING RIG: DPT
DRILLER: G. Sorto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
	0-1.5			Dense	Gray		Gravelly SILT w/ some	Slightly moist	0-2' 53.8
							sand & clay.	(Asphalt)	2-4' 38.5
	1.5-2.5			Compact	Gray/brn		Gravelly, Silty SAND	Slightly moist	4-6' 22.5
	2.5-22			Hard	brn mottled		Medium plasticity CLAY w/	Slightly moist	6-8' 17.8
					red/brn & cream		trace Silt.		8-10' 29.5
	22-25			moderately Hard	red/brn		Low plasticity silty CLAY	Slightly moist	10-12' 19.8
									12-14' 13.3
									14-16' 1.2
									16-18' 6.1
									18-20' 10.4
									20-22' 12.1
									22-24' 11.4
									24-25' 15.9

Remarks: Sample intervals of 0-2 & 8-10

Drilling Area Background (PPM): 0.0

Convert to Well: Yes: No: x

Well I.D. #:

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Main Terminal
Project No.: 112IC04054 - 04

Sample ID No.: MT-SB19
Sample Location: SB19
Sampled By: S.Cameron / W. Pryor
C.O.C. No.:

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time			
Method:			
Monitor Readings (Range in ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
7/9/12	1140	0-2	light brn / red brn	Low plasticity silty CLAY w/ some sand & gravel, slightly moist, hard.
Method:				
Grab				
Monitor Readings	1145	8-10	red/brn mottled	Low plasticity silty CLAY w/ trace
(Range in ppm):			cream	sand. Slightly moist, hard.
0.0				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3 - 40 mL vials / 1 - 4 oz Jar	✓	
SVOCs	1 - 4 oz Jar	✓	
Metals	1 - 4 oz Jar	✓	
TPH-GRO	1 - 4 oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

S. Cameron

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Main Terminal Phase II
BORING No.: MT-SB19
PROJECT NUMBER: 112IC04054 - 04
DATE: 7-9-12
DRILLING COMPANY: Ground Zero
GEOLOGIST: S. Cameron
DRILLING RIG: DPT
DRILLER: G. Sorto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
	0-0.5			Loose	Gray		Coarse, Angular GRAVEL	DRY (Asphalt)	0-2' 0.0
	0.5-1.5			Loose	Blk/light brn		Silty, gravelly, coarse grained	Slightly Moist	2-4' 0.0
							SAND.		4-6' 0.0
	1.5-17.5			Hard	red/brn		Low plasticity silty CLAY	Slightly Moist	6-8' 0.0
					Mottled Cream		w/ trace sand.		8-10' 0.0
	17.5-19			Soft	cream/brn		Fine grained sandy, clayey	Slightly Moist	10-12' 0.0
					mottled red/brn		SILT.		12-14' 0.0
	19-21.5			Dense/Hard	red/brn		Fine grained sandy, clayey SILT.	Slightly Moist (moist @ 21')	14-16' 0.0
									16-18' 0.0
	21.5-25			Hard/dense	red/brn		Low plasticity silty CLAY.	Slightly Moist	18-20' 0.0
					Mottled Cream/ brn				20-22' 0.0
									22-24' 0.0
									24-25' 0.0

Remarks: Sample intervals 0-2 & 8-10

Drilling Area Background (PPM): 0.0

Convert to Well: Yes: No: x

Well I.D. #:

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Main Terminal
Project No.: 112IC04054 - 04

Sample ID No.: MT-SB20
Sample Location: SB20
Sampled By: S.Cameron / W. Pryor
C.O.C. No.:

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time			
Method			
Monitor Reading (ppm)			

COMPOSITE SAMPLE DATA:

Date: 7/9/12	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1340	0-2	red/brn	Low plasticity silty CLAY w/ some
Method:			mottled cream	sand & gravel, slightly moist & hard.
Grab				
Monitor Readings	1345	8-10	Same as above	Same as above
(Range in ppm):				
0.0				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3 - 40 mL vials / 1 - 4 oz Jar	✓	
SVOCs	1 - 4 oz Jar	✓	
Metals	1 - 4 oz Jar	✓	
TPH-GRO	1 - 4 oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

S. Cameron

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Main Terminal Phase II
BORING No.: MT-SB 20
PROJECT NUMBER: 112IC04054 - 04
DATE: 7/9/12
DRILLING COMPANY: Ground Zero
GEOLOGIST: S. Cameron
DRILLING RIG: DPT
DRILLER: G. Sorto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
	0-0.25				Gray		Coarse, Angular GRAVEL	Dry (Asphalt)	0-2': 0.0
	0.25-0.5			loose	dark brn		Silty, gravelly, coarse grained	Slightly moist	2-4': 0.0
							poorly sorted SAND.		4-6': 0.0
	0.5-14			Hard	red/brn		Low plasticity silty CLAY w/	Slightly Moist	6-8': 0.0
					Mottled Cream		trace sand. (No Recovery 2.5-5')		8-10': 0.0
	14-17			medium hard	cream becoming		Clayey SILT w/ trace	Slightly moist	10-12': 0.0
					red/brn @14.5		fine grained sand.		12-14': 0.0
	17-22			Hard	red/brn		Medium plasticity CLAY w/	Slightly moist	14-16': 0.0
							trace silt.		16-18': 0.0
	22-25			Hard	red/brn		Clayey SILT w/ trace fine	Slightly Moist	18-20': 0.0
					mottled cream		grained sand		20-22': 0.0
									22-24': 0.0
									24-25': 0.0

Remarks: Sample interval 0-2 & 8-10

Drilling Area Background (PPM): 0.0

Convert to Well: Yes: No: x

Well I.D. #:

Tetra Tech

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: Main Terminal
Project No.: 112IC04054 - 04

Sample ID No.: MT-SB21
Sample Location: SB21
Sampled By: S.Cameron / W. Pryor
C.O.C. No.:

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[ ] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

Date	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time			
Method			
Monitor Readings (Range in ppm)			

COMPOSITE SAMPLE DATA:

Date: 7/9/12	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
	1430	0-2	red/brn & cream	Silty CLAY w/ trace sand, Slightly moist.
Method: Grab	1435	8-10	red/brn mottled cream	Low plasticity silty CLAY w/ trace sand, Slightly moist, hard.
Monitor Readings (Range in ppm): 0.0				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOCs	3 - 40 mL vials / 1 - 4 oz Jar	✓	
SVOCs	1 - 4 oz Jar	✓	
Metals	1 - 4 oz Jar	✓	
TPH-GRO	1 - 4 oz Jar	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

BORING LOG

PROJECT NAME: Main Terminal Phase II
BORING No.: MT-SB 21
PROJECT NUMBER: 112IC04054 - 04
DATE: 7-9-12
DRILLING COMPANY: Ground Zero
GEOLOGIST: S. Cameron
DRILLING RIG: DPT
DRILLER: G. Sorto

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Sample Recovery / Sample Length	Lithology change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	USCS	Material Classification	Remarks	PID/FID Reading (PPM)
	0-0.5				Gray		Coarse Angular GRAVEL	Dry (Asphalt)	0-2' 0.0
	0.5-1.5			Loose	blk/light brn		Silty, gravelly, coarse SAND	Slightly moist	2-4' 0.0
	1.5-11			Hard	red/brn		Low plasticity silty CLAY w/	Slightly moist	4-6' 0.0
					mottled cream		trace sand.		6-8' 0.0
	11-19			Hard	Red/brn		Medium plasticity CLAY w/	slightly moist	8-10' 0.0
							trace silt.		10-12' 0.0
	19-22			medium Hard	Red/brn		Clayey SILT w/trace sand.	Slightly Moist	12-14' 0.0
	22-25				Red/brn		Low plasticity silty CLAY w/	Slightly moist	14-16' 0.0
					Mottled Cream		trace fine grained sand.		16-18' 0.0
									18-20' 0.0
									20-22' 0.0
									22-24' 0.0
									24-25' 0.0

Remarks: Sample Intervals 0-2 & 8-10

Drilling Area Background (PPM): 0.0

Convert to Well: Yes: No: x

Well I.D. #:

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVEST. MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC ROTOSONIC

BORING No.: MA-MW-7S
DATE: 7/27/2012
GEOLOGIST: W. ONEIL
DRILLER: LARRY HUNSBERGER

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0						ASPHALT		off scale				
							GRAY BROWN GRAVEL TO SILT FILL DRY AT TOP		off scale				
	5						WET A 4'-5' (perched water)		700				
							RED BROWN CLAY SLIGHTLY PLIABLE V. SLIGHTLY MOIST		672				
	10						RED TO BROWN ORGANIC-RICH CLAY TO SILTY CLAY, PLIABLE TO SOFT VI SLIGHTLY MOIST (RED) TO SLIGHTLY MOIST (BROWN) LIKELY FILL MATERIAL		55.1				
									0.0				
							BROWN ORANGE GRAY CLAY W/ GRAVEL AND DEBRIS, PLIABLE VI SLIGHTLY MOIST LIKELY FILL MATERIAL		1.5				
	15								0.0				
							RED, ORANGE, GRAY CLAY, DENSE, STIFF DRY		0.0				
	20								0.0				
									0.0				
							ORANGE & RED GRAY CLAY DENSE, STIFF, DRY		0.0				
	25												

* When rock coring, enter rock brokeness

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No ____ Well I.D. #: MA-MW-7S

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVEST. MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC ROTOSONIC

BORING No.: MT-MW-75
DATE: 7/27/2012
GEOLOGIST: W. ONEIL
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	25						RED ORANGE GRAY SANDY SILT, SOFT, MOIST		0.0				
									0.0				
							RED, ORANGE, GRAY CLAY STIFF, DRY						
									0.0				
	30												
							RED ORANGE GRAY		0.0				
							SANDY SILT, med. soft MOIST						
									0.0				
							GRAY TO RED CLAY DENSE, STIFF, DRY						
	35						ORANGE RED SILTY SAND / RED ORANGE GRAY CLAY	SOFT, MOIST	0.0				
							STIFF, DENSE, DRY						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm):

Remarks:

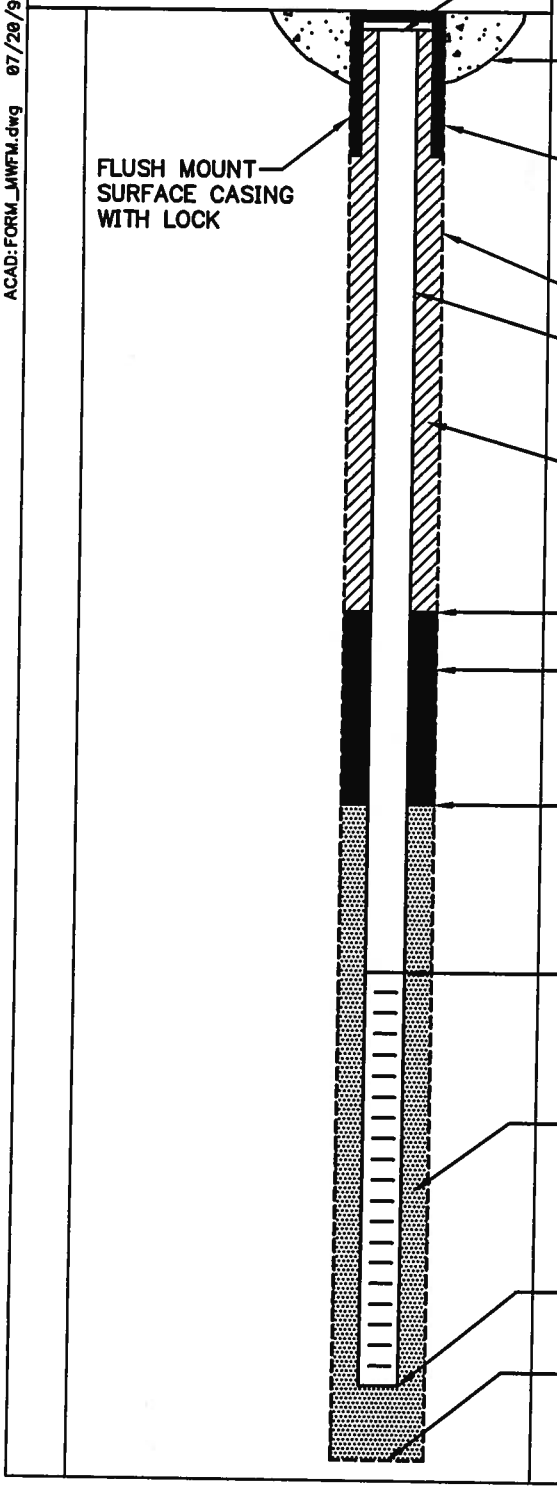
Converted to Well: Yes _____ No _____ Well I.D. #: _____

WELL NO.: MA-MW-75

Tetra Tech NUS, Inc.

OVERBURDEN
MONITORING WELL SHEET
FLUSH - MOUNT

PROJECT SUPPLEMENTAL PHASE II INVEST. MSA	LOCATION MSA - Middle River, MD	DRILLER Larry Hunsberger
PROJECT NO.	BORING MA-MW-75'	DRILLING METHOD Roto Sonic
DATE BEGUN 7/27/2012	DATE COMPLETED 7/28/12	DEVELOPMENT METHOD
FIELD GEOLOGIST W. ONeil		
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: High Strength Concrete

TYPE OF PROTECTIVE CASING: steel w/plastic

I.D. OF PROTECTIVE CASING: 8"

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Portland Cement w/ Bentonite Grout

ELEVATION/DEPTH TOP OF SEAL: 121'

TYPE OF SEAL: Bentonite Chips

ELEVATION/DEPTH TOP OF SAND: 123'

ELEVATION/DEPTH TOP OF SCREEN: 125'

TYPE OF SCREEN: PVC

SLOT SIZE x LENGTH: 0.01" X 10'

TYPE OF SAND PACK: #1 Silica

DIAMETER OF HOLE IN BEDROCK: N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: 135'

ELEVATION / DEPTH BOTTOM OF SAND: 135'

ELEVATION/DEPTH BOTTOM OF HOLE: 135'

BACKFILL MATERIAL BELOW SAND: N/A

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Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVEST. MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC ROTOSONIC

BORING No.: MA-MW-085
DATE: 7/28/2012
GEOLOGIST: W. ONEY
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0						ASPHALT CONCRETE						
							GRAVEL FILL, DRY						
							RED BROWN CLAY						
							DENSE, STIFF, DRY						
	5						RED BROWN CLAY, PLIABLE V. SLIGHTLY MOIST TO DRY						
							POORLY SORTED, SILT, SAND CLAY GRAVEL FILL						
							WET (PERCHED WATER)						
							RED BROWN CLAY						
							PLIABLE, V. SLIGHTLY MOIST						
	10												
							GRAY BROWN ORGANIC RICH SILT to CLAY SOFT MOIST						
							GRAY SILTY CLAY W/ ORANGE STREAKS						
	15						STIFF DRY						
							RED BROWN CLAY						
							DENSE, STIFF, DRY						
	20						RED BROWN CLAY						
							W WHITE & ORANGE MOTTLING						
							DENSE STIFF DRY						
	25												

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks:

Converted to Well: Yes X No ____ Well I.D. #: MA-MW-085

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVEST. MSA
PROJECT NUMBER:
DRILLING COMPANY: BART LONGYEAR
DRILLING RIG: SPIDER SONIC ROTOSONIC

BORING No.: MA-MW-085
DATE: ~~7/28~~ 7/28/12
GEOLOGIST: C. ONEY
DRILLER: LARRY HUNSBERGER

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	PID/FID Reading (ppm): Sampler BZ	PID/FID Reading (ppm): Borehole**	PID/FID Reading (ppm): Driller BZ**
	25						RED BROWN CLAY W WHITE & ORANGE MOTTLING						
							DENSE, STIFF, DRY						
							ORANGE/RED CLAY DENSE STIFF, DRY						
							GRAY CLAY W ORANGE streaks, slightly pliable very slightly moist						
	30						ORANGE, RED, GRAY SILTY CLAY, PLIABLE, SLIGHTLY MOIST						
							YL. BROWN SILTY SAND SOFT MOIST						
							PLIABLE, ORANGE CLAY						
							STIFF TO PLIABLE, DARK YELLOW/RED SILTY CLAY PLIABLE SLIGHTLY MOIST						
							RED BROWN GRAY CLAY, SLIGHTLY PLIABLE						
	35						very slightly moist						

* When rock coring, enter rock brokeness

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0-0

Remarks:

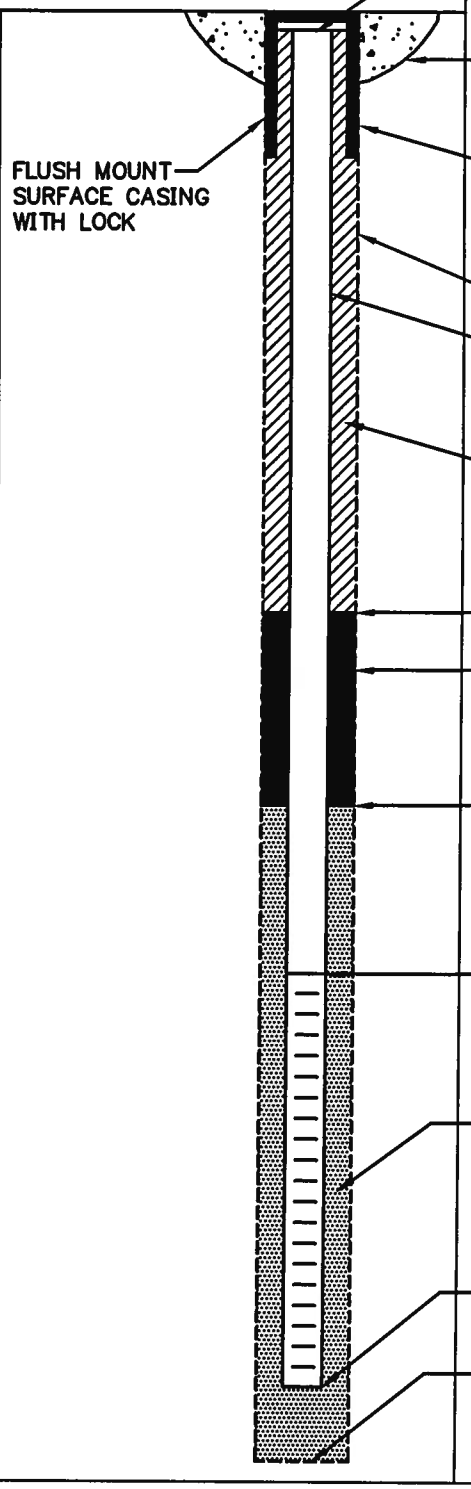
Converted to Well: Yes X No ____ Well I.D. #: MA-MW-085

WELL NO.: MT-MW-08S

Tetra Tech NUS, Inc.

OVERBURDEN
MONITORING WELL SHEET
FLUSH - MOUNT

PROJECT SUPPLEMENTAL PHASE II INVEST. MSA	LOCATION MSA - Middle River MD	DRILLER Larry Hunsberger
PROJECT NO.	BORING MT-MW-08S	DRILLING METHOD ROTO SONIC
DATE BEGUN 7/28/2012	DATE COMPLETED	
FIELD GEOLOGIST W. ONeil		DEVELOPMENT METHOD
GROUND ELEVATION	DATUM	



ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: High Strength Concrete

TYPE OF PROTECTIVE CASING: steel/plastic

I.D. OF PROTECTIVE CASING: 8"

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Portland cement/ bentonite grout

ELEVATION/DEPTH TOP OF SEAL: 21'

TYPE OF SEAL: Bentonite chips

ELEVATION/DEPTH TOP OF SAND: 23'

ELEVATION/DEPTH TOP OF SCREEN: 25'

TYPE OF SCREEN: PVC

SLOT SIZE x LENGTH: 0.01" X 10'

TYPE OF SAND PACK: #1 silica

DIAMETER OF HOLE IN BEDROCK: N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: 35'

ELEVATION / DEPTH BOTTOM OF SAND: 35'

ELEVATION/DEPTH BOTTOM OF HOLE: 35'

BACKFILL MATERIAL BELOW SAND: N/A

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Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVEST. MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC ROTOSONIC

BORING No.: MA-MW-9S
DATE: 7/27/2012
GEOLOGIST: W. O'Neil
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0						ASPHALT		0.3				
							GRAY, GRAVEL FILL, DRY		44				
							RED, WHITE, PURPLE CLAY, STIFF, DRY		33				
	5						RED BROWN CLAY STIFF DRY		1.0				
							ORANGE, PURPLE CLAY, stiff, DRY		1.8				
	10								4.7				
							BROWN SILTY CLAY PLIABLE V. SLIGHTLY MOIST		390				
	15						RED BROWN WHITE CLAY, STIFF, DRY		42				
									12				
							RED, WHITE, BROWN CLAY, SLIGHTLY PLIABLE, V. SLIGHTLY MOIST		12.6				
	20						RED BROWN CLAY STIFF DRY						
							GRAY/RED BROWN CLAY SLIGHTLY PLIABLE, DRY		0.0				
							Red BROWN CLAY SLIGHTLY PLIABLE		0.0				
	25						V. slightly moist		29.3				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: No significant water bearing zones were observed

Converted to Well: Yes X No _____ Well I.D. #: MA-MW-9S

Tetra Tech NUS, Inc.

BORING LOG

SUPPLEMENTAL PHASE II

PROJECT NAME: INVEST. MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC ROTOSONIC

BORING No.: MA-MW-95
DATE: 7/27/2012
GEOLOGIST: W. ONEIL
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	25						RED BROWN CLAY SLIGHTLY PLIABLE V. SLIGHTLY MOIST		29.3				
							RED BROWN GRAY CLAY PLIABLE, V. Slightly MOIST		73				
	30						RED BROWN CLAY DENSE STIFF DRY		19				
							RED BROWN CLAY W/ WHITE MOTTLING, SLIGHTLY PLIABLE		0.0 DRY				
							RED BROWN CLAY PLIABLE V. SLIGHTLY MOIST		0.0				
	35								3.0				
							RED GRAY CLAY PLIABLE V. Slightly Moist		2.8				
	40								45				
							BROWN SILTY CLAY TO CLAYEY SILT FRIABLE, V. SLIGHTLY MOIST		70.1				
							GRAY CLAY PLIABLE, DRY						
							RED BROWN SILTY CLAY TO CLAYEY SILT, FRIABLE V. Slightly MOIST		2.1				
	45						BROWN CLAYEY SILT pliable SLIGHTLY MOIST		0.0				
							RED BROWN SILTY CLAY PLIABLE, V. Slightly MOIST		0.0				
							RED BROWN CLAY						
	50						DENSE, SLIGHTLY PLIABLE, DRY		0.0				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No _____ Well I.D. #: MA-MW-95

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVEST. MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC ROTOSONIC

BORING No.: MA-MW-95
DATE: 5/27/2012
GEOLOGIST: W. O'Neil
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	MATERIAL DESCRIPTION: Color	MATERIAL DESCRIPTION: Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	50						RED BROWN CLAY		0.0				
							DENSE, SLIGHTLY		0.0				
							PLIABLE, DRY						
	55								0.0				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

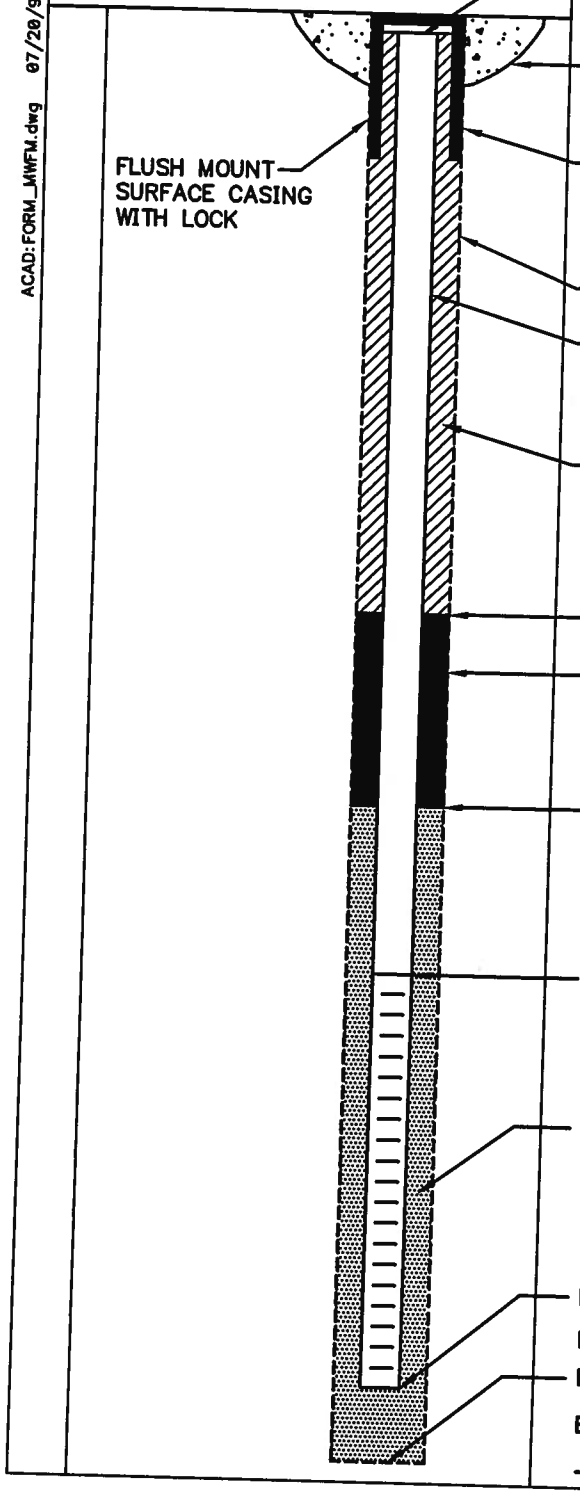
Converted to Well: Yes X No _____ Well I.D. #: MA-MW-95

WELL NO.: MT-MW-09S

Tetra Tech NUS, Inc.

OVERBURDEN
MONITORING WELL SHEET
FLUSH - MOUNT

PROJECT SUPPLEMENTAL PHASE II INVEST
PROJECT NO.
DATE BEGUN 07/27/2012
FIELD GEOLOGIST W. ONeil
GROUND ELEVATION
LOCATION MSA Middle River MD
BORING MT-MW-09S
DATE COMPLETED 07/27/12
DATUM
DRILLER LARRY HUNSBERGER
DRILLING METHOD Roto Sonic
DEVELOPMENT METHOD



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: High Strength Concrete

TYPE OF PROTECTIVE CASING: Steel/plastic

I.D. OF PROTECTIVE CASING: ~~6~~ 8"

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Portland cement/ bentonite grout

ELEVATION/DEPTH TOP OF SEAL: 136

TYPE OF SEAL: Bentonite chips

ELEVATION/DEPTH TOP OF SAND: 138

ELEVATION/DEPTH TOP OF SCREEN: 140

TYPE OF SCREEN: PVC

SLOT SIZE x LENGTH: 0.01" X 10'

TYPE OF SAND PACK: #1 Silica

DIAMETER OF HOLE IN BEDROCK: N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: 150

ELEVATION / DEPTH BOTTOM OF SAND: 150.5

ELEVATION/DEPTH BOTTOM OF HOLE: 155

BACKFILL MATERIAL BELOW SAND: Bentonite chips

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Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II MSA
PROJECT NUMBER:
DRILLING COMPANY: Boart Longyear
DRILLING RIG: Spider Sonic - rotosonic

BORING No.: MA-MW-105
DATE: 7/26/2012
GEOLOGIST: W. O'Neill
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0						DARK BROWN SOIL, SLIGHTLY MOIST		0.3				
							Red Brown clayey Fill friable Dry		0.1				
	5								0.1				
									0.3				
							RED BROWN PURPLE CLAY dense stiff dry		0.1				
	10								0.0				
									0.0				
	15								0.0				
									0.0				
							RED BROWN CLAY DENSE STIFF DRY		0.0				
	20								0.0				
							RED BROWN CLAY DENSE SLIGHTLY PLIABLE DRY		0.0				
	25								0.0				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No _____ Well I.D. #: MA-MW-105

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVEST MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC - VOTO SONIC

BORING No.: MA-MW-105
DATE: 7/26/12
GEOLOGIST: W. ONELL
DRILLER: LARRY HUNSBERGER

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	25						RED BROWN CLAY, SENSE SLIGHTLY PLIABLE DRY		0.0				
							RED BROWN CLAY, SLIGHTLY PLIABLE DRY		0.0				
							RED BROWN CLAY						
							DENSE DRY		0.5				
	30												
									0.3				
							RED GRAY ORANGE CLAY DENSE DRY						
									0.0				
							GRAY CLAYEY SILT SOFT, V. SLIGHTLY MOIST						
	35						RED BROWN ORANGE CLAY DENSE, DRY		0.0				
							GRAY, ORANGE CLAYEY SANDY SILT, SOFT, MOIST						
							gray orange SANDY CLAY, DENSE V. slightly moist		1.5				
							GRAY ORANGE CLAYEY SILT, pliable, slightly moist		1.3				
	40						GRAY ORANGE SILTY CLAY, stiff, V. slightly moist						

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read

Remarks:

Drilling Area Background (ppm): 0.0

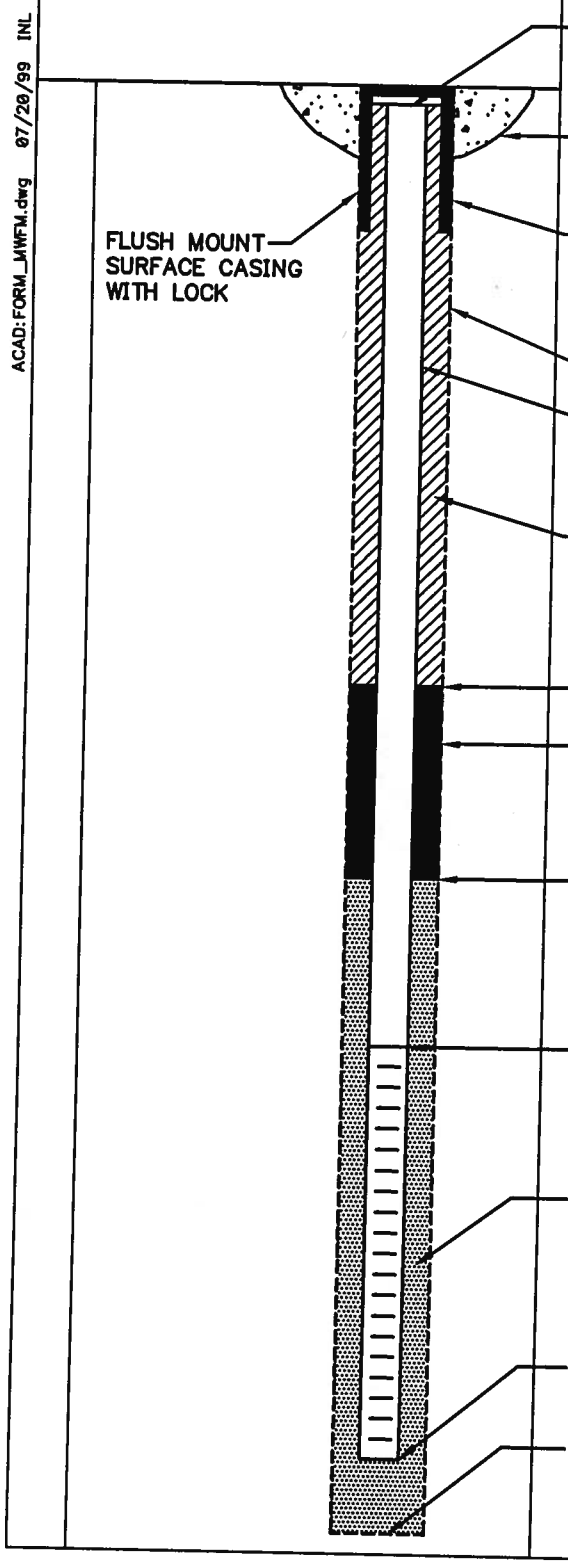
Converted to Well: Yes X No ____ Well I.D. #: MA-MW-105

WELL NO.: MF-MW-105

Tetra Tech NUS, Inc.

OVERBURDEN
MONITORING WELL SHEET
FLUSH - MOUNT

PROJECT SUPPLEMENTAL PHASE II INVEST - MSA
PROJECT NO.
DATE BEGUN 7/26/2012
FIELD GEOLOGIST W-ONiell
GROUND ELEVATION
LOCATION MSA - Middle River MD
BORING MF-MW-105
DATE COMPLETED 07/26/12
DATUM
DRILLER LARRY HUNSBERGER
DRILLING METHOD ROTO SONIC
DEVELOPMENT METHOD



ELEVATION TOP OF RISER:

TYPE OF SURFACE SEAL: High strength Concrete

TYPE OF PROTECTIVE CASING: ~~6"~~ flush mount steel / plastic

I.D. OF PROTECTIVE CASING: ~~6"~~ 8"

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: portland cement/ bentonite grout

ELEVATION/DEPTH TOP OF SEAL: 120'

TYPE OF SEAL: Bentonite chips

ELEVATION/DEPTH TOP OF SAND: 128'

ELEVATION/DEPTH TOP OF SCREEN: 130'

TYPE OF SCREEN: PVC

SLOT SIZE x LENGTH: 0.01" X 10'

TYPE OF SAND PACK: #1 SILICA

DIAMETER OF HOLE IN BEDROCK: N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: 140'

ELEVATION / DEPTH BOTTOM OF SAND: 140'

ELEVATION/DEPTH BOTTOM OF HOLE: 140'

BACKFILL MATERIAL BELOW SAND: N/A

ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVESTIGATION - MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC ROTOSONIC

BORING No.: MA-MW-115
DATE: 7/25/2012
GEOLOGIST: W. ONIELL
DRILLER: LARRY HUNSBERGER

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0				HARD	BLACK	ASPHALT		0.1				
							RED, ORANGE, GRAY CLAY, STIFF, DRY		0.1				
	5								0.6				
									0.3				
							RED BROWN CLAY STIFF, DRY		0.1				
	10								0.1				
							RED BROWN CLAY STIFF, FRIABLE DRY		0.0				
	15								0.1				
							GRAY CLAY, V. SLIGHTLY PLIABLE, DRY		0.6				
							RED, BROWN & GRAY MOTTLED CLAY STIFF, DRY		0.6				
	20						RED BROWN CLAY V. slightly pliable DRY		6.5				
							RED, BROWN, ORANGE CLAY, STIFF, DRY		0.6				
	25								0.3				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No _____ Well I.D. #: MA-MW-115

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVESTIGATION MSA
PROJECT NUMBER:
DRILLING COMPANY: BOART LONGYEAR
DRILLING RIG: SPIDER SONIC - ROTOSONIC

BORING No.: MA - MW - 115
DATE: 7/25/2012
GEOLOGIST: W. ONeil
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	25						RED, BROWN, ORANGE CLAY, STIFF, DRY		0.3				
							GRAY, SILTY CLAY, STIFF TO SOFT, V. SLIGHT MOISTURE		0.4				
							RED, BROWN SANDY CLAY, FRIABLE, DRY						
							RED GRAY SILTY CLAY STIFF, DRY		0.8				
	30						RED BROWN CLAY STIFF DRY						
									0.8				
							RED, GRAY, PINK, ORANGE SILTY CLAY, FRIABLE, DRY						
									0.7				
	35						RED, BROWN, ORANGE		0.4				
							CLAY, FRIABLE, STIFF & DRY WITH						
							BROWN SILTY CLAY LENSES, V. SLIGHTLY		0.3				
							MOIST @ 34 to 34,5'						
							RED, GRAY CLAY		0.4				
	40						STIFF, DRY						
									0.4				
							GRAY SILTY CLAY Slightly stiff, V. slightly moist						
							RED, GRAY, CLAY TO SILTY CLAY, STIFF TO PLIABLE V. slightly moist		0.2				
	45								0.3				
							RED, GRAY CLAY HARD FRIABLE						
							DRY		0.5				
									0.4				
	50												

* When rock conng, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0.0

Remarks: WELL WILL NOT MAKE A LOT OF WATER DUE TO ABSENCE OF SIGNIFICANT ~~SAT~~ SATURATED ZONE

Converted to Well: Yes X No _____ Well I.D. #: MA - MW - 115

Tetra Tech NUS, Inc.

OVERBURDEN MONITORING WELL SHEET FLUSH - MOUNT

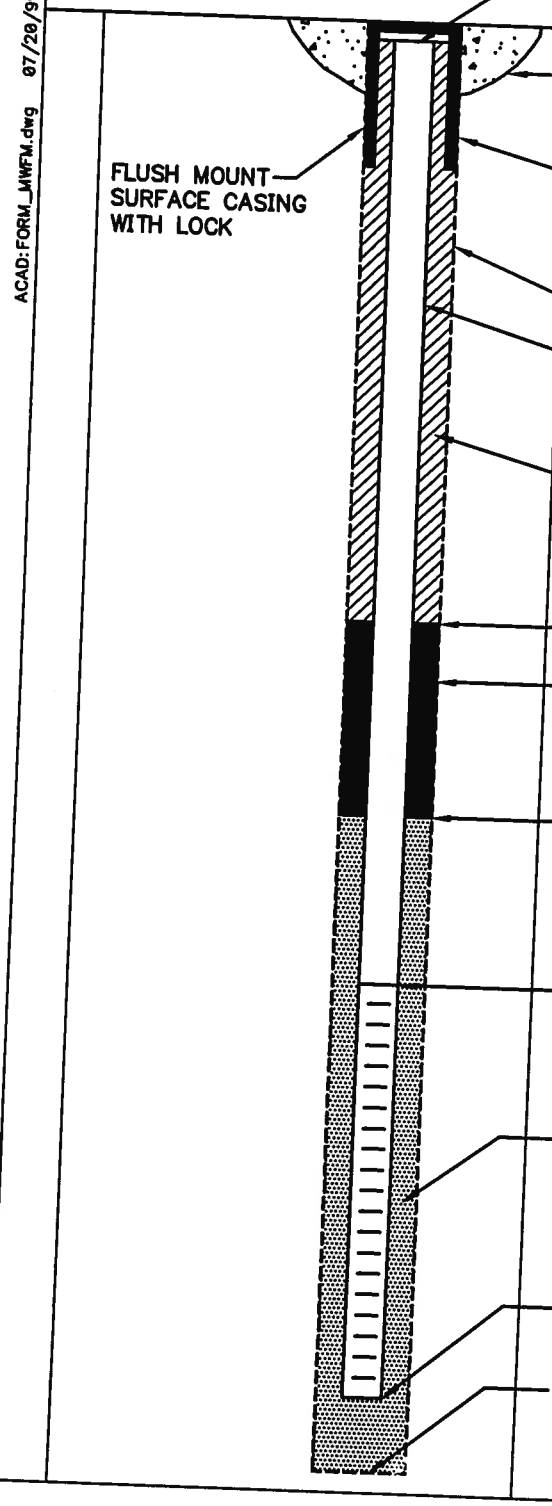
WELL NO.: MX-MW-11S

PROJECT Supplemental PHASE II MSA
PROJECT NO.
DATE BEGUN 7/25/12
FIELD GEOLOGIST W. O'Neill
GROUND ELEVATION ____ DATUM ____

LOCATION Middle River, MD
BORING MX-MW-11S
DATE COMPLETED 07/25/12

DRILLER Larry Hunsberger
DRILLING METHOD Roto Sonic
DEVELOPMENT METHOD

ACAD:FORM_MWFM.dwg 07/20/99 INL



ELEVATION TOP OF RISER: ____

TYPE OF SURFACE SEAL: Concrete High strength

TYPE OF PROTECTIVE CASING: Steel/plastic

I.D. OF PROTECTIVE CASING: 8"

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Portland Cement w/ bentonite grout

ELEVATION/DEPTH TOP OF SEAL: 121'

TYPE OF SEAL: Bentonite Chips

ELEVATION/DEPTH TOP OF SAND: 123'

ELEVATION/DEPTH TOP OF SCREEN: 125'

TYPE OF SCREEN: PVC

SLOT SIZE x LENGTH: 0.01 X 20'

TYPE OF SAND PACK: #1 Silica

DIAMETER OF HOLE IN BEDROCK: N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: 145'

ELEVATION / DEPTH BOTTOM OF SAND: 145.5'

ELEVATION/DEPTH BOTTOM OF HOLE: 149'

BACKFILL MATERIAL BELOW SAND: Bentonite Chips

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVESTIGATION MSA
PROJECT NUMBER:
DRILLING COMPANY: Boart Longyear
DRILLING RIG: SPIDER SONIC / ROTOSONIC

BORING No.: MA-MW-125
DATE: 7/26/2012
GEOLOGIST: W. ONeil
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	0						ASPHALT & CONCRETE		20.6				
									0.5				
	5						ORANGE, RED CLAY		0.3				
							STIFF/DENSE, DRY		0.2				
									0.2				
	10												
							red/white CLAY STIFF DRY		0.1				
							RED CLAY HARD, FRIABLE, DRY		0.1				
							RED CLAY, DENSE						
	15						SLIGHTLY PLIABLE, DRY		0.4				
							~~TAN/RED CLAYEY SILT SOFT, SLIGHTLY MOIST~~		@ DENSE, DRY				
							TAN/RED CLAYEY SILT SOFT, SLIGHTLY MOIST						
							RED CLAY DENSE, DRY						
							ORANGE SANDY, CLAYEY SILT, SOFT, MOIST		0.1				
							RED CLAY, DENSE, DRY		0.1				
	20												
							RED/GRAY CLAY		0.3				
							STIFF, DRY						
							GRAY CLAY		0.3				
							STIFF, VI SLIGHTLY MOIST						
	25								0.2				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks:

Drilling Area Background (ppm): 0.0

Converted to Well: Yes X No Well I.D. #: MA-MW-125

Tetra Tech NUS, Inc.

BORING LOG

PROJECT NAME: SUPPLEMENTAL PHASE II INVESTIGATION MSA
PROJECT NUMBER:
DRILLING COMPANY: BoArt Longyear
DRILLING RIG: Spider Sonic - Rotosonic

BORING No.: ~~MA~~-MW-125
DATE: 7/26/2012
GEOLOGIST: W. ONeil
DRILLER: Larry Hunsberger

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	25						GRAY CLAY, STIFF, V. SLIGHTLY MOIST		0.2				
							RED BROWN CLAY						
							STIFF, DRY		0.1				
							RED, PINK, WHITE		0.3				
	30						CLAY PLIABLE V. SLIGHTLY MOIST						
				5/52			M. BROWN CLAYEY SILT, PLIABLE V. SLIGHTLY MOIST		0.2				
							RED, ORANGE, GRAY						
							CLAY, DENSE DRY		0.1				
	35						RED ORANGE CLAY DENSE, DRY		0.0				

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read

Remarks:

Drilling Area Background (ppm): 0.0

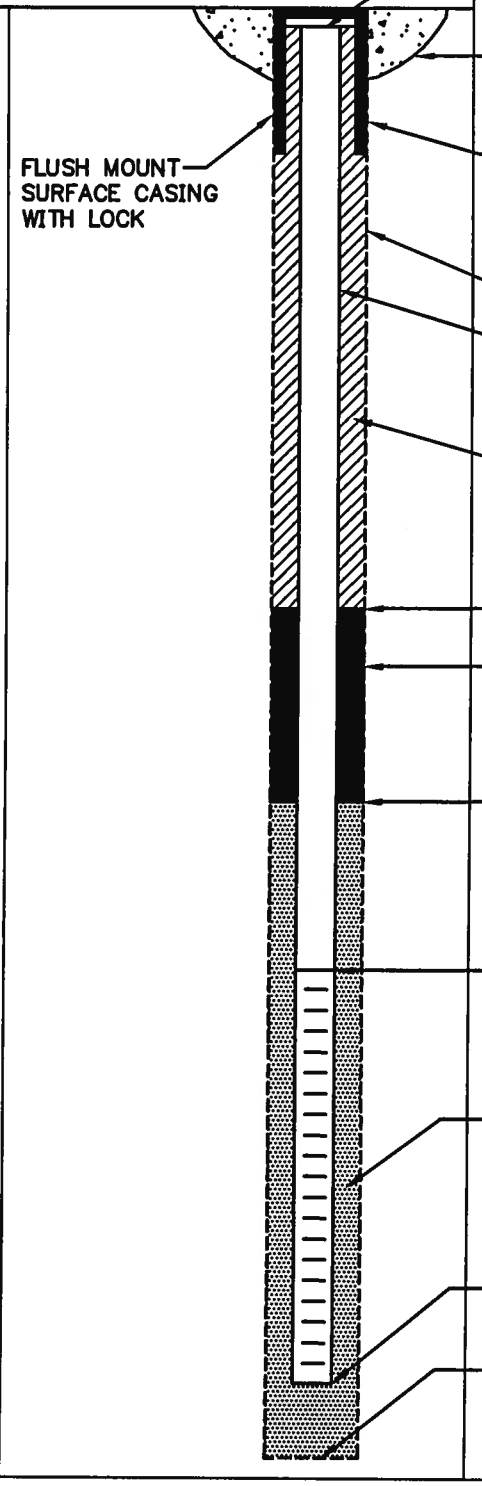
Converted to Well: Yes X No Well I.D. #: MA - MW - 125

WELL NO.: MTA-MW-115

Tetra Tech NUS, Inc.

OVERBURDEN
MONITORING WELL SHEET
FLUSH - MOUNT

PROJECT: SUPPLEMENTAL PHASE II INVEST, MSA	LOCATION: MSA Middle River MD	DRILLER: Larry Hunsberger
PROJECT NO.:	BORING: MTA-MW-115	DRILLING METHOD: Roto Sonic
DATE BEGUN: 7/26/12	DATE COMPLETED: 07/26/12	
FIELD GEOLOGIST: W ONeil		DEVELOPMENT METHOD:
GROUND ELEVATION:	DATUM:	



ELEVATION TOP OF RISER: _____

TYPE OF SURFACE SEAL: High strength concrete

TYPE OF PROTECTIVE CASING: Steel/plastic

I.D. OF PROTECTIVE CASING: ~~8"~~ 8"

DIAMETER OF HOLE: 6"

TYPE OF RISER PIPE: PVC

RISER PIPE I.D.: 2"

TYPE OF BACKFILL/SEAL: Portland cement/ bentonite grout

ELEVATION/DEPTH TOP OF SEAL: ~~1000~~ 11'

TYPE OF SEAL: Bentonite chips

ELEVATION/DEPTH TOP OF SAND: ~~1000~~ 13'

ELEVATION/DEPTH TOP OF SCREEN: ~~1000~~ 15'

TYPE OF SCREEN: PVC

SLOT SIZE x LENGTH: 0.01" X 20'

TYPE OF SAND PACK: #1 Silica

DIAMETER OF HOLE IN BEDROCK: N/A

ELEVATION / DEPTH BOTTOM OF SCREEN: 35'

ELEVATION / DEPTH BOTTOM OF SAND: 35'

ELEVATION/DEPTH BOTTOM OF HOLE: 35'

BACKFILL MATERIAL BELOW SAND: N/A

ACAD:FORM_MWFM.dwg 07/20/99 INL

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Page 1 of 1

Well: MT-MW-075
Site: MSA - Middle Ranch
Date Installed: 7/28/12
Date Developed: 7/30/12
Dev. Method: Submersible
Pump Type: 12V

Depth to Bottom (ft.): 9.22 w/ pump
Static Water Level Before (ft.): 9.39
Static Water Level After (ft.): 35'
Screen Length (ft.): 10'
Specific Capacity: 130.8 gal/ft/day
Casing ID (in.): 2"

Responsible Personnel: W. Oneil
Drilling Co.: Boart Longyear
Project Name: Supplemental Phase II Invest. MSA
Project Number:

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C) 22.00	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1124	24"	0	9.22	23.45	6.03	0.126	off scale	pumping at MAX speed
1130	<1"	9.6	25.28	~~25.28~~	5.47	0.085	"	pump at bottom of well
1138	<1"							pumped dry
Restart 1145	<1"	11.5	21.05	21.24	4.68	0.058	2205	
1152	—	38.3	~~26.34~~ N/A	20.34	~~7.62~~ 4.62	0.051	1350	still pumping
1210	—	50	~~20.36~~ N/A	20.26	4.56	0.044	27	" " 2 GPM to get new down
we start 1216	—							
1224		60	N/A	21.17	4.60	0.045	0.96	turbidity up
1232		70		21.24	4.61	0.045	1.36	should be OK at this point

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MT-MW-08S
Site: MSA - Middle River MD
Date Installed: 7/28/12
Date Developed: 7/30/12
Dev. Method: Submersible pump
Pump Type: 12V

Depth to Bottom (ft.): 35' (pulled w/ pump)
Static Water Level Before (ft.): 10.59"
Static Water Level After (ft.): _____
Screen Length (ft.): 10'
Specific Capacity: 87.7 gl/ft/day
Casing ID (in.): 2"

Responsible Personnel: W. Orrell
Drilling Co.: Boart Longyear
Project Name: Supplemental Phase II Invest MSA
Project Number: _____

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units _____)	Turbidity (NTU)	Remarks (odor, color, etc.)
1255	<1"	0	9.12	—	—	—	—	~~Start~~ at full speed
1257	—			24.93	6.3	0.173	65	
1300	—	4.75	N/A					pumped dry
restart 1332			30.00					
1334		5.5	N/A	24.25	6.82	0.323	169	pumped dry
restart 1348			34.62					
1349		Gal	N/A	26.78	6.74	0.265	243	pumped dry

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MW-MW-095
Site: MSA - Middle River, MD
Date Installed: 7/27/12
Date Developed: 7/29/12 & 7/30/12
Dev. Method: bailer
Pump Type: _____

Depth to Bottom (ft.): 50'
Static Water Level Before (ft.): 46.29
Static Water Level After (ft.): _____
Screen Length (ft.): 10'
Specific Capacity: ?
Casing ID (in.): 2"

Responsible Personnel: W. ONeil
Drilling Co.: Boart Longyear
Project Name: Supplemental Phase II Invest. MSA
Project Number: _____

	Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units _____)	Turbidity (NTU)	Remarks (odor, color, etc.)
7/29/12	1400		1	46.03'					bailed dry after 1 gallon
7/30/12	0730		1.5	46.29'					bailed dry after ½ gallon
									very turbid

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Page 1 of 1

Well: MT-MW-105 / Middle River MD
Site: MSA - Manton St. Airport
Date Installed: 7/26/12
Date Developed: 7/30/12
Dev. Method: Submersible pump
Pump Type: 12v
Depth to Bottom (ft.): 35'
Static Water Level Before (ft.): 11.88'
Static Water Level After (ft.): _____
Screen Length (ft.): 10'
Specific Capacity: 22 to 43 gal/ft/day
Casing ID (in.): 2"
Responsible Personnel: W. Oneill
Drilling Co.: Boart Longyear
Project Name: Supplemental Phase II Invest. MSA
Project Number: _____

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ~~S/cm~~)	Turbidity (NTU)	Remarks (odor, color, etc.)
0810	≈12"	<1	17.8'	18.45	6.05	0.347	off Scale	Very turbid ppt @ 0824
0900 restart	<1"	9.5	32.6'	24.58	6.23	0.317	"	Flow 0.13 gpm
0915	"	12.3	34.63	24.05	6.08	0.256	2218	Flow ~~0.12~~ 0.18 gpm INC. flow↑
0929	"							pumped dry
0953 restart	"	13.9	33.00'	24.77	5.94	0.225	off scale	
1005	"	15.20	35.45	24.01	5.93	0.218	1296	
1012	"	16.4						INCreased Flow & pumped dry
1032 restart	"		34.80'	~~22.55~~	~~5.83~~	~~0.221~~		MAx flow
1033.5	"	17.24		22.55	5.83	0.221	off scale	pumped dry
1051	"	18.00	35.00	26.46	~~5.72~~ 5.72	~~0.113~~	~~1010~~	pumped dry

Note: measuring in cup because flow through cell leaks

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

30.34 7/29/12

Well: MW-MW-11S
Site: MSA - Middle River, MD
Date Installed: 7/25/12
Date Developed: 7/30/12
Dev. Method: ~~Submersible pump~~ Bailer
Pump Type: ~~12V~~
Depth to Bottom (ft.): 45
Static Water Level Before (ft.): 38.41
Static Water Level After (ft.): _____
Screen Length (ft.): 20'
Specific Capacity: _____
Casing ID (in.): 2"
Responsible Personnel: W. ONeil
Drilling Co.: Boart Longyear
Project Name: Supplemental Phase II INVest. MSA
Project Number: _____

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
7/29/12			30.34					
1710		5.5						DTW @ 40.42' after bailing 5.5 gal
7/30/12 1458			38.41				1000	
1515				24.85	6.97	0.477	1040	
1550		7.5	~~40.30~~ 44.30					

Tetra Tech NUS, Inc.

MONITORING WELL DEVELOPMENT RECORD

Well: MW-MW-12S
Site: MSA - Middle Road
Date Installed: 7/26/12
*Date Developed: 7/30/12
Dev. Method: submersible pump
Pump Type: 12 volt

Depth to Bottom (ft.): 35' / 19.85 w/ pump
Static Water Level Before (ft.): 20.42'
Static Water Level After (ft.):
Screen Length (ft.): 20'
Specific Capacity: 88 gal/ft/day
Casing ID (in.): 2"

Responsible Personnel: G. O'Neil
Drilling Co.: Brant Longyear
Project Name: Supplemental Phase II Invest MSA
Project Number:

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units mS/cm)	Turbidity (NTU)	Remarks (odor, color, etc.)
1426		0	19.85	—	—	—	—	Start pump At MW Board
1430	—	3.73	N/A	28.76	6.58	0.734	64.6	pumped dry
restart 1555			27.37	25.26	6.38	0.783	57.59	
1558		5.3						pumped dry
restart 1700		6.3						
*note Backed 10 gallons from well			MA-MW 12 on 7/29/12					
Initial DTW was			9.59' @	1445 on	7/29/12			

APPENDIX C—SYNOPTIC GROUNDWATER-LEVEL DATA

Groundwater Levels and Elevations
Lockheed Martin Martin State Airport, Middle River, Maryland

Well ID	Date of Well Installation	Aquifer Level	Northing[1] NAD83 Feet	Easting[1] NAD83 Feet	Elevation[1] Ground NAVD88 Feet	Elevation[1] Top of PVC NAVD88 Feet	Well Casing Stickup/ Stickdown (-) Feet	Elevation[1] Screen Midpoint NAVD88 Feet	Well Casing and Screen Diameter Inches	Depth Top of Screen Below Grade Feet	Depth Bottom of Screen Below Grade Feet	Elevation[1] Top of Screen NAVD88 Feet	Elevation[1] Bottom of Screen NAVD88 Feet	Well Screen Length Feet	Depth Top of Filterpack Below Grade Feet	Depth Bottom of Filterpack Below Grade Feet	Well Filterpack Thickness Feet	Well Borehole Diameter Inches	Depth to Groundwater Top of Well Casing 10/14/2003 Feet	Groundwater Elevation[1] NAVD88 10/14/2003 Feet	Depth to Groundwater Top of Well Casing 12/1/2003 Feet	Groundwater Elevation[1] NAVD88 12/1/2003 Feet	Depth to Groundwater Top of Well Casing 9/30/2004 Feet	Groundwater Elevation[1] NAVD88 9/30/2004 Feet
DMW-1A	5/1/2002	I	604398.60	1479498.32	10.37	12.05	1.68	-39.63	2	45.00	55.00	-34.63	-44.63	10	44.00	56.00	12.00	8	8.43	3.62	8.91	3.14	9.50	2.55
DMW-1B	5/1/2002	D	604398.60	1479498.32	10.37	12.04	1.67	-75.13	2	83.00	88.00	-72.63	-77.63	5	82.00	89.00	7.00	8	8.81	3.23	9.54	2.50	9.65	2.39
DMW-1S	7/28/2003	S	604458.58	1479310.48	11.41	11.08	-0.33	-2.25	2	8.66	18.66	2.75	-7.25	10	5.66	18.66	13.00	8.25	7.34	3.74	7.74	3.34	8.50	2.58
DMW-2A	5/1/2002	I	604678.82	1479789.39	19.58	21.65	2.07	-35.42	2	50.00	60.00	-30.42	-40.42	10	49.00	61.00	12.00	8	19.37	2.28	20.92	0.73	20.13	1.52
DMW-2B	5/1/2002	D	604678.82	1479789.39	19.58	21.66	2.08	-70.42	2	85.00	95.00	-65.42	-75.42	10	84.00	96.00	12.00	8	19.14	2.52	20.55	1.11	19.90	1.76
DMW-2S	7/17/2003	S	604670.41	1479807.55	19.34	21.75	2.41	-6.26	2	20.60	30.60	-1.26	-11.26	10	17.60	30.60	13.00	8.25	19.31	2.44	20.53	1.22	20.60	1.15
DMW-3D	7/10/2003	D	604810.48	1479731.13	16.47	16.46	-0.01	-63.79	2	75.26	85.26	-58.79	-68.79	10	68.80	88.00	19.20	8.25	14.02	2.44	15.61	0.85	14.82	1.64
DMW-3I	7/11/2003	I	604810.48	1479731.13	16.47	16.45	-0.02	-36.79	2	48.26	58.26	-31.79	-41.79	10	41.00	62.00	21.00	8.25	14.03	2.42	15.53	0.92	14.85	1.60
DMW-3S	7/11/2003	S	604804.87	1479733.91	16.53	16.52	-0.01	-5.43	2	16.96	26.96	-0.43	-10.43	10	14.10	26.96	12.86	8.25	14.41	2.11	10.06	6.46	10.51	6.01
DMW-4D	7/16/2003	D	604566.00	1480031.48	17.52	20.44	2.92	-58.00	2	70.52	80.52	-53.00	-63.00	10	67.00	90.00	23.00	8.25	18.32	2.12	20.11	0.33	19.00	1.44
DMW-4I	7/16/2003	I	604566.00	1480031.48	17.52	20.48	2.96	-34.11	2	46.63	56.63	-29.11	-39.11	10	39.00	62.00	23.00	8.25	18.23	2.25	19.70	0.78	18.95	1.53
DMW-4S	7/17/2003	S	604563.04	1480036.27	17.61	20.52	2.91	-7.34	2	19.95	29.95	-2.34	-12.34	10	17.00	30.00	13.00	8.25	18.55	1.97	20.15	0.37	19.25	1.27
DMW-5D	7/22/2003	D	604431.10	1480140.63	18.66	21.38	2.72	-57.39	2	71.05	81.05	-52.39	-62.39	10	67.00	100.00	33.00	8.25	19.18	2.20	20.81	0.57	20.02	1.36
DMW-5I	7/22/2003	I	604431.10	1480140.50	18.66	21.39	2.73	-32.79	2	46.45	56.45	-27.79	-37.79	10	39.00	62.00	23.00	8.25	19.13	2.26	20.68	0.71	19.95	1.44
DMW-5S	7/23/2003	S	604430.05	1480141.08	18.50	21.34	2.84	-6.95	2	20.45	30.45	-1.95	-11.95	10	17.00	35.00	18.00	8.25	19.09	2.25	20.48	0.86	20.12	1.22
DMW-6D	7/24/2003	D	604193.59	1480266.19	15.61	18.51	2.90	-49.44	2	60.05	70.05	-44.44	-54.44	10	57.50	85.00	27.50	8.25	16.29	2.22	17.76	0.75	17.25	1.26
DMW-6I	7/24/2003	I	604193.59	1480266.19	15.61	18.64	3.03	-30.67	2	41.28	51.28	-25.67	-35.67	10	35.00	54.50	19.50	8.25	16.41	2.23	17.71	0.93	17.15	1.49
DMW-6S	7/25/2003	S	604190.48	1480255.05	15.95	18.62	2.67	-4.59	2	15.54	25.54	0.41	-9.59	10	14.00	27.00	13.00	8.25	16.20	2.42	17.72	0.90	17.09	1.53
DMW-7D	7/29/2003	D	604287.20	1479924.19	19.22	21.94	2.72	-54.93	2	69.15	79.15	-49.93	-59.93	10	63.00	82.00	19.00	8.25	19.31	2.63	20.41	1.53	20.11	1.83
DMW-7I	7/29/2003	I	604287.20	1479924.19	19.22	21.90	2.68	-29.89	2	44.11	54.11	-24.89	-34.89	10	39.00	57.50	18.50	8.25	19.28	2.62	20.49	1.41	20.20	1.70
DMW-7S	7/30/2003	S	604291.49	1479921.81	19.21	21.84	2.63	-5.56	2	19.77	29.77	-0.56	-10.56	10	16.00	29.77	13.77	8.25	19.18	2.66	20.14	1.70	19.98	1.86
DMW-8D	7/31/2003	D	604516.04	1479673.57	13.62	16.35	2.73	-51.08	2	59.70	69.70	-46.08	-56.08	10	54.00	85.00	31.00	8.25	13.64	2.71	14.65	1.70	14.31	2.04
DMW-8I	7/31/2003	I	604516.04	1479673.57	13.62	16.30	2.68	-26.42	2	35.04	45.04	-21.42	-31.42	10	29.00	49.00	20.00	8.25	13.64	2.66	14.60	1.70	14.37	1.93
DMW-8S	7/31/2003	S	604516.62	1479667.79	13.35	15.80	2.45	-1.60	2	9.95	19.95	3.40	-6.60	10	7.00	19.95	12.95	8.25	12.38	3.42	11.86	3.94	14.20	1.60
DMW-9D	8/6/2003	D	604764.91	1479293.42	8.71	11.41	2.70	-56.49	2	60.20	70.20	-51.49	-61.49	10	54.00	85.00	31.00	8.25	8.22	3.19	9.21	2.20	9.20	2.21
DMW-9I	8/6/2003	I	604764.91	1479293.42	8.71	11.40	2.69	-30.99	2	34.70	44.70	-25.99	-35.99	10	29.00	49.00	20.00	8.25	7.95	3.45	9.18	2.22	9.16	2.24
DMW-9S	8/6/2003	S	604771.56	1479286.86	8.76	11.45	2.69	-5.69	2	9.45	19.45	-0.69	-10.69	10	6.00	20.00	14.00	8.25	7.91	3.54	8.44	3.01	9.22	2.23
MW-1[2]	8/10/1994	I	604052.58	1479214.74	10.69	10.69	--	-30.31	4	36.00	46.00	-25.31	-35.31	10	34.00	46.00	12.00	10	6.92	3.77	6.35	4.34	--	--
MW-10I	8/13/2003	I	604630.69	1479217.34	10.43	10.27	-0.16	-29.53	2	34.96	44.96	-24.53	-34.53	10	32.00	44.96	12.96	8.25	6.78	3.49	7.25	3.02	7.70	2.57
MW-10S	8/27/2003	S	604636.82	1479225.83	10.24	10.29	0.05	-5.44	2	10.68	20.68	-0.44	-10.44	10	7.00	20.68	13.68	8.25	6.60	3.69	6.94	3.35	7.80	2.49
MW-11I	8/14/2003	I	604429.32	1478930.78	9.38	9.15	-0.23	-26.18	2	30.56	40.56	-21.18	-31.18	10	27.56	40.56	13.00	8.25	5.20	3.95	5.60	3.55	6.30	2.85
MW-11S	8/27/2003	S	604424.24	1478934.92	9.35	9.20	-0.15	-5.66	2	10.01	20.01	-0.66	-10.66	10	8.00	20.01	12.01	8.25	3.43	5.77	3.20	6.00	3.30	5.90
MW-14D	2/23/2007	DD	605129.85	1479550.68	11.95	11.56	-0.39	-101.05	2	108.00	118.00	-96.05	-106.05	10	106.0	118.0	12.0	10	--	--	--	--	--	--
MW-14I	2/23/2007	I	605129.85	1479550.68	11.95	11.72	-0.23	-33.05	2	40.00	50.00	-28.05	-38.05	10	37.00	55.00	18.00	10	--	--	--	--	--	--
MW-15D	11/7/2007	D	605010.96	1479028.29	6.29	8.77	2.48	-53.21	2	57.00	62.00	-50.71	-55.71	5	54.00	68.00	14.00	10	--	--	--	--	--	--
MW-15I	11/8/2007	I	605010.96	1479028.29	6.29	8.79	2.50	-33.71	2	35.00	45.00	-28.71	-38.71	10	33.00	46.50	13.50	10	--	--	--	--	--	--
MW-15S	11/8/2007	S	605010.96	1479028.29	6.29	8.60	2.31	-8.71	2	10.00	20.00	-3.71	-13.71	10	8.00	22.00	14.00	10	--	--	--	--	--	--
MW-16D	10/12/2007	D	605086.42	1479248.84	7.81	10.22	2.41	-53.19	2	56.00	66.00	-48.19	-58.19	10	53.00	68.00	15.00	10	--	--	--	--	--	--
MW-16I	10/12/2007	I	605086.42	1479248.84	7.81	10.06	2.25	-32.19	2	35.00	45.00	-27.19	-37.19	10	33.00	47.00	14.00	10	--	--	--	--	--	--
MW-16S	10/12/2007	S	605086.42	1479248.84	7.81	10.20	2.39	-7.19	2	10.00	20.00	-2.19	-12.19	10	8.00	21.00	13.00	10	--	--	--	--	--	--
MW-17D	10/10/2007	D	605112.67	1479358.32	8.03	7.56	-0.47	-56.97	2	60.00	70.00	-51.97	-61.97	10	58.00	71.00	13.00	10	--	--	--	--	--	--
MW-17I	10/10/2007	I	605112.67	1479358.32	8.03	7.68	-0.35	-32.97	2	36.00	46.00	-27.97	-37.97	10	33.00	47.00	14.00	10	--	--	--	--	--	--
MW-17S	10/10/2007	S	605112.67	1479358.32	8.03	7.61	-0.42	-5.97	2	9.00	19.00	-0.97	-10.97	10	7.00	20.00	13.00	10	--	--	--	--	--	--
MW-18D	11/18/2007	D	604934.54	1479642.31	9.17	8.88	-0.29	-69.83	2	74.00	84.00	-64.83	-74.83	10	71.50	84.50	13.00	10	--	--	--	--	--	--
MW-18I	10/16/2007	I	604930.77	1479645.06	9.14	8.91	-0.23	-35.86	2	40.00	50.00	-30.86	-40.86	10	38.00	51.00	13.00	10	--	--	--	--	--	--
MW-18S	10/16/2007	S	604930.77	1479645.06	9.14	8.89	-0.25	-10.86	2	15.00	25.00	-5.86	-15.86	10	13.00	26.00	13.00	10	--	--	--	--	--	--
MW-19D	10/22/2007	D	604152.70	1479701.18	8.45	7.94	-0.51	-66.55	2	70.00	80.00	-61.55	-71.55	10	68.00	82.00	14.00	10	--	--	--	--	--	--
MW-19I	10/18/2007	I	604152.70	1479701.18	8.45	7.90	-0.55	-41.55	2	45.00	55.00	-36.55	-46.55	10	43.00	63.00	20.00	10	--	--	--	--	--	--
MW-2	8/12/1994	I	604144.32	1479708.26	8.54	8.40	-0.14	-28.46	4	32.00	42.00	-23.46	-33.46	10	31.50	42.00	10.50	10	5.35	3.05	6.06	2.34	6.20	2.20
MW-20D	11/6/2007	D	604630.96	1479397.95	9.91	12.40	2.49	-55.09	2	60.00	70.00	-50.09	-60.09	10	58.00	71.00	13.00	10	--	--	--	--	--	--
MW-20I	11/6/2007	I	604630.96	1479397.95	9.91	12.39	2.48	-30.09	2	35.00	45.00	-25.09	-35.09	10	33.00	46.00	13.00	10	--	--	--	--	--	--
MW-20S	11/6/2007	S	604630.96	1479397.95	9.91	12.44	2.53	-5.09	2	10.00	20.00	-0.09	-10.09	10	8.00	21.00	13.00	10	--	--	--	--	--	--
MW-21D	10/26/2007	D	604467.75	1479303.22	11.31	10.78	-0.53	-63.69	2	70.00	80.00	-58.69	-68.69	10	68.00	83.00	15.00	10	--	--	--	--	--	--
MW-21I	10/26/2007	I	604467.75	1479303.22	11.31	10.83	-0.48	-23.69	2	30.00	40.00	-18.69	-28.69	10	28.00	41.00	13.00	10	--	--	--	--	--	--
MW-22D	10/30/2007	D	604442.07	1479112.84	11.49	11.02	-0.47	-63.51	2	70.00	80.00	-58.51	-68.51	10	68.00	83.00	15.00	10	--	--	--	--	--	--
MW-22I	11/30/2007	I	604442.07	1479112.84	11.49	11.01	-0.48	-23.51	2	30.00	40.00	-18.51	-28.51	10	27.50	42.00	14.50	10	--	--	--	--	--	--
MW-23D	11/1/2007	D	604237.13	1479295.12	10.34	10.03	-0.31	-70.66	2	76.00	86.00	-65.66	-75.66	10	73.00	88.00	15.00	10	--	--	--	--	--	--
MW-23I	11/1/2007	I	604237.13	1479295.12	10.34	10.07	-0.27	-34.66	2	40.00	50.00	-29.66	-39.66	10	38.00	50.00	12.00	10	--	--	--	--	--	--
MW-23S	11/1/2007	S	604237.13	1479295.12	10.34	10.01	-0.33	-11.66	2	17.00	27.00	-6.66	-16.66	10	15.00	30.00	15.00	10	--	--	--	--	--	--
MW-24I	11/5/2007	I	603945.66	1479375.24	8.24	7.68	-0.56	-31.76	2	35.00	45.00	-26.76	-36.76	10	33.00	48.00	15.00	10	--	--	--	--	--	--
MW-24S	11/5/2007	S	603945.66	1479375.24	8.24	7.72	-0.52	-11.76	2	15.00	25.00	-6.76	-16.76	10	13.00	27.00	14.00	10	--	--	--	--	--	--

Well ID	Date of Well Installation	Aquifer Level	Northing[1] NAD83 Feet	Easting[1] NAD83 Feet	Elevation[1] Ground NAVD88 Feet	Elevation[1] Top of PVC NAVD88 Feet	Well Casing Stickup/ Stickdown (-) Feet	Elevation[1] Screen Midpoint NAVD88 Feet	Well Casing and Screen Diameter Inches	Depth Top of Screen Below Grade Feet	Depth Bottom of Screen Below Grade Feet	Elevation[1] Top of Screen NAVD88 Feet	Elevation[1] Bottom of Screen NAVD88 Feet	Well Screen Length Feet	Depth Top of Filterpack Below Grade Feet	Depth Bottom of Filterpack Below Grade Feet	Well Filterpack Thickness Feet	Well Borehole Diameter Inches	Depth to Groundwater Top of Well Casing 10/14/2003 Feet	Groundwater Elevation[1] NAVD88 10/14/2003 Feet	Depth to Groundwater Top of Well Casing 12/1/2003 Feet	Groundwater Elevation[1] NAVD88 12/1/2003 Feet	Depth to Groundwater Top of Well Casing 9/30/2004 Feet	Groundwater Elevation[1] NAVD88 9/30/2004 Feet
MW-25I	11/5/2007	I	604510.08	1478812.44	10.11	9.72	-0.39	-28.89	2	34.00	44.00	-23.89	-33.89	10	32.00	48.00	16.00	10	--	--	--	--	--	--
MW-25S	11/5/2007	S	604510.08	1478812.44	10.11	9.69	-0.42	-4.89	2	10.00	20.00	0.11	-9.89	10	8.00	21.00	13.00	10	--	--	--	--	--	--
MW-26D	10/25/2007	D	604726.41	1479035.39	12.04	11.66	-0.38	-50.96	2	58.00	68.00	-45.96	-55.96	10	56.00	68.00	12.00	10	--	--	--	--	--	--
MW-26I	10/25/2007	I	604726.41	1479035.39	12.04	11.67	-0.37	-27.96	2	35.00	45.00	-22.96	-32.96	10	33.00	48.00	15.00	10	--	--	--	--	--	--
MW-26S	10/25/2007	S	604726.41	1479035.39	12.04	11.72	-0.32	-2.96	2	10.00	20.00	2.04	-7.96	10	8.00	23.00	15.00	10	--	--	--	--	--	--
MW-27D	7/10/2008	DD	605114.25	1479032.00	5.47	8.39	2.92	-174.53	2.5	175.00	185.00	-169.53	-179.53	10	170.00	186.00	16.00	7	--	--	--	--	--	--
MW-28I	7/10/2008	I	605110.61	1479027.89	5.69	8.65	2.96	-39.64	2	40.33	50.33	-34.64	-44.64	10	36.75	50.33	13.58	7	--	--	--	--	--	--
MW-29D	7/10/2008	DD	603774.77	1480488.41	11.66	11.43	-0.23	-143.34	2.5	150.00	160.00	-138.34	-148.34	10	145.92	162.00	16.08	7	--	--	--	--	--	--
MW-3	8/12/1994	S	604448.84	1479107.23	11.49	11.19	-0.30	-13.51	4	20.00	30.00	-8.51	-18.51	10	18.00	30.00	12.00	10	7.23	3.96	7.25	3.94	8.65	2.54
MW-30D	12/11/2008	DD	603825.46	1479645.71	8.39	8.26	-0.13	-194.61	2.5	198.00	208.00	-189.61	-199.61	10	195.00	211.00	16.00	7	--	--	--	--	--	--
MW-30I	6/12/2011	I	603824.91	1479473.54	7.80	7.52	-0.28	-32.20	2.0	35.00	45.00	-27.20	-37.20	10	33.00	45.00	12.00	6	--	--	--	--	--	--
MW-31D	12/11/2008	DD	603747.78	1480099.58	7.15	6.95	-0.20	-187.85	2.5	190.00	200.00	-182.85	-192.85	10	186.00	200.00	14.00	7	--	--	--	--	--	--
MW-32I	8/23/2009	I	603917.70	1479926.52	7.45	7.28	-0.17	-52.55	2	55.00	65.00	-47.55	-57.55	10	52.00	68.00	16.00	7	--	--	--	--	--	--
MW-32S	8/23/2009	S	603917.70	1479926.52	7.45	7.27	-0.18	-22.55	2	25.00	35.00	-17.55	-27.55	10	22.00	38.00	16.00	7	--	--	--	--	--	--
MW-33I	8/23/2009	I	605115.62	1478762.02	10.23	10.02	-0.21	-54.77	2	60.00	70.00	-49.77	-59.77	10	57.00	73.00	16.00	7	--	--	--	--	--	--
MW-33S	8/23/2009	S	605115.62	1478762.02	9.58	9.97	0.39	-29.92	2	34.50	44.50	-24.92	-34.92	10	31.50	41.50	10.00	7	--	--	--	--	--	--
MW-34I	8/23/2009	I	605340.11	1478893.75	7.51	7.37	-0.14	-42.49	2	45.00	55.00	-37.49	-47.49	10	42.00	58.00	16.00	7	--	--	--	--	--	--
MW-34S	8/23/2009	S	605340.11	1478893.75	7.51	7.44	-0.07	-24.49	2	27.00	37.00	-19.49	-29.49	10	24.00	40.00	16.00	7	--	--	--	--	--	--
MW-35S	6/7/2011	S	605371.56	1478645.77	12.94	12.63	-0.31	-16.06	2	24.00	34.00	-11.06	-21.06	10	22.00	35.00	13.00	6	--	--	--	--	--	--
MW-36S	6/5/2011	S	605068.52	1478395.88	12.11	11.88	-0.23	-17.89	2	25.00	35.00	-12.89	-22.89	10	23.00	37.00	14.00	6	--	--	--	--	--	--
MW-37S	6/6/2011	S	604275.33	1478851.69	10.99	10.70	-0.29	-9.01	2	15.00	25.00	-4.01	-14.01	10	12.00	25.00	13.00	6	--	--	--	--	--	--
MW-38S	6/13/2011	S	604045.94	1478555.27	11.10	10.81	-0.29	-4.90	2	11.00	21.00	0.10	-9.90	10	9.00	22.00	13.00	6	--	--	--	--	--	--
MW-39S	6/7/2011	S	604711.98	1479561.57	15.99	15.70	-0.29	-9.01	2	20.00	30.00	-4.01	-14.01	10	18.00	31.00	13.00	6	--	--	--	--	--	--
MW-4	1/29/1996	S	604852.91	1479180.81	10.51	10.34	-0.17	-5.99	4	3.00	30.00	7.51	-19.49	27	3.00	31.00	28.00	6.25	6.62	3.72	6.10	4.24	7.85	2.49
MW-5	1/30/1996	S	604294.68	1479901.86	19.41	22.65	3.24	-9.59	4	19.00	39.00	0.41	-19.59	20	17.00	39.00	22.00	6.25	19.99	2.66	21.10	1.55	20.96	1.69
MW-6	1/31/1996	S	604009.26	1480184.72	13.69	15.72	2.03	-10.31	4	14.00	34.00	-0.31	-20.31	20	12.00	34.00	22.00	6.25	12.92	2.80	13.46	2.26	13.70	2.02
MW-7	8/11/2003	S	604765.23	1478680.36	11.18	10.90	-0.28	-5.88	2	12.06	22.06	-0.88	-10.88	10	9.00	22.06	13.06	8.25	5.78	5.12	6.86	4.04	7.36	3.54
OW1-I	10/18/2007	I	604638.04	1479781.43	18.32	18.05	-0.27	-36.68	2	50.00	60.00	-31.68	-41.68	10	48.00	60.00	12.00	10	--	--	--	--	--	--
OW1-S	10/22/2007	S	604674.88	1479817.31	19.16	19.17	0.01	-5.84	2	20.00	30.00	-0.84	-10.84	10	17.60	30.00	12.40	10	--	--	--	--	--	--
RW1-I	10/18/2007	I	604662.81	1479782.43	18.67	18.44	-0.23	-36.33	4	50.00	60.00	-31.33	-41.33	10	47.00	60.00	13.00	8	--	--	--	--	--	--
RW1-S	10/22/2007	S	604677.60	1479813.40	19.30	19.09	-0.21	-5.70	4	20.00	30.00	-0.70	-10.70	10	16.00	30.00	14.00	8	--	--	--	--	--	--
TT-11[2]	8/26/2003	S	604264.70	1479085.31	11.16	11.16	--	-2.34	1.25	11.00	16.00	0.16	-4.84	5	8.00	16.00	8.00	6.25	6.45	4.71	5.60	5.56	--	--
TT-12[2]	8/26/2003	S	604077.47	1479083.14	11.51	11.51	--	-1.99	1.25	11.00	16.00	0.51	-4.49	5	8.00	16.00	8.00	6.25	6.39	5.12	5.79	5.72	--	--
TT-13[2]	8/26/2003	S	603961.29	1479338.80	9.55	9.55	--	-2.95	1.25	10.00	15.00	-0.45	-5.45	5	7.00	16.00	9.00	6.25	4.31	5.24	4.23	5.32	--	--
TT-14[2]	8/26/2003	S	604062.23	1479385.80	10.31	10.31	--	-2.19	1.25	10.00	15.00	0.31	-4.69	5	7.00	16.00	9.00	6.25	4.81	5.50	3.96	6.35	--	--
GSP-MW1	6/1/2011	S	603998.13	1478204.72	11.38	11.13	-0.25	1.38	2	5	15	6.38	-3.62	10	3	17	14.00	6	--	--	--	--	--	--
GSP-MW2	6/1/2011	S	604048.11	1478149.38	11.87	11.64	-0.23	-14.13	2	21	31	-9.13	-19.13	10	19	33	14.00	6	--	--	--	--	--	--
GSP-MW3	6/1/2011	S	603920.33	1478158.20	7.27	7.01	-0.26	-22.73	2	25	35	-17.73	-27.73	10	23	35	12.00	6	--	--	--	--	--	--
GSP-MW4	6/2/2011	S	603801.74	1478020.42	7.49	7.27	-0.22	-8.01	2	10.5	20.5	-3.01	-13.01	10	8.5	21.5	13.00	6	--	--	--	--	--	--
GSP-MW5	6/3/2011	S	603313.31	1478737.12	9.84	9.58	-0.26	-25.16	2	30	40	-20.16	-30.16	10	28	40	12.00	6	--	--	--	--	--	--
GSP-MW6	6/3/2011	S	603358.89	1478705.09	8.62	8.36	-0.26	-8.88	2	12.5	22.5	-3.88	-13.88	10	10	24	14.00	6	--	--	--	--	--	--
GSP-MW7	6/2/2011	S	602919.98	1479296.33	9.00	8.74	-0.26	-8.00	2	12	22	-3.00	-13.00	10	10	23	13.00	6	--	--	--	--	--	--
GSP-MW8	6/2/2011	S	603086.90	1479055.35	9.41	9.15	-0.26	-2.59	2	7	17	2.41	-7.59	10	5	19	14.00	6	--	--	--	--	--	--
GSP-MW9	9/12/2012	S	602854.36	1479195.16	14.440	14.17	-0.27	-0.56	2	10	20	4.44	-5.56	10	8	20.6	12.60	6	--	--	--	--	--	--
GSP-MW10	9/13/2012	S	602812.27	1479357.31	9.300	9.02	-0.28	-7.70	2	12	22	-2.70	-12.70	10	10	22.6	12.60	6	--	--	--	--	--	--
GSP-MW11	9/13/2012	S	602755.96	1479265.71	13.930	13.64	-0.29	3.93	2	5	15	8.93	-1.07	10	3	15.5	12.50	6	--	--	--	--	--	--
GSP-MW12	9/17/2012	S	602597.52	1479141.94	14.130	13.89	-0.24	-6.37	2	13	28	1.13	-13.87	15	11	30	19.00	6	--	--	--	--	--	--
GSP-MW13	9/13/2012	S	602667.96	1479249.83	14.000	13.7	-0.30	-4.00	2	13	23	1.00	-9.00	10	11	23.5	12.50	6	--	--	--	--	--	--
GSP-MW14	9/14/2012	S	602642.43	1479384.84	13.770	13.48	-0.29	4.27	2	7	12	6.77	1.77	5	5	12.5	7.50	6	--	--	--	--	--	--
GSP-MW15	9/17/2012	S	602509.32	1479259.92	14.020	13.71	-0.31	-0.98	2	10	20	4.02	-5.98	10	8	20.5	12.50	6	--	--	--	--	--	--
GSP-MW16	9/14/2012	S	602440.13	1479131.27	13.420	13.13	-0.29	-11.58	2	20	30	-6.58	-16.58	10	17	30	13.00	6	--	--	--	--	--	--
GSP-MW17	9/17/2012	S	603757.02	1477996.65	8.060	7.78	-0.28	-14.44	2	15	30	-6.94	-21.94	15	13	30	17.00	6	--	--	--	--	--	--
GSP-MW18	9/11/2012	S	603791.31	1478068.03	6.880	6.61	-0.27	-15.62	2	15	30	-8.12	-23.12	15	13	30	17.00	6	--	--	--	--	--	--
GSP-MW19	9/12/2012	S	603924.93	1478209.90	10.150	9.85	-0.30	-0.85	2	6	16	4.15	-5.85	10	4	16.5	12.50	6	--	--	--	--	--	--
GSP-MW20	9/12/2012	S	603984.84	1478261.17	12.690	12.41	-0.28	2.69	2	5	15	7.69	-2.31	10	3	15.5	12.50	6	--	--	--	--	--	--
MT-MW01S	5/19/2011	S	606556.70	1475440.70	17.91	17.61	-0.30	4.91	2	8	18	9.91	-0.09	10	6	20	14.00	6	--	--	--	--	--	--
MT-MW02S	5/20/2011	S	606332.96	1475383.52	18.12	17.76	-0.36	4.12	2	8	20	10.12	-1.88	12	6	20	14.00	6	--	--	--	--	--	--
MT-MW03S	5/20/2011	S	605940.36	1475539.97	4.15	3.68	-0.47	-20.85	2	20	30	-15.85	-25.85	10	18	32	14.00	6	--	--	--	--	--	--
MT-MW04S	5/18/2011	S	605222.37	1475744.11	12.89	12.59	-0.30	-7.11	2	15	25	-2.11	-12.11	10	13	27	14.00	6	--	--	--	--	--	--
MT-MW05S	5/19/2011	S	605775.36	1475990.70	12.61	12.37	-0.24	-7.39	2	15	25	-2.39	-12.39	10	13	25	12.00	6	--	--	--	--	--	--
MT-MW06S	5/21/2011	S	605723.94	1475763.23	7.27	6.79	-0.48	-3.73	2	6	16	1.27	-8.73	10	4	18	14.00	6	--	--	--	--	--	--
MT-MW07S	7/27/2012	S	606343.33	1475339.58	17.269	16.89	-0.38	-12.73	2	25	35	-7.73	-17.73	10	23	35	12.00	6	--	--	--	--	--	--
MT-MW08S	7/28/2012	S	606408.00	1475339.00	18.571	18.19	-0.38	-11.43	2	25	35	-6.43	-16.43	10	23	35	12.00	6	--	--	--	--	--	--
MT-MW09S	7/27/2012	S	605416.35	1476159.23	15.672	15.33	-0.34	-29.33	2	40	50	-24.33	-34.33	10	38	50.5	12.50	6	--	--	--	--	--	--
MT-MW010S	7/26/2012	S	605210.00	1475841.00	15.350	15.1	-0.25	-19.65	2	30	40	-14.65	-24.65	10	28	40	12.00	6	--	--	--	--	--	--
MT-MW011S	7/25/2012	S	605506.50	1475717.23	7.561	7.33	-0.23	-22.44	2	25	35	-17.44	-27.44	10	23	45.5	22.50	6	--	--	--	--	--	--
MT-MW012S	7/26/2012	S	605593.00	1475751.00	7.872	7.55	-0.32	-17.13	2	15	35	-7.13	-27.13	20	13	35	22.00	6	--	--	--	--	--	--

Groundwater Levels and Elevations
Lockheed Martin Martin State Airport, Middle River, Maryland

Well ID	Date of Well Installation	Aquifer Level	Northing[1] NAD83 Feet	Easting[1] NAD83 Feet	Elevation[1] Ground NAVD88 Feet	Elevation[1] Top of PVC NAVD88 Feet	Depth to Groundwater Top of Well Casing 12/10/2004 Feet	Groundwater Elevation[1] NAVD88 12/10/2004 Feet	Depth to Groundwater Top of Well Casing 6/25/2004 Feet	Groundwater Elevation[1] NAVD88 6/25/2004 Feet	Depth to Groundwater Top of Well Casing 1/14/2008 Feet	Groundwater Elevation[1] NAVD88 1/14/2008 Feet	Depth to Groundwater Top of Well Casing 10/30/2008 Feet	Groundwater Elevation[1] NAVD88 10/30/2008 Feet	Depth to Groundwater Top of Well Casing 9/10/2009 Feet	Groundwater Elevation[1] NAVD88 9/10/2009 Feet	Depth to Groundwater Top of Well Casing 9/18/2009 Feet	Groundwater Elevation[1] NAVD88 9/18/2009 Feet	Depth to Groundwater Top of Well Casing 1/19/2010 Feet	Groundwater Elevation[1] NAVD88 1/19/2010 Feet	Depth to Groundwater Top of Well Casing 7/2/2010 Feet	Groundwater Elevation[1] NAVD88 7/2/2010 Feet	Depth to Groundwater Top of Well Casing 7/14/2011 Feet	Groundwater Elevation[1] NAVD88 7/14/2011 Feet
DMW-1A	5/1/2002	I	604398.60	1479498.32	10.37	12.05	8.75	3.30	9.35	2.70	9.70	2.35	10.30	1.75	9.92	2.13	--	--	8.70	3.35	10.45	1.60	10.07	1.98
DMW-1B	5/1/2002	D	604398.60	1479498.32	10.37	12.04	9.11	2.93	9.57	2.47	9.90	2.14	10.50	1.54	10.11	1.93	--	--	9.00	3.04	10.71	1.33	10.38	1.66
DMW-1S	7/28/2003	S	604458.58	1479310.48	11.41	11.08	7.60	3.48	8.15	2.93	8.60	2.48	8.10	2.98	8.81	2.27	--	--	7.65	3.43	9.22	1.86	9.91	1.17
DMW-2A	5/1/2002	I	604678.82	1479789.39	19.58	21.65	20.20	1.45	2.75	18.90	20.50	1.15	21.15	0.50	20.54	1.11	--	--	19.95	1.70	21.25	0.40	21.02	0.63
DMW-2B	5/1/2002	D	604678.82	1479789.39	19.58	21.66	19.95	1.71	20.35	1.31	20.30	1.36	21.00	0.66	20.35	1.31	--	--	19.60	2.06	21.04	0.62	20.72	0.94
DMW-2S	7/17/2003	S	604670.41	1479807.55	19.34	21.75	20.43	1.32	20.49	1.26	21.00	0.75	21.30	0.45	20.85	0.90	--	--	20.35	1.40	21.29	0.46	20.80	0.95
DMW-3D	7/10/2003	D	604810.48	1479731.13	16.47	16.46	15.25	1.21	14.95	1.51	15.15	1.31	15.90	0.56	15.26	1.20	--	--	14.65	1.81	15.96	0.50	15.53	0.93
DMW-3I	7/11/2003	I	604810.48	1479731.13	16.47	16.45	15.23	1.22	14.90	1.55	15.20	1.25	15.85	0.60	15.31	1.14	--	--	14.65	1.80	15.95	0.50	15.62	0.83
DMW-3S	7/11/2003	S	604804.87	1479733.91	16.53	16.52	10.34	6.18	9.63	6.89	--	--	12.40	4.12	11.79	4.73	--	--	8.45	8.07	10.86	5.66	11.08	5.44
DMW-4D	7/16/2003	D	604566.00	1480031.48	17.52	20.44	19.45	0.99	19.50	0.94	19.40	1.04	20.20	0.24	19.32	1.12	--	--	18.80	1.64	20.06	0.38	20.25	0.19
DMW-4I	7/16/2003	I	604566.00	1480031.48	17.52	20.48	19.20	1.28	19.12	1.36	19.50	0.98	20.05	0.43	19.36	1.12	--	--	18.70	1.78	20.03	0.45	20.01	0.47
DMW-4S	7/17/2003	S	604563.04	1480036.27	17.61	20.52	19.70	0.82	19.60	0.92	19.95	0.57	20.50	0.02	19.69	0.83	--	--	19.20	1.32	20.29	0.23	20.00	0.52
DMW-5D	7/22/2003	D	604431.10	1480140.63	18.66	21.38	19.80	1.58	20.20	1.18	20.40	0.98	21.10	0.28	20.38	1.00	--	--	19.70	1.68	21.00	0.38	21.13	0.25
DMW-5I	7/22/2003	I	604431.10	1480140.50	18.66	21.39	19.75	1.64	20.15	1.24	20.40	0.99	21.10	0.29	20.36	1.03	--	--	19.70	1.69	21.03	0.36	21.04	0.35
DMW-5S	7/23/2003	S	604430.05	1480141.08	18.50	21.34	20.00	1.34	20.02	1.32	20.50	0.84	20.95	0.39	20.39	0.95	--	--	19.80	1.54	20.99	0.35	20.89	0.45
DMW-6D	7/24/2003	D	604193.59	1480266.19	15.61	18.51	17.15	1.36	17.70	0.81	17.60	0.91	18.30	0.21	17.52	0.99	--	--	16.80	1.71	18.21	0.30	18.26	0.25
DMW-6I	7/24/2003	I	604193.59	1480266.19	15.61	18.64	17.42	1.22	17.98	0.66	17.60	1.04	18.30	0.34	17.56	1.08	--	--	16.80	1.84	18.26	0.38	18.24	0.40
DMW-6S	7/25/2003	S	604190.48	1480255.05	15.95	18.62	17.35	1.27	17.75	0.87	17.45	1.17	18.30	0.32	18.78	-0.16	--	--	16.85	1.77	18.39	0.23	17.98	0.64
DMW-7D	7/29/2003	D	604287.20	1479924.19	19.22	21.94	20.24	1.70	20.35	1.59	20.60	1.34	21.20	0.74	20.57	1.37	--	--	19.70	2.24	21.23	0.71	21.00	0.94
DMW-7I	7/29/2003	I	604287.20	1479924.19	19.22	21.90	20.42	1.48	20.47	1.43	20.70	1.20	21.25	0.65	20.61	1.29	--	--	19.80	2.10	21.32	0.58	21.07	0.83
DMW-7S	7/30/2003	S	604291.49	1479921.81	19.21	21.84	20.12	1.72	20.20	1.64	--	--	--	--	--	--	--	--	--	--	--	--	20.52	1.32
DMW-8D	7/31/2003	D	604516.04	1479673.57	13.62	16.35	14.60	1.75	14.36	1.99	14.80	1.55	15.35	1.00	14.79	1.56	--	--	14.00	2.35	15.46	0.89	15.17	1.18
DMW-8I	7/31/2003	I	604516.04	1479673.57	13.62	16.30	14.15	2.15	14.45	1.85	14.90	1.40	15.40	0.90	14.84	1.46	--	--	14.02	2.28	15.47	0.83	14.84	1.46
DMW-8S	7/31/2003	S	604516.62	1479667.79	13.35	15.80	12.50	3.30	13.05	2.75	13.90	1.90	14.30	1.50	14.44	1.36	--	--	12.23	3.57	12.60	3.20	14.29	1.51
DMW-9D	8/6/2003	D	604764.91	1479293.42	8.71	11.41	9.00	2.41	9.37	2.04	9.51	1.90	10.15	1.26	9.68	1.73	--	--	8.65	2.76	10.29	1.12	9.93	1.48
DMW-9I	8/6/2003	I	604764.91	1479293.42	8.71	11.40	8.82	2.58	9.11	2.29	9.35	2.05	9.80	1.60	9.59	1.81	--	--	8.25	3.15	9.92	1.48	9.60	1.80
DMW-9S	8/6/2003	S	604771.56	1479286.86	8.76	11.45	8.79	2.66	9.10	2.35	9.35	2.10	9.75	1.70	9.49	1.96	--	--	8.16	3.29	9.85	1.60	9.53	1.92
MW-1[2]	8/10/1994	I	604052.58	1479214.74	10.69	10.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10I	8/13/2003	I	604630.69	1479217.34	10.43	10.27	6.81	3.46	7.60	2.67	7.80	2.47	8.45	1.82	8.87	1.40	--	--	6.95	3.32	8.56	1.71	8.20	2.07
MW-10S	8/27/2003	S	604636.82	1479225.83	10.24	10.29	6.82	3.47	7.58	2.71	7.90	2.39	8.30	1.99	8.06	2.23	--	--	6.90	3.39	8.39	1.90	7.64	2.65
MW-11I	8/14/2003	I	604429.32	1478930.78	9.38	9.15	5.20	3.95	6.20	2.95	33.20	-24.05	7.15	2.00	6.78	2.37	--	--	5.40	3.75	7.29	--	5.02	4.13
MW-11S	8/27/2003	S	604424.24	1478934.92	9.35	9.20	3.40	5.80	4.32	4.88	4.00	5.20	5.00	4.20	4.45	4.75	--	--	3.25	5.95	5.69	3.51	6.89	2.31
MW-14D	2/23/2007	DD	605129.85	1479550.68	11.95	11.56	--	--	--	--	7.60	3.96	8.25	3.31	7.71	3.85	--	--	7.00	4.56	7.97	3.59	--	--
MW-14I	2/23/2007	I	605129.85	1479550.68	11.95	11.72	--	--	--	--	10.60	1.12	11.20	0.52	10.72	1.00	10.32	1.40	10.15	1.57	11.29	0.43	10.90	0.82
MW-15D	11/7/2007	D	605010.96	1479028.29	6.29	8.77	--	--	--	--	6.26	2.51	7.00	1.77	6.61	2.16	5.5	3.27	5.43	3.34	7.17	1.60	6.71	2.06
MW-15I	11/8/2007	I	605010.96	1479028.29	6.29	8.79	--	--	--	--	6.30	2.49	7.02	1.77	6.63	2.16	5.55	3.24	5.43	3.36	7.19	1.60	6.74	2.05
MW-15S	11/8/2007	S	605010.96	1479028.29	6.29	8.60	--	--	--	--	5.80	2.80	6.83	1.77	6.66	1.94	4.95	3.65	4.65	3.95	7.22	1.38	6.69	1.91
MW-16D	10/12/2007	D	605086.42	1479248.84	7.81	10.22	--	--	--	--	7.90	2.32	8.70	1.52	8.26	1.96	7.3	2.92	7.19	3.03	9.84	0.38	8.47	1.75
MW-16I	10/12/2007	I	605086.42	1479248.84	7.81	10.06	--	--	--	--	7.80	2.26	8.50	1.56	8.11	1.95	7.1	2.96	7.01	3.05	8.66	1.40	8.30	1.76
MW-16S	10/12/2007	S	605086.42	1479248.84	7.81	10.20	--	--	--	--	8.40	1.80	9.10	1.10	9.26	0.94	8.49	1.71	8.35	1.85	9.73	0.47	9.27	0.93
MW-17D	10/10/2007	D	605112.67	1479358.32	8.03	7.56	--	--	--	--	18.00	-10.44	10.90	-3.34	5.88	1.68	4.90	2.66	4.40	3.16	5.41	2.15	5.90	1.66
MW-17I	10/10/2007	I	605112.67	1479358.32	8.03	7.68	--	--	--	--	5.60	2.08	6.30	1.38	6.12	1.56	5.65	2.03	5.22	2.46	6.51	1.17	5.23	2.45
MW-17S	10/10/2007	S	605112.67	1479358.32	8.03	7.61	--	--	--	--	6.00	1.61	9.35	-1.74	6.69	0.92	5.92	1.69	5.83	1.78	7.16	0.45	6.71	0.90
MW-18D	11/18/2007	D	604934.54	1479642.31	9.17	8.88	--	--	--	--	7.85	1.03	8.30	0.58	--	--	--	--	7.21	1.67	8.41	0.47	--	--
MW-18I	10/16/2007	I	604930.77	1479645.06	9.14	8.91	--	--	--	--	7.80	1.11	8.50	0.41	7.86	1.05	--	--	7.21	1.70	8.62	0.29	--	--
MW-18S	10/16/2007	S	604930.77	1479645.06	9.14	8.89	--	--	--	--	7.80	1.09	7.70	1.19	7.72	1.17	--	--	7.10	1.79	8.56	0.33	--	--
MW-19D	10/22/2007	D	604152.70	1479701.18	8.45	7.94	--	--	--	--	6.35	1.59	7.00	0.94	6.48	1.46	--	--	5.49	2.45	7.16	0.78	6.83	1.11
MW-19I	10/18/2007	I	604152.70	1479701.18	8.45	7.90	--	--	--	--	6.80	1.10	7.05	0.85	6.48	1.42	--	--	5.50	2.40	7.17	0.73	6.84	1.06
MW-2	8/12/1994	I	604144.32	1479708.26	8.54	8.40	5.83	2.57	6.50	1.90	6.60	1.80	7.25	1.15	7.74	0.66	--	--	5.65	2.75	7.46	0.94	7.09	1.31
MW-20D	11/6/2007	D	604630.96	1479397.95	9.91	12.40	--	--	--	--	10.60	1.80	11.30	1.10	10.74	1.66	--	--	9.80	2.60	11.38	1.02	11.06	1.34
MW-20I	11/6/2007	I	604630.96	1479397.95	9.91	12.39	--	--	--	--	10.40	1.99	10.75	1.64	10.42	1.97	--	--	9.20	3.19	10.82	1.57	10.53	1.86
MW-20S	11/6/2007	S	604630.96	1479397.95	9.91	12.44	--	--	--	--	10.40	2.04	10.80	1.64	10.51	1.93	--	--	9.23	3.21	10.89	1.55	10.58	1.86
MW-21D	10/26/2007	D	604467.75	1479303.22	11.31	10.78	--	--	--	--	8.85	1.93	9.20	1.58	9.10	1.68	--	--	8.00	2.78	9.61	1.17	8.86	1.92
MW-21I	10/26/2007	I	604467.75	1479303.22	11.31	10.83	--	--	--	--	8.60	2.23	8.90	1.93	8.75	2.08	--	--	7.60	3.23	9.21	1.62	8.79	2.04
MW-22D	10/30/2007	D	604442.07	1479112.84	11.49	11.02	--	--	--	--	8.70	2.32	9.30	1.72	9.02	2.00	--	--	7.85	3.17	9.61	1.41	9.00	2.02
MW-22I	11/30/2007	I	604442.07	1479112.84	11.49	11.01	--	--	--	--	9.22	1.79	9.45	1.56	8.61	2.40	--	--	7.90	3.11	9.12	1.89	8.82	2.19
MW-23D	11/1/2007	D	604237.13	1479295.12	10.34	10.03	--	--	--	--	8.70	1.33	8.62	1.41	8.16	1.87	--	--	7.10	2.93	8.82	1.21	8.42	1.61
MW-23I	11/1/2007	I	604237.13	1479295.12	10.34	10.07	--	--	--	--	7.65	2.42	7.95	2.12	7.84	2.23	--	--	6.70	3.37	8.37	1.70	7.99	2.08
MW-23S	11/1/2007	S	604237.13	1479295.12	10.34	10.01	--	--	--	--	7.55	2.46	7.95	2.06	7.76	2.25	--	--	6.65	3.36	8.29	1.72	7.95	2.06
MW-24I	11/5/2007	I	603945.66	1479375.24	8.24	7.68	--	--	--	--	5.20	2.48	5.80	1.88	5.42	2.26	--	--	4.30	3.38	5.96	1.72	5.52	2.16
MW-24S	11/5/2007	S	603945.66	1479375.24	8.24	7.72	--	--	--	--	4.10	3.62	4.50	3.22	4.32	3.40	--	--	3.65	4.07	4.81	2.91	4.43	3.29

Groundwater Levels and Elevations
Lockheed Martin Martin State Airport, Middle River, Maryland

Well ID	Date of Well Installation	Aquifer Level	Northing[1] NAD83 Feet	Easting[1] NAD83 Feet	Elevation[1] Ground NAVD88 Feet	Elevation[1] Top of PVC NAVD88 Feet	Depth to Groundwater Top of Well Casing 12/10/2004 Feet	Groundwater Elevation[1] NAVD88 12/10/2004 Feet	Depth to Groundwater Top of Well Casing 6/25/2004 Feet	Groundwater Elevation[1] NAVD88 6/25/2004 Feet	Depth to Groundwater Top of Well Casing 1/14/2008 Feet	Groundwater Elevation[1] NAVD88 1/14/2008 Feet	Depth to Groundwater Top of Well Casing 10/30/2008 Feet	Groundwater Elevation[1] NAVD88 10/30/2008 Feet	Depth to Groundwater Top of Well Casing 9/10/2009 Feet	Groundwater Elevation[1] NAVD88 9/10/2009 Feet	Depth to Groundwater Top of Well Casing 9/18/2009 Feet	Groundwater Elevation[1] NAVD88 9/18/2009 Feet	Depth to Groundwater Top of Well Casing 1/19/2010 Feet	Groundwater Elevation[1] NAVD88 1/19/2010 Feet	Depth to Groundwater Top of Well Casing 7/2/2010 Feet	Groundwater Elevation[1] NAVD88 7/2/2010 Feet	Depth to Groundwater Top of Well Casing 7/14/2011 Feet	Groundwater Elevation[1] NAVD88 7/14/2011 Feet
MW-25I	11/5/2007	I	604510.08	1478812.44	10.11	9.72	--	--	--	--	6.90	2.82	7.30	2.42	7.31	2.41	--	--	5.95	3.77	7.83	1.89	7.34	2.38
MW-25S	11/5/2007	S	604510.08	1478812.44	10.11	9.69	--	--	--	--	5.03	4.66	5.66	4.03	5.32	4.37	--	--	4.80	4.89	6.23	3.46	5.82	3.87
MW-26D	10/25/2007	D	604726.41	1479035.39	12.04	11.66	--	--	--	--	9.80	1.86	9.10	2.56	9.42	2.24	--	--	6.65	5.01	9.92	1.74	9.35	2.31
MW-26I	10/25/2007	I	604726.41	1479035.39	12.04	11.67	--	--	--	--	9.25	2.42	9.60	2.07	9.44	2.23	--	--	8.39	3.28	9.98	1.69	9.35	2.32
MW-26S	10/25/2007	S	604726.41	1479035.39	12.04	11.72	--	--	--	--	10.05	1.67	9.55	2.17	9.41	2.31	--	--	7.75	3.97	9.47	2.25	9.29	2.43
MW-27D	7/10/2008	DD	605114.25	1479032.00	5.47	8.39	--	--	--	--	--	--	6.02	--	5.65	2.74	--	--	4.00	4.39	5.02	3.37	3.81	4.58
MW-28I	7/10/2008	I	605110.61	1479027.89	5.69	8.65	--	--	--	--	--	--	6.81	--	6.57	2.08	5.45	3.20	5.40	3.25	7.18	1.47	6.71	1.94
MW-29D	7/10/2008	DD	603774.77	1480488.41	11.66	11.43	--	--	--	--	--	--	12.25	--	11.89	-0.46	--	--	10.00	1.43	11.05	0.38	--	--
MW-3	8/12/1994	S	604448.84	1479107.23	11.49	11.19	7.40	3.79	8.27	2.92	8.65	2.54	9.00	2.19	8.79	2.40	--	--	7.70	3.49	9.21	1.98	8.88	2.31
MW-30D	12/11/2008	DD	603825.46	1479645.71	8.39	8.26	--	--	--	--	--	--	--	--	8.00	0.26	--	--	6.20	2.06	7.37	0.89	5.26	3.00
MW-30I	6/12/2011	I	603824.91	1479473.54	7.80	7.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.26	2.26
MW-31D	12/11/2008	DD	603747.78	1480099.58	7.15	6.95	--	--	--	--	--	--	--	--	7.47	-0.52	--	--	5.75	1.20	6.78	0.17	5.28	1.67
MW-32I	8/23/2009	I	603917.70	1479926.52	7.45	7.28	--	--	--	--	--	--	--	--	5.71	1.57	4.65	2.63	4.62	2.66	6.40	0.88	6.04	1.24
MW-32S	8/23/2009	S	603917.70	1479926.52	7.45	7.27	--	--	--	--	--	--	--	--	5.62	1.65	4.52	2.75	4.50	2.77	6.31	0.96	5.94	1.33
MW-33I	8/23/2009	I	605115.62	1478762.02	10.23	10.02	--	--	--	--	--	--	--	--	7.38	2.64	6.25	3.77	6.25	3.77	7.94	2.08	7.47	2.55
MW-33S	8/23/2009	S	605115.62	1478762.02	9.58	9.97	--	--	--	--	--	--	--	--	7.34	2.63	6.05	3.92	6.23	3.74	7.84	2.13	7.37	2.60
MW-34I	8/23/2009	I	605340.11	1478893.75	7.51	7.37	--	--	--	--	--	--	--	--	5.15	2.22	--	--	4.00	3.37	5.72	1.65	5.21	2.16
MW-34S	8/23/2009	S	605340.11	1478893.75	7.51	7.44	--	--	--	--	--	--	--	--	5.20	2.24	--	--	3.90	3.54	5.77	1.67	5.01	2.43
MW-35S	6/7/2011	S	605371.56	1478645.77	12.94	12.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.31	--
MW-36S	6/5/2011	S	605068.52	1478395.88	12.11	11.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.83	--
MW-37S	6/6/2011	S	604275.33	1478851.69	10.99	10.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.81	--
MW-38S	6/13/2011	S	604045.94	1478555.27	11.10	10.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.92	--
MW-39S	6/7/2011	S	604711.98	1479561.57	15.99	15.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12.58	--
MW-4	1/29/1996	S	604852.91	1479180.81	10.51	10.34	7.00	3.34	7.25	3.09	7.50	2.84	8.25	2.09	8.15	2.19	--	--	5.45	4.89	8.59	1.75	8.07	2.27
MW-5	1/30/1996	S	604294.68	1479901.86	19.41	22.65	21.00	1.65	21.05	1.60	21.15	1.50	21.55	1.10	21.35	1.30	--	--	20.30	2.35	21.77	0.88	21.66	0.99
MW-6	1/31/1996	S	604009.26	1480184.72	13.69	15.72	13.75	1.97	13.97	1.75	14.30	1.42	15.00	0.72	14.46	1.26	--	--	13.15	2.57	15.14	0.58	14.73	0.99
MW-7	8/11/2003	S	604765.23	1478680.36	11.18	10.90	5.73	5.17	6.70	4.20	--	--	--	--	7.27	3.63	--	--	--	--	7.36	3.54	6.88	4.02
OW1-I	10/18/2007	I	604638.04	1479781.43	18.32	18.05	--	--	--	--	17.00	1.05	--	--	17.02	1.03	--	--	--	--	17.73	0.32	--	--
OW1-S	10/22/2007	S	604674.88	1479817.31	19.16	19.17	--	--	--	--	18.50	0.67	--	--	--	--	--	--	--	--	18.57	0.60	--	--
RW1-I	10/18/2007	I	604662.81	1479782.43	18.67	18.44	--	--	--	--	17.50	0.94	--	--	17.40	1.04	--	--	--	--	18.11	0.33	--	--
RW1-S	10/22/2007	S	604677.60	1479813.40	19.30	19.09	--	--	--	--	18.20	0.89	--	--	--	--	--	--	--	--	18.45	0.64	--	--
TT-11[2]	8/26/2003	S	604264.70	1479085.31	11.16	11.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TT-12[2]	8/26/2003	S	604077.47	1479083.14	11.51	11.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TT-13[2]	8/26/2003	S	603961.29	1479338.80	9.55	9.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TT-14[2]	8/26/2003	S	604062.23	1479385.80	10.31	10.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW1	6/1/2011	S	603998.13	1478204.72	11.38	11.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW2	6/1/2011	S	604048.11	1478149.38	11.87	11.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW3	6/1/2011	S	603920.33	1478158.20	7.27	7.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW4	6/2/2011	S	603801.74	1478020.42	7.49	7.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW5	6/3/2011	S	603313.31	1478737.12	9.84	9.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW6	6/3/2011	S	603358.89	1478705.09	8.62	8.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW7	6/2/2011	S	602919.98	1479296.33	9.00	8.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW8	6/2/2011	S	603086.90	1479055.35	9.41	9.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW9	9/12/2012	S	602854.36	1479195.16	14.440	14.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW10	9/13/2012	S	602812.27	1479357.31	9.300	9.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW11	9/13/2012	S	602755.96	1479265.71	13.930	13.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW12	9/17/2012	S	602597.52	1479141.94	14.130	13.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW13	9/13/2012	S	602667.96	1479249.83	14.000	13.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW14	9/14/2012	S	602642.43	1479384.84	13.770	13.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW15	9/17/2012	S	602509.32	1479259.92	14.020	13.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW16	9/14/2012	S	602440.13	1479131.27	13.420	13.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW17	9/17/2012	S	603757.02	1477996.65	8.060	7.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW18	9/11/2012	S	603791.31	1478068.03	6.880	6.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW19	9/12/2012	S	603924.93	1478209.90	10.150	9.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GSP-MW20	9/12/2012	S	603984.84	1478261.17	12.690	12.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW01S	5/19/2011	S	606556.70	1475440.70	17.91	17.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW02S	5/20/2011	S	606332.96	1475383.52	18.12	17.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW03S	5/20/2011	S	605940.36	1475539.97	4.15	3.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW04S	5/18/2011	S	605222.37	1475744.11	12.89	12.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW05S	5/19/2011	S	605775.36	1475990.70	12.61	12.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW06S	5/21/2011	S	605723.94	1475763.23	7.27	6.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW07S	7/27/2012	S	606343.33	1475339.58	17.269	16.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW08S	7/28/2012	S	606408.00	1475339.00	18.571	18.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW09S	7/27/2012	S	605416.35	1476159.23	15.672	15.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW010S	7/26/2012	S	605210.00	1475841.00	15.350	15.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW011S	7/25/2012	S	605506.50	1475717.23	7.561	7.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MT-MW012S	7/26/2012	S	605593.00	1475751.00	7.872	7.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Levels and Elevations
Lockheed Martin Martin State Airport, Middle River, Maryland

Well ID	Date of Well Installation	Aquifer Level	Northing[1] NAD83 Feet	Easting[1] NAD83 Feet	Elevation[1] Ground NAVD88 Feet	Elevation[1] Top of PVC NAVD88 Feet	Depth to Groundwater Top of Well Casing 4/16/2012 Feet	Groundwater Elevation[1] NAVD88 4/16/2012 Feet	Depth to Groundwater Top of Well Casing 10/4/2012 Feet	Groundwater Elevation[1] NAVD88 10/4/2012 Feet
DMW-1A	5/1/2002	I	604398.60	1479498.32	10.37	12.05	9.88	2.17	10.70	1.35
DMW-1B	5/1/2002	D	604398.60	1479498.32	10.37	12.04	10.15	1.89	10.85	1.19
DMW-1S	7/28/2003	S	604458.58	1479310.48	11.41	11.08	8.68	2.40	9.62	1.46
DMW-2A	5/1/2002	I	604678.82	1479789.39	19.58	21.65	20.89	0.76	21.00	0.65
DMW-2B	5/1/2002	D	604678.82	1479789.39	19.58	21.66	20.61	1.05	20.79	0.87
DMW-2S	7/17/2003	S	604670.41	1479807.55	19.34	21.75	20.93	0.82	21.28	0.47
DMW-3D	7/10/2003	D	604810.48	1479731.13	16.47	16.46	15.39	1.07	12.00	4.46
DMW-3I	7/11/2003	I	604810.48	1479731.13	16.47	16.45	15.55	0.90	15.65	0.80
DMW-3S	7/11/2003	S	604804.87	1479733.91	16.53	16.52	10.10	6.42	15.56	0.96
DMW-4D	7/16/2003	D	604566.00	1480031.48	17.52	20.44	19.90	0.54	19.69	0.75
DMW-4I	7/16/2003	I	604566.00	1480031.48	17.52	20.48	19.75	0.73	19.76	0.72
DMW-4S	7/17/2003	S	604563.04	1480036.27	17.61	20.52	19.95	0.57	19.99	0.53
DMW-5D	7/22/2003	D	604431.10	1480140.63	18.66	21.38	20.85	0.53	20.74	0.64
DMW-5I	7/22/2003	I	604431.10	1480140.50	18.66	21.39	20.80	0.59	20.76	0.63
DMW-5S	7/23/2003	S	604430.05	1480141.08	18.50	21.34	20.75	0.59	20.75	0.59
DMW-6D	7/24/2003	D	604193.59	1480266.19	15.61	18.51	18.02	0.49	17.98	0.53
DMW-6I	7/24/2003	I	604193.59	1480266.19	15.61	18.64	18.03	0.61	18.01	0.63
DMW-6S	7/25/2003	S	604190.48	1480255.05	15.95	18.62	18.00	0.62	18.18	0.44
DMW-7D	7/29/2003	D	604287.20	1479924.19	19.22	21.94	20.90	1.04	21.09	0.85
DMW-7I	7/29/2003	I	604287.20	1479924.19	19.22	21.90	20.95	0.95	21.12	0.78
DMW-7S	7/30/2003	S	604291.49	1479921.81	19.21	21.84	20.90	0.94	20.92	0.92
DMW-8D	7/31/2003	D	604516.04	1479673.57	13.62	16.35	15.03	1.32	15.31	1.04
DMW-8I	7/31/2003	I	604516.04	1479673.57	13.62	16.30	15.03	1.27	15.35	0.95
DMW-8S	7/31/2003	S	604516.62	1479667.79	13.35	15.80	14.02	1.78	14.98	0.82
DMW-9D	8/6/2003	D	604764.91	1479293.42	8.71	11.41	9.69	1.72	10.30	1.11
DMW-9I	8/6/2003	I	604764.91	1479293.42	8.71	11.40	9.42	1.98	10.23	1.17
DMW-9S	8/6/2003	S	604771.56	1479286.86	8.76	11.45	9.32	2.13	10.23	1.22
MW-1[2]	8/10/1994	I	604052.58	1479214.74	10.69	10.69	--	--		--
MW-10I	8/13/2003	I	604630.69	1479217.34	10.43	10.27	7.99	2.28	8.80	1.47
MW-10S	8/27/2003	S	604636.82	1479225.83	10.24	10.29	7.68	2.61	8.73	1.56
MW-11I	8/14/2003	I	604429.32	1478930.78	9.38	9.15	6.43	2.72	7.58	1.57
MW-11S	8/27/2003	S	604424.24	1478934.92	9.35	9.20	4.97	4.23	6.20	3.00
MW-14D	2/23/2007	DD	605129.85	1479550.68	11.95	11.56	7.09	4.47	10.80	0.76
MW-14I	2/23/2007	I	605129.85	1479550.68	11.95	11.72	10.99	0.73	11.08	0.64
MW-15D	11/7/2007	D	605010.96	1479028.29	6.29	8.77	6.38	2.39	7.33	1.44
MW-15I	11/8/2007	I	605010.96	1479028.29	6.29	8.79	6.55	2.24	7.38	1.41
MW-15S	11/8/2007	S	605010.96	1479028.29	6.29	8.60	6.05	2.55	7.60	1.00
MW-16D	10/12/2007	D	605086.42	1479248.84	7.81	10.22	8.15	2.07	8.95	1.27
MW-16I	10/12/2007	I	605086.42	1479248.84	7.81	10.06	8.00	2.06	8.74	1.32
MW-16S	10/12/2007	S	605086.42	1479248.84	7.81	10.20	9.00	1.20	9.42	0.78
MW-17D	10/10/2007	D	605112.67	1479358.32	8.03	7.56	5.55	2.01	5.51	2.05
MW-17I	10/10/2007	I	605112.67	1479358.32	8.03	7.68	5.40	2.28	6.18	1.50
MW-17S	10/10/2007	S	605112.67	1479358.32	8.03	7.61	6.45	1.16	6.92	0.69
MW-18D	11/18/2007	D	604934.54	1479642.31	9.17	8.88	8.05	0.83	11.20	-2.32
MW-18I	10/16/2007	I	604930.77	1479645.06	9.14	8.91	8.21	0.70	8.30	0.61
MW-18S	10/16/2007	S	604930.77	1479645.06	9.14	8.89	7.94	0.95	8.22	0.67
MW-19D	10/22/2007	D	604152.70	1479701.18	8.45	7.94	6.53	1.41	7.03	0.91
MW-19I	10/18/2007	I	604152.70	1479701.18	8.45	7.90	6.63	1.27	7.10	0.80
MW-2	8/12/1994	I	604144.32	1479708.26	8.54	8.40	6.87	1.53	7.43	0.97
MW-20D	11/6/2007	D	604630.96	1479397.95	9.91	12.40	10.82	1.58	11.40	1.00
MW-20I	11/6/2007	I	604630.96	1479397.95	9.91	12.39	10.34	2.05	11.20	1.19
MW-20S	11/6/2007	S	604630.96	1479397.95	9.91	12.44	10.35	2.09	11.25	1.19
MW-21D	10/26/2007	D	604467.75	1479303.22	11.31	10.78	8.89	1.89	9.65	1.13
MW-21I	10/26/2007	I	604467.75	1479303.22	11.31	10.83	8.68	2.15	9.55	1.28
MW-22D	10/30/2007	D	604442.07	1479112.84	11.49	11.02	8.90	2.12	9.68	1.34
MW-22I	11/30/2007	I	604442.07	1479112.84	11.49	11.01	8.75	2.26	9.49	1.52
MW-23D	11/1/2007	D	604237.13	1479295.12	10.34	10.03	8.21	1.82	8.63	1.40
MW-23I	11/1/2007	I	604237.13	1479295.12	10.34	10.07	7.80	2.27	8.63	1.44
MW-23S	11/1/2007	S	604237.13	1479295.12	10.34	10.01	7.60	2.41	8.89	1.12
MW-24I	11/5/2007	I	603945.66	1479375.24	8.24	7.68	5.40	2.28	6.21	1.47
MW-24S	11/5/2007	S	603945.66	1479375.24	8.24	7.72	4.17	3.55	4.79	2.93

Well ID	Date of Well Installation	Aquifer Level	Northing[1] NAD83 Feet	Easting[1] NAD83 Feet	Elevation[1] Ground NAVD88 Feet	Elevation[1] Top of PVC NAVD88 Feet	Depth to Groundwater Top of Well Casing 4/16/2012 Feet	Groundwater Elevation[1] NAVD88 4/16/2012 Feet	Depth to Groundwater Top of Well Casing 10/4/2012 Feet	Groundwater Elevation[1] NAVD88 10/4/2012 Feet
MW-25I	11/5/2007	I	604510.08	1478812.44	10.11	9.72	6.97	2.75	8.10	1.62
MW-25S	11/5/2007	S	604510.08	1478812.44	10.11	9.69	5.75	3.94	6.74	2.95
MW-26D	10/25/2007	D	604726.41	1479035.39	12.04	11.66	9.00	2.66	10.11	1.55
MW-26I	10/25/2007	I	604726.41	1479035.39	12.04	11.67	8.97	2.70	10.17	1.50
MW-26S	10/25/2007	S	604726.41	1479035.39	12.04	11.72	8.92	2.80	10.00	1.72
MW-27D	7/10/2008	DD	605114.25	1479032.00	5.47	8.39	2.42	5.97	3.16	5.23
MW-28I	7/10/2008	I	605110.61	1479027.89	5.69	8.65	6.35	2.30	7.30	1.35
MW-29D	7/10/2008	DD	603774.77	1480488.41	11.66	11.43	8.10	3.33	12.30	-0.87
MW-3	8/12/1994	S	604448.84	1479107.23	11.49	11.19	8.70	2.49	9.68	1.51
MW-30D	12/11/2008	DD	603825.46	1479645.71	8.39	8.26	4.27	3.99	4.95	3.31
MW-30I	6/12/2011	I	603824.91	1479473.54	7.80	7.52	--	--		--
MW-31D	12/11/2008	DD	603747.78	1480099.58	7.15	6.95	3.55	3.40	4.20	2.75
MW-32I	8/23/2009	I	603917.70	1479926.52	7.45	7.28	5.65	1.63	6.32	0.96
MW-32S	8/23/2009	S	603917.70	1479926.52	7.45	7.27	5.74	1.53	6.30	0.97
MW-33I	8/23/2009	I	605115.62	1478762.02	10.23	10.02	7.11	2.91	8.05	1.97
MW-33S	8/23/2009	S	605115.62	1478762.02	9.58	9.97	7.05	2.92	8.06	1.91
MW-34I	8/23/2009	I	605340.11	1478893.75	7.51	7.37	4.81	2.56	5.20	2.17
MW-34S	8/23/2009	S	605340.11	1478893.75	7.51	7.44	4.51	2.93	5.92	1.52
MW-35S	6/7/2011	S	605371.56	1478645.77	12.94	12.63	9.25	3.38	10.05	2.58
MW-36S	6/5/2011	S	605068.52	1478395.88	12.11	11.88	7.45	4.43	8.90	2.98
MW-37S	6/6/2011	S	604275.33	1478851.69	10.99	10.70	6.83	3.87	7.55	3.15
MW-38S	6/13/2011	S	604045.94	1478555.27	11.10	10.81	--	--		--
MW-39S	6/7/2011	S	604711.98	1479561.57	15.99	15.70	12.30	3.40	13.75	1.95
MW-4	1/29/1996	S	604852.91	1479180.81	10.51	10.34	7.74	2.60	9.06	1.28
MW-5	1/30/1996	S	604294.68	1479901.86	19.41	22.65	21.35	1.30	21.88	0.77
MW-6	1/31/1996	S	604009.26	1480184.72	13.69	15.72	14.50	1.22	14.89	0.83
MW-7	8/11/2003	S	604765.23	1478680.36	11.18	10.90	6.80	4.10	8.78	2.12
OW1-I	10/18/2007	I	604638.04	1479781.43	18.32	18.05	--	--		--
OW1-S	10/22/2007	S	604674.88	1479817.31	19.16	19.17	--	--		--
RW1-I	10/18/2007	I	604662.81	1479782.43	18.67	18.44	--	--		--
RW1-S	10/22/2007	S	604677.60	1479813.40	19.30	19.09	--	--		--
TT-11[2]	8/26/2003	S	604264.70	1479085.31	11.16	11.16	--	--		--
TT-12[2]	8/26/2003	S	604077.47	1479083.14	11.51	11.51	--	--		--
TT-13[2]	8/26/2003	S	603961.29	1479338.80	9.55	9.55	--	--		--
TT-14[2]	8/26/2003	S	604062.23	1479385.80	10.31	10.31	--	--		--
GSP-MW1	6/1/2011	S	603998.13	1478204.72	11.38	11.13	6.00	5.13	7.7	3.43
GSP-MW2	6/1/2011	S	604048.11	1478149.38	11.87	11.64	6.91	4.73	--	--
GSP-MW3	6/1/2011	S	603920.33	1478158.20	7.27	7.01	3.75	3.26	5	2.01
GSP-MW4	6/2/2011	S	603801.74	1478020.42	7.49	7.27	3.40	3.87	4.45	2.82
GSP-MW5	6/3/2011	S	603313.31	1478737.12	9.84	9.58	3.60	5.98	6.99	2.59
GSP-MW6	6/3/2011	S	603358.89	1478705.09	8.62	8.36	5.20	3.16	8.3	0.06
GSP-MW7	6/2/2011	S	602919.98	1479296.33	9.00	8.74	3.55	5.19	5.76	2.98
GSP-MW8	6/2/2011	S	603086.90	1479055.35	9.41	9.15	4.22	4.93	6.2	2.95
GSP-MW9	9/12/2012	S	602854.36	1479195.16	14.440	14.17	--	--	9.89	4.28
GSP-MW10	9/13/2012	S	602812.27	1479357.31	9.300	9.02	--	--	4.46	4.56
GSP-MW11	9/13/2012	S	602755.96	1479265.71	13.930	13.64	--	--	6.63	7.01
GSP-MW12	9/17/2012	S	602597.52	1479141.94	14.130	13.89	--	--	7.95	5.94
GSP-MW13	9/13/2012	S	602667.96	1479249.83	14.000	13.7	--	--	6	7.70
GSP-MW14	9/14/2012	S	602642.43	1479384.84	13.770	13.48	--	--	5.3	8.18
GSP-MW15	9/17/2012	S	602509.32	1479259.92	14.020	13.71	--	--	7.35	6.36
GSP-MW16	9/14/2012	S	602440.13	1479131.27	13.420	13.13	--	--	8.05	5.08
GSP-MW17	9/17/2012	S	603757.02	1477996.65	8.060	7.78	--	--	7.5	0.28
GSP-MW18	9/11/2012	S	603791.31	1478068.03	6.880	6.61	--	--	13.3	-6.69
GSP-MW19	9/12/2012	S	603924.93	1478209.90	10.150	9.85	--	--	9.55	0.30
GSP-MW20	9/12/2012	S	603984.84	1478261.17	12.690	12.41	--	--	10	2.41
MT-MW01S	5/19/2011	S	606556.70	1475440.70	17.91	17.61	4.77	12.84	5.45	12.16
MT-MW02S	5/20/2011	S	606332.96	1475383.52	18.12	17.76	9.87	7.89	14.19	3.57
MT-MW03S	5/20/2011	S	605940.36	1475539.97	4.15	3.68	0.00	3.68	0	3.68
MT-MW04S	5/18/2011	S	605222.37	1475744.11	12.89	12.59	5.74	6.85	8.99	3.60
MT-MW05S	5/19/2011	S	605775.36	1475990.70	12.61	12.37	4.40	7.97	5.32	7.05
MT-MW06S	5/21/2011	S	605723.94	1475763.23	7.27	6.79	1.70	5.09	2.19	4.60
MT-MW07S	7/27/2012	S	606343.33	1475339.58	17.269	16.89	--	--	9.79	7.10
MT-MW08S	7/28/2012	S	606408.00	1475339.00	18.571	18.19	--	--	10.75	7.44
MT-MW09S	7/27/2012	S	605416.35	1476159.23	15.672	15.33	--	--	9.49	5.84
MT-MW010S	7/26/2012	S	605210.00	1475841.00	15.350	15.1	--	--	12.05	3.05
MT-MW011S	7/25/2012	S	605506.50	1475717.23	7.561	7.33	--	--	--	--
MT-MW012S	7/26/2012	S	605593.00	1475751.00	7.872	7.55	--	--	3.98	3.57

1 Based on an October 2010 survey of all Dump Road Area wells

2 Well has been sealed and abandoned in accordance with state regulations and is no longer in

"--" - Not available or not measured

S - Upper surficial aquifer

I - Intermediate surficial aquifer

D - Lower surficial aquifer

DD - Deep confined aquifer or below the lower surficial aquifer

NAVD88 = North American Vertical Datum of 1988.

NAD83 - North American Datum of 1983

APPENDIX D—
PURGE LOGS AND GROUNDWATER-SAMPLE RECORD SHEETS

Tetra Tech NUS, Inc

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: 112EC04021-02

[] Domestic Well Data
[] Monitoring Well Data
[] Other Well Type
[] QA Sample Type:

Sample ID No.: MT-MW01S-042512
Sample Location: MW01S
Sampled By: Walt P
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 4-25-12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 1335								
Method: Peristaltic pump	Clear	6.18	0.499	17.11	1.1	1.02	0.2	6

PURGE DATA:

Date: 4-25-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peristaltic pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 2" PVC		See Low Flow Purge Data Sheet						
Total Well Depth (TD):								
Static Water Level (WL): 4.35								
One Casing Volume(gal/L):								
Start Purge (hrs): 1244								
End Purge (hrs): 1330								
Total Purge Time (min): 46								
Total Vol. Purged (gal/L): 1.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3 - 40 ml VOA	✓
Total ARM	HNO3	1 - 500 ml Poly	✓
Diss ARM	HNO3	1 - 500 ml Poly	✓
1,4 Dioxane	—	2 - 1L Ambers	✓
DRO	—	2 - 1L Ambers	✓
GRO	HCl	2 - 40 ml VOA	✓
Perchlorate	—	1 - 250 ml Poly	✓
Hex Chrom	—	1 - 250 ml Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:
MS/MSD — Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: 112fc04021-62
WELL ID.: MT-MW01S-0425-12
DATE: 4-25-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1244	4.35	—	—	—	—	—	—	—	—	Initial, no odor
1245	5.00	300	6.03	0.499	23.0	3.33	16.43	154	0.2	Slightly cloudy
1250	5.95	100	6.26	0.463	6.7	1.71	16.52	52	0.2	Clean water
1255	6.70	100	6.31	0.455	3.1	1.55	16.75	29	0.2	
1305	8.05	100	6.33	0.499	1.6	1.22	17.15	9	0.2	
1315	8.50	100	6.26	0.450	0.5	1.17	17.01	7	0.2	
1320	8.70	100	6.22	0.499	1.0	1.04	17.13	6	0.2	
1325	8.75	100	6.19	0.499	1.0	1.02	17.26	7	0.2	
1330	8.80	100	6.18	0.499	1.1	1.02	17.11	6	0.2	
			Well Parameters Stabilized							
			Sampling Begins							

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Manton State Airport
Project No.: 112IC04021-02

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MT-MW02S-042312
Sample Location: MW02S
Sampled By: Walt P
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: / Time: / Method: Peristaltic pump	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 4-23-12								
Method: Peristaltic pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD):		See low flow purge						
Static Water Level (WL): 9.45								
One Casing Volume(gal/L):			Data Sheet					
Start Purge (hrs): 1305								
End Purge (hrs): 1436								
Total Time (min): 91								
Total Vol. Purged (gal/L): 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3 - 40 ml VOA	
Total PPM	HNO3	1 - 500 ml Poly	
Diss PPM	HNO3	1 - 500 ml Poly	
1,4 Dioxane	—	2 - 1L Ambers	
Perchlorate	—	1 - 250 ml Poly	
Hex Chrom	—	1 - 250 ml Poly	
Geo	HCl	2 - 40 ml VOA	
DRO	—	2 - 1L Ambers	

OBSERVATIONS / NOTES:

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	Walt P

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: MSA GW Sampling
Project No.: 112IC0401

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MT-MW02s
Sample Location: MT-MW02s
Sampled By: SBC
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 4/30/12	Color Visual	pH Standard	S.C. mS/cm	Temp. °C	Turbidity NTU	DO mg/l	ORP mV	Sal %
Time: 1305								
Method: Peri Pump								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	TDS
Method:								
Monitor Reading (ppm):								
Well Casing Diameter & Material								
Total Well Depth (TD): 17.75								
Static Water Level (WL): 14.79								
One Casing Volume(gal/L):								
Start Purge (hrs):								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 ml vials	
Total Metals	HNO3	1-500 ml plastic	
Dissolved Metals	HNO3	1-500 ml plastic	
1,4-Dioxane	—	2-1L Ambers	
Perchlorate	—	1-250 ml plastic	
GRO + DRO	HCl/None	2-40ml Vials / 2-1L Ambers	
Hexavalent Chromium	—	1-250 ml plastic	

OBSERVATIONS / NOTES:

Hex Chrom collected @ 1320

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: 112IC04021-02
WELL ID.: MT-MW02S-04232
DATE: 4-23-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1305	9.45	—	—	—	—	—	—	—	—	Initial, no odor
1306	9.85	300	6.07	0.609	157	3.00	13.76	63	0.3	Cloudy water
1311	10.05	100	5.82	0.623	31.8	1.91	13.63	44	0.3	Slightly cloudy
1316	10.35	100	5.76	0.626	14.5	1.67	13.61	37	0.3	
1326	11.03	100	5.72	0.639	14.1	1.29	13.37	25	0.3	
1336	12.10	100	5.71	0.641	13.3	1.26	13.41	14	0.3	
1346	12.75	100	5.78	0.648	12.7	1.21	13.17	8	0.3	
1356	13.40	100	5.82	0.653	13.4	1.18	13.35	1	0.3	
1406	14.01	100	5.85	0.669	13.5	1.14	13.11	-4	0.3	
1416	14.75	100	5.86	0.678	14.1	1.22	13.33	-9	0.3	
1426	15.30	100	5.76	0.690	15.1	1.27	13.33	-7	0.3	
1436	16.00	100	5.80	0.696	15.1	1.27	13.76	-13	0.3	

Well parameters did not stabilize 90 min max purge per Work Plan. Well dry for Recharge 60%.

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Manton State Airport
Project No.: 112FC04621.02

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MAT-MW03-042312
Sample Location: MW03
Sampled By: Walt P.
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: / Time:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Method: Peristaltic pump	Cloudy	6.21	0.152	14.85	3.05	1.42	0.1	ORP 11

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date 4-23-12								
Method: Peristaltic pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 2" PVC			See	low	flow	purge		
Total Well Depth (TD):								
Static Water Level (WL): Top of Box			Data	Sheet				
One Casing Volume(gal/L):								
Start Purge (hrs): 1037								
End Purge (hrs): 1148								
Total Purge Time (min): 70								
Total Vol. Purged (gal/L) 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3 - 40 ml VOA	
Total PPM	HNO3	1 - 500 ml Poly	
Diss PPM	HNO3	1 - 500 ml Poly	
1,4 Dioxane	—	2 - 1L Ambers	
Perchlorate	—	1 - 250 ml Poly	
Hex Chrom	—	1 - 250 ml Poly	
GRO	—	2 - 40 ml VOA	
DRO	—	2 - 1L Ambers	

OBSERVATIONS / NOTES:

Circle if Applicable:
MS/MSD | Duplicate ID No.:

Signature(s): Walt P.

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: 112IC04021-02

WELL ID.: MT-MW03S-042312
DATE: 4-23-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1037	Top Of Pvc	—	—	—	—	—	—	—	—	
1038	0.40	300	5.58	0.286	61.9	3.15	15.61	163	0-1	Initial, no odor
1043	1.55	200	6.01	0.214	56.5	1.61	15.39	83	0-1	Slightly cloudy
1048	2.30	200	6.15	0.201	65.4	1.41	15.25	54	0-1	↓
1058	3.50	100	6.23	0.186	275	1.27	15.15	33	0-1	Cloudy water
1108	4.55	100	6.26	0.181	390	1.20	14.76	26	0-1	↓
1118	5.85	100	6.26	0.182	346	1.16	14.80	19	0-1	
1128	6.85	100	6.27	0.186	364	1.18	14.65	13	0-1	
1138	8.00	100	6.29	0.186	360	1.30	14.84	9	0-1	
1148	9.00	100	6.21	0.192	305	1.40	14.85	11	0-1	
1158										
1208				Dry						

Let Well Recharge 90%

SIGNATURE(S): [signature]

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Meaton State Airport
Project No.: 112G04021-02

Sample ID No.: MT-MW04S-042412
Sample Location: MW04S
Sampled By: Matt P
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 4-28-12 / Time: 1130 / Method: Peristaltic pump	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
	Clean	4.48	0.134	14.15	2.9	2.28	0.1	260

PURGE DATA:

Date: 4-24-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peristaltic pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 2" PVC			See	Low	Flow	Purge		
Total Well Depth (TD):				Data	Sheet			
Static Water Level (WL): 5.81								
One Casing Volume(gal/L):								
Start Purge (hrs): 0954								
End Purge (hrs): 1125								
Total Purge Time (min): ~~8.0~~	91							
Total Vol. Purged (gal/L): 2.0								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3 - 40 ml VOA	✓
Total Fe	HNO3	1 - 500 ml Poly	✓
Diss Fe	HNO3	1 - 500 ml Poly	✓
1,4 Dioxane	—	2 - 1L Ambers	✓
DRO	—	2 - 1L Ambers	✓
GRO	HCl	2 - 40 ml VOA	✓
Perchlorate	—	1 - 250 ml Poly	✓
Hex Chrom	—	1 - 250 ml Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):
Matt P

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: 112EC0421-02
WELL ID.: MT-MW04S-042412
DATE: 4-24-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0954	5.81	—	—	—	—	—	—	—	—	Initial, MW odor
0955	6.60	300	4.05	0.196	76.9	4.75	15.71	287	0.1	Cloudy water
1000	7.15	150	3.88	0.161	35.5	2.84	15.98	296	0.1	Slightly cloudy
1005	7.60	100	3.88	0.149	16.4	2.67	15.27	296	0.1	↓
1015	8.90	100	4.03	0.137	7.3	2.55	14.68	287	0.1	Clear water
1025	10.50	100	4.31	0.137	4.7	2.54	13.83	271	0.1	
1035	11.80	100	4.32	0.136	3.8	2.50	13.77	269	0.1	
1045	13.10	100	4.45	0.136	4.0	2.48	13.81	262	0.1	
1055	14.80	100	4.44	0.135	3.4	2.49	13.81	262	0.1	
1105	15.01	100	4.44	0.135	3.3	2.35	13.95	262	0.1	
1115	15.50	100	4.47	0.134	2.6	2.32	14.12	260	0.1	
1125	15.70	100	4.44	0.134	2.5	2.28	14.15	260	0.1	↓

Well Parameters did not Stabilize after 90 min max Purge Plan Sampling Begins

SIGNATURE(S): Matt Fee

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: 112EC0421-62

Sample ID No.: MT-MW05S-042512
Sample Location: MW05S
Sampled By: Walt P
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

Date: 4-25-12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1051	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(‰)	ORP
Method: Peristaltic pump	Clear	4.00	0.587	13.04	2.0	1.00	0.3	345

PURGE DATA:

Date: 4-25-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Peristaltic pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 2" PVC		See Low Flow Purge Data Sheet						
Total Well Depth (TD):								
Static Water Level (WL): 4.15								
One Casing Volume(gal/L):								
Start Purge (hrs): 0915								
End Purge (hrs): 1046								
Total Purge Time (min): 91								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3 – 40 ml VOA	✓
Total PPM	HNO_3	1 – 500 ml Poly	✓
Diss PPM	HNO_3	1 – 500 ml Poly	✓
1,4 Dioxane	—	2 – 1L Ambers	✓
DRO	—	2 – 1L Ambers	✓
GRO	HCl	2 – 40 ml VOA	✓
Perchlorate	—	1 – 250 ml Poly	✓
Hex Chrom	—	1 – 250 ml Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Martin State Airport
PROJECT NUMBER: 112IC04021.

WELL ID.: MT-MW05S-042512
DATE: 4-25-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0915	4.15	—	—	—	—	—	—	—	—	Initial, no odor
0916	4.90	300	4.00	0.662	15.7	3.16	14.33	328	0.3	Slightly Cloudy
0921	5.45	100	3.81	0.643	3.0	1.74	13.33	340	0.3	Clean Water
0926	6.00	100	3.85	0.623	3.2	1.46	12.92	340	0.3	
0936	7.45	100	3.87	0.601	6.7	1.14	12.75	343	0.3	
0946	8.53	100	3.86	0.593	2.6	1.15	12.76	344	0.3	
0956	9.70	100	3.91	0.593	3.1	1.05	12.77	344	0.3	
1006	10.85	100	3.94	0.589	2.4	1.07	12.81	344	0.3	
1016	11.90	100	3.95	0.589	2.4	1.06	12.91	345	0.3	
1026	12.90	100	3.97	0.587	1.9	1.02	12.97	345	0.3	
1036	14.20	100	3.99	0.587	1.9	1.00	13.05	345	0.3	
1046	15.20	100	4.00	0.587	2.0	1.00	13.04	345	0.3	

Well parameters did not stabilize
after 90 min max purge pure work
plan sampling begins

SIGNATURE(S): Walt Pe

Tetra Tech NUS, Inc.

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Martin State Airport
Project No.: 112G04021 - 02

Sample ID No.: MT-MW06S-042412
Sample Location: MW06S
Sampled By: Walt P
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 4-24-12	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	ORP
Time: 1457								
Method: Peristaltic pump	Clear	4.42	0.864	18.10	8.8	1.30	0.4	265

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 4-24-12								
Method: Peristaltic pump								
Monitor Reading (ppm): 0.0								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD):		See	low	flow	purge			
Static Water Level (WL): 1.50								
One Casing Volume(gal/L):			Data	Sheet				
Start Purge (hrs): 1331								
End Purge (hrs): 1452								
Total Purge Time (min): 81								
Total Vol. Purged (gal/L): 2.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3 – 40 ml vial	✓
Total Mn	HNO3	1 – 500 ml Poly	✓
Diss Mn	HNO3	1 – 500 ml Poly	✓
1,4 Dioxane	—	2 – 1L Ambers	✓
DRO	—	2 – 1L Ambers	✓
GRO	HCl	2 – 40 ml vials	✓
Perchlorate	—	1 – 250 ml Poly	✓
Hex Chrom	—	1 – 250 ml Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:
MS/MSD
Duplicate ID No.:

Signature(s):
Walt P

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Mansfield State Airport
PROJECT NUMBER: 112EC04021 02

WELL ID.: MT-MW06S-042412
DATE: 4-24-12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1331	1.50	—	—	—	—	—	—	—	—	
1332	2.05	300	4.42	0.744	61.1	3.05	20.09	251	0.4	Initial, no odor
1337	3.00	200	4.38	0.793	34.6	1.48	18.79	276	0.4	Slightly Cloudy
1342	3.75	100	4.35	0.792	28.0	1.24	18.61	277	0.4	
1352	5.65	100	4.21	0.804	19.6	1.21	18.11	285	0.4	
1402	6.30	100	4.22	0.805	11.1	1.20	14.21	282	0.4	
1412	6.60	100	4.29	0.806	11.7	1.27	18.25	278	0.4	
1422	6.90	100	4.31	0.806	9.1	1.22	18.22	276	0.4	Clean water
1432	7.25	100	4.34	0.805	8.5	1.22	18.11	273	0.4	
1442	7.60	100	4.39	0.805	9.7	1.26	18.01	270	0.4	
1447	7.65	100	4.41	0.805	9.5	1.29	18.06	268	0.4	
1452	7.70	100	4.42	0.804	9.8	1.30	18.10	265	0.4	
			Well Parameters Stabilized							
			Sampling Begins							

SIGNATURE(S): Matt C

Tetra Tech

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Main Terminal GW Sampling
Project No.:

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: MT-MW07S
Sample Location: MSA
Sampled By: SBL/JAM
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Date: 8/22/12								ORP
Time: 1110								
Method:	light fel	4.79	0.863	19.21	17.9	1.23	0.03	100.8

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 8/22/12								
Method: Monsoon								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2" PVC			SEE	LOW	FLOW	PURGE	DATA	
Total Well Depth (TD): 34.42						SHEET		
Static Water Level (WL): 9.34								
One Casing Volume(gal/L):								
Start Purge (hrs): 1015								
End Purge (hrs): 1125								
Total Purge Time (min): 70								
Total Vol. Purged (gal/L): 3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	
TPH-GRO	HCl	3-40 mL vials	
TPH-DRO	None	2-1L ambers	
~~SVOCs~~ SVOCs/1,4-dioxane	None	2-1L ambers	
Total Metals	HNO3	1-500mL plastic bottle	
Dissolved Metals	HNO3	1-500 mL plastic bottle	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Mesa Terrace / GW Sampling
PROJECT NUMBER:
WELL ID.: MT-MW-07S
DATE: 8/22/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1015	~~1005~~ 9.34	—	—	—	—	—	—	—	—	
1020	9.86	200	5.80	0.163	>1000	2.42	20.12	-48.2	0.09	
1025	9.86	200	4.72	0.184	>1000	0.45	20.28	16.9	0.09	
1030	9.98	200	5.78	0.169	>1000	0.42	19.42	-13.2	0.09	
1035	9.83	200	5.19	0.145	886	0.39	19.49	2.5	0.08	
1040	~~9.90~~	~~200~~	5.42	0.125	255	0.42	20.43	1.4	0.07	
1045	10.00	200	5.19	0.103	135	0.61	19.56	37.0	0.05	
1050	9.91	200	5.04	0.083	77.5	0.68	19.89	45.6	0.04	
1055	9.85	200	5.04	0.079	53.3	0.87	20.19	60.9	0.04	
1100	~~9.90~~ 9.90	200	4.81	0.069	29.7	1.06	19.78	87.5	0.03	
1105	10.15	200	4.79	0.062	27.3	1.14	20.00	97.0	0.03	
1110	10.16	200	4.79	~~0.069~~	17.9	1.23	19.21	100.8	0.03	
				Begin Sampling at 1110						

SIGNATURE(S):

Tetra Tech

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Main Terminal Gw Sampling
Project No.:

[ ] Domestic Well Data
[X] Monitoring Well Data
[ ] Other Well Type:
[ ] QA Sample Type:

Sample ID No.: MT-MW08S
Sample Location: MSA
Sampled By: SBL/JAM
C.O.C. No.:
Type of Sample:
[ ] Low Concentration
[ ] High Concentration

SAMPLING DATA:

Date: 8/22/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 0940								ORP
Method:	clear	5.97	0.162	21.50	1.0	3.08	0.08	94.5

PURGE DATA:

Date: 8-22-12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Monsoon Pump								
Monitor Reading (ppm): -								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 34.82								
Static Water Level (WL): 9.35								
One Casing Volume(gal/L):								
Start Purge (hrs): 0855								
End Purge (hrs): 1005								
Total Purge Time (min): 70								
Total Vol. Purged (gal/L): 3								

See Low Flow Data Sheet

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3- 40 mL vials	
TPH-GRO	HCl	3- 40 mL vials	
TPH-DRO	None	2- 1 L ambers	
BTEX/ 1,4-dioxane	None	2- 1L Amber	
Total Metals	HNO3	1- 500 mL plastic bottle	
Dissolved metals	HNO3	1- 500 mL plastic bottle	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Main Terminal GW Sampling
PROJECT NUMBER:

WELL ID.: MT-MW-08S
DATE: 8/22/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
0855	9.35	-	-	-	-	-	-	-	-	
0900	10.67	200	6.26	0.187	66.4	4.98	21.86	617	0.09	
0905	11.90		5.32	0.196	94.6	3.06	21.81	418	0.10	
0910	12.65		5.43	0.203	69.0	2.84	22.56	288	0.10	
0915	13.54		6.08	0.191	54.6	2.91	22.54	22.6	0.10	
0920	14.98		5.97	0.186	38.3	2.87	21.45	42.9	0.09	
0925	17.32		5.98	0.181	27.4	2.86	22.02	64.9	0.09	
0930	17.05		5.90	0.174	13.1	2.91	21.85	89.4	0.09	
0935	19.35		5.97	0.162	11.0	3.08	21.50	94.5	0.08	
					0940 Stand Sampling					

SIGNATURE(S): Rob Medina

Tetra Tech

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Main Terminal / GW Sampling
Project No.:

Sample ID No.: MF-MW-095
Sample Location: MSA
Sampled By: SBC / JAM
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[x] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date: 8/21/12								
Time: 1338								
Method:	clear/clear	5.94	0.201	17.55	6.28	0.35	0.10	8.5

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 8/21/12								
Method: Monsoon								
Monitor Reading (ppm):				See Low Flow Water Purge Sheet				
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 46.34								
Static Water Level (WL): 11.83								
One Casing Volume(gal/L):								
Start Purge (hrs): 1255								
End Purge (hrs): 1400								
Total Purge Time (min): 65								
Total Vol. Purged (gal/L): 3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL VOAs	
TPH-GRO	HCl	3-40 mL VOAs	
TPH-DRO	None	2-1L ambers	
SVOCs / 1,4-dioxane	None	2-1L ambers	
Total Metals	HNO3	1-500 mL plastic bottle	
Dissolved Metals	HNO3	1-500 mL plastic bottle	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Main Terminal GW Sampling
PROJECT NUMBER:

WELL ID.: MT-MW 08S
DATE: 8/21/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1255	11.83	—	—	—	—	—	—	—	—	
1300	13.55	150	5.81	0.204	66.2	0.65	21.51	9.6	0.10	
1305	14.55		5.90	0.217	76.5	0.40	22.57	7.6	0.10	
1310	15.15		5.98	0.215	73.2	0.36	23.98	9.5	0.10	
1315	15.95		5.96	0.209	75.7	0.34	23.72	7.4	0.10	
1320	17.05		5.96	0.210	62.0	0.34	24.33	7.5	0.10	
1325	17.45		5.94	0.201	87.8	0.35	23.55	8.5	0.10	
					Sampling at		1320			

SIGNATURE(S):

Tetra Tech

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Main Terminal GW Sampling
Project No.:

- [ ] Domestic Well Data
- [x] Monitoring Well Data
- [ ] Other Well Type:
- [ ] QA Sample Type:

Sample ID No.: MT-MW10S
Sample Location: MSA
Sampled By: SAL/JAM
C.O.C. No.:
Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

SAMPLING DATA:

Date: 8/22/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1320								
Method:	Clear	5.44	0.712	14.54	0.1	0.38	0.11	27.8

PURGE DATA:

Date: 8/22/12	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Monsoon								
Monitor Reading (ppm):				SEE low flow				
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 39.71								
Static Water Level (WL): 10.94								
One Casing Volume(gal/L):								
Start Purge (hrs): 1220								
End Purge (hrs): 1345								
Total Purge Time (min): 85								
Total Vol. Purged (gal/L): 3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	
TPH-GRO	HCl	3-40 mL vials	
TPH-DRO	none	2-1L ambers	
SVOCs/ 1,4-D. Xane	none	2-1L ambers	
Total Metals	HNO3	1-500 mL plastic bottle	
Dissolved Metals	HNO3	1-500 mL plastic bottle	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Mark Twain Natl GW Sampling
PROJECT NUMBER:
WELL ID.: MT-MW-105
DATE: 8/22/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1220	10.44	-	-	-	-	-	-	-	-	
1225	13.00	~~150~~	5.54	0.248	>1000	2.67	19.43	13.3	0.13	
1230	13.61	150	4.64	0.250	>1000	3.05	20.85	55.47	0.13	
1235	14.54	150	5.15	0.245	375	0.51	20.46	21.3	0.13	
1240	14.96	150	5.45	0.244	263	0.40	20.72	5.1	0.13	
1245	14.41	150	5.54	0.239	187	0.34	20.21	5.5	0.12	
1250	15.34	|	5.56	0.236	130	0.36	20.36	7.8	0.12	
1255	15.72	|	5.21	0.229	90.7	0.39	19.58	33.0	0.12	
1300	15.75	|	5.43	0.239	74.2	0.38	20.04	29.3	0.12	
1305	15.92	|	5.51	0.228	50.2	0.38	20.42	20.3	0.12	
1310	16.59	|	5.49	0.217	18.4	0.38	20.00	22.9	0.11	
1315	16.88	|	5.44	0.212	12.1	0.38	19.58	27.8	0.11	
		|								
		|		~~#~~	1320	Begin Sampling				
		|								
		|								
		|			

Tetra Tech

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Marine Terminal GW Sampling
Project No.:

Sample ID No.: MT-MW11S
Sample Location: MSA
Sampled By: SBL/JAM
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date: 8/21/12								
Time: 1105								
Method:	Clear	7.13	0.642	22.37	46.3	1.70	0.33	-69.4

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 8-21-12								
Method: Masoon Pump		See Low Flow Purge Data Sheet						
Monitor Reading (ppm): —								
Well Casing Diameter & Material Type: 2" PVC								
Total Well Depth (TD): 44.40								
Static Water Level (WL): 1.05								
One Casing Volume(gal/L):								
Start Purge (hrs): 1004								
End Purge (hrs): 1130								
Total Purge Time (min): 81								
Total Vol. Purged (gal/L): 3 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	
TPH-GRO	HCl	3-40 mL vials	
TPH-DRO	none	2-1L ambers	
SVOCs / 1,4-dioxane	none	2-1L ambers	
Total Metals	HNO_3	1-500 mL plastic bottle	
Dissolved Metals	HNO_3	1-500 mL plastic bottle	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

~~1639~~

~~1187~~

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Moon Terminal GW Sampling
PROJECT NUMBER:
WELL ID.: MT-MW-115
DATE: 8/21/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	Ş. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1009	1.05	-	-	-	-	-	-	-	-	
1014	2.99	700	7.07	0.651	1182	0.60	21.33	-60.5	0.34	
1020	4.84	150	6.72	0.643	936	0.38	21.00	-72.6	0.34	
1025	6.61	150	7.14	0.665	2.58	0.42	22.33	-76.0	0.33	
1030	7.55	150	7.18	0.653	163	0.32	22.20	-93.2	0.34	
1035	8.80		7.11	0.629	97.7	0.30	21.24	-79.0	0.33	
1040	9.98		7.16	0.647	69.4	0.33	22.64	-83.5	0.33	
1045	11.59		7.15	0.631	50.7	0.28	21.60	-79.9	0.33	
1050	13.0		7.17	0.621	49.2	1.65	21.52	-80.7	0.32	
1055	14.21		7.01	0.615	74.8	1.41	20.56	-68.1	0.33	
1100	14.81		7.06	0.630	67.2	0.93	21.66	-70.3	0.33	
1105	15.67		7.13	0.642	46.3	1.70	22.27	-69.4	0.33	
				Start Sampling 1105						

SIGNATURE(S):

Tetra Tech

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Main Terminal GW Sampling
Project No.:

- [ ] Domestic Well Data
- [x] Monitoring Well Data
- [ ] Other Well Type:
- [ ] QA Sample Type:

Sample ID No.: MT-MW125
Sample Location: MSA
Sampled By: SBC/JAM
C.O.C. No.:
Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

SAMPLING DATA:

	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date: 8/21/12								
Time: 1505								
Method:	Colorless	6.20	0.449	23.29	72.3	0.23	0.18	-5.2

PURGE DATA:

	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 8/21/12								
Method: Monsoon								
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 2" PVC			See low flow purge sheet					
Total Well Depth (TD): 34.43								
Static Water Level (WL): 2.52								
One Casing Volume(gal/L):								
Start Purge (hrs): 1420								
End Purge (hrs): 1530								
Total Purge Time (min): 70								
Total Vol. Purged (gal/L): 3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs	HCl	3-40 mL vials	
TPH-GRO	HCl	3-40 mL vials	
TPH-DRO	None	2-1L ambers	
SVOCs/1,4-Dioxane	None	2-1L ambers	
Total Metals	HNO3	1-500 mL plastic bottle	
Dissolved Metals	HNO3	1-500 mL plastic bottle	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):

LOW FLOW PURGE DATA SHEET

PROJECT SITE NAME: Mesa Terminal GW Sampling
PROJECT NUMBER:

WELL ID.: MT-MW-125
DATE: 8/21/12

Time (Hrs.)	Water Level (Ft. below TOC)	Flow (mL/Min.)	pH (S.U.)	S. Cond. (mS/cm)	Turb. (NTU)	DO (mg/L)	Temp. (Celcius)	ORP mV	Salinity % or ppt	Comments
1420	2.52	-	-	-	-	-	-	-	-	
1425	4.13	150	6.15	0.935	336	0.89	22.92	34.4	0.48	
1430	5.19		6.14	0.974	241	0.47	24.27	23.4	0.49	
1435	5.95		6.21	0.973	226	0.34	24.03	12.9	0.49	
1440	6.88		6.22	0.974	153	0.29	24.26	3.1	0.49	
1445	8.04		6.21	0.963	105	0.22	23.95	-3.5	0.48	
1450	8.86		6.19	0.932	91.6	0.29	22.89	-6.8	0.48	
1455	9.71		6.17	0.940	82.0	0.24	23.12	-5.8	0.48	
1500	10.54		6.20	0.949	77.3	0.23	23.24	-5.9	0.48	
				Begin Sampling		1505				

SIGNATURE(S):

APPENDIX E—
GROUNDWATER MONITORING WELL SURVEY REPORT AND GPS-LOCATION FILE

Groundwater Monitoring Well Survey Report and GPS Location File
Main Terminal Area
Martin State Airport

Main Terminal Area Monitoring Wells

Well ID	Northing	Easting	Top of Well Casing Elevation	Top of PVC Elevation	Ground Elevation*	Stick-up Height	Site	Survey Date
MT-MW07S	606341.494	1475342.990	17.269	16.89	17.269	Flushmount	Main Terminal (MT)	8/6/2012
MT-MW08S	606423.753	1475339.420	18.571	18.19	18.571	Flushmount	Main Terminal (MT)	8/6/2012
MT-MW09S	605418.897	1476158.936	15.672	15.33	15.672	Flushmount	Main Terminal (MT)	8/6/2012
MT-MW10S	605210.474	1475840.717	15.350	15.1	15.350	Flushmount	Main Terminal (MT)	8/6/2012
MT-MW11S	605510.210	1475715.166	7.561	7.33	7.561	Flushmount	Main Terminal (MT)	8/6/2012
MT-MW12S	605591.707	1475754.020	7.872	7.55	7.872	Flushmount	Main Terminal (MT)	8/6/2012
* For flushmount monitoring wells the ground elevation is the same as the top of casing elevation.								
Horizontal Datum: MDSPCS NAD83 IN FEET Vertical Datum: NAVD88 IN FEET								
Reference control Martair Az								

APPENDIX F—INVESTIGATION-DERIVED WASTE DOCUMENTATION

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) D44 PW Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	1		005563687 FLE

GENERATOR

5. Generator's Name and Mailing Address

Generator's Phone:

5. Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Clean Harbors Environmental Services Inc — U.S. EPA ID Number: MAD039322260

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON D.O.T. REGULATED (SOIL)	021	DM		P	NONE
	2. NON HAZARDOUS, NON D.O.T. REGULATED	001	DM	00600		NONE
	3. ~~NON HAZARDOUS, NON REGULATED~~					
	4.					

14. Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Michelle — Signature — Month: 12 — Day: 2 — Year:

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Daniel Brooks — Signature: Daniel Brooks — Month: 10 — Day: 12 — Year: 12

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month — Day — Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. GENERATOR'S INITIAL COPY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
MDD000524413	1	(800) 424-9300	005563688 FLE

GENERATOR

5. Generator's Name and Mailing Address
Lockheed Martin
196 Chesapeake Park Plaza
Middle River, MD 21220
Generator's Phone: (301) 572-7021

Generator's Site Address (if different than mailing address)
Lockheed Martin Corporation - Middle River
Medication
[illegible] Eastern Blvd
[illegible] 21220

6. Transporter 1 Company Name
Clean Harbors Environmental Services Inc

U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Env Services Inc
2900 Rockefeller Avenue
Cleveland OH 44115
Facility's Phone: (216) 252-2122

U.S. EPA ID Number
OHD000724153

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON D.O.T. REGULATED, (NON-HAZ WATER)	016 (01)	DM	016 (01)		NONE		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. CH244311 (16 by 55)

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Michael Mushero
Signature: Michael Mushero
Month: 10 Day: 12 Year: 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: [illegible]
Signature: [illegible]
Month: 10 Day: 12 Year: 12

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H077			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name:
Signature:
Month: Day: Year:

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

Trailer # 52[illegible]

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MDR000[illegible] GA
2. Page 1 of 1
3. Emergency Response Phone: (800) 483-3718
4. Manifest Tracking Number: 005558610 FLE

5. Generator's Name and Mailing Address: Lockheed Martin, 195 Chesapeake Park Plaza, Middle River, MD 21220
Generator's Phone: (301) [illegible]

Generator's Site Address (if different than mailing address): SAME, 2323 Gaspeen Blvd, Middle River MD 21220 GA

6. Transporter 1 Company Name: Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Clean Harbors Env Services, Inc., 2900 Rockefeller Avenue, Cleveland, OH 44115
Facility's Phone: (216) 429-2402
U.S. EPA ID Number: OHD000724153

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON DOT Regulated (Non-Haz Water)	005	DM	02500	F	NONE
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. CH244311 (5x55)

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Michael Musheno
Signature: Michael Musheno
Month 10 Day 12 Year 12

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Gregory Arnold
Signature: [signature]
Month 10 Day 12 Year 12
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name
Signature
Month Day Year

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
				005558609 FLE

GENERATOR

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.	COS	DM		F	NONE
	2.					
	3.					
	4.					

14 Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Michael Mysheno — Signature — Month 10 Day 12 Year 12

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Gregory Avonce — Signature — Month 10 Day 12 Year 12

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month Day Year

APPENDIX G—DATA QUALITY REVIEW AND DATA VALIDATION REPORTS

Data Quality Review

Data quality indicators (DQIs) are parameters that are monitored to help establish the quality of data generated during an investigation. Individually, DQIs provide measures of the performance of the laboratory. During data validation, individual quality control (QC) results were evaluated. If individual QC results were acceptable, no validation flag was assigned to an analytical result, otherwise a flag indicating the type of QC deficiency was assigned to the result. Rejected data are not acceptable for performing risk assessments.

Completeness

Usable, valid samples (or results) were those judged, after data assessment, to represent the sampling populations and to have not been disqualified for use through data validation or additional data review. Completeness was determined using the following equation:

$$\%C = \frac{V}{T} \times 100$$

where %C = percent completeness
V = number of samples (or results) determined to be valid
T = total number of planned samples (or results)

The percent completeness for sample collection was 100.
All analytical fractions had 100 percent completeness except for the following:

MATRIX	ANALYTICAL FRACTION	TOTAL NUMBER OF DATA POINTS	REJECTED DATA POINTS	ANALYTICAL PERCENT COMPLETENESS
WATER	Volatile organic compounds	1,008	28	97.2
SOIL	Volatile organic compounds	720	26	96.4
SOIL	Semivolatile organic compounds	670	1	99.9

All water and soil data points for vinyl acetate and tertiary-butyl alcohol were rejected due to calibration response factors less than 0.05. Six of ten soil data points for 2-chloroethyl vinyl ether were rejected due to calibration response factors less than 0.05. One of ten soil data points for hexachlorocyclopentadiene was rejected due to a matrix spike recovery less than 10%.

Laboratory Accuracy

Laboratory accuracy was assessed by comparing calculated %R values to accuracy control limits specified by the laboratory using the appropriate analytical method.

Percent recovery is calculated using the following equation:

$$\%R = \frac{Ss - So}{S} \times 100$$

where %R = percent recovery
Ss = result of spiked sample
So = result of non-spiked sample
S = concentration of spiked amount.

Arsenic, lead, and copper detected results for several water samples were qualified as estimated biased high due to calibration noncompliances.

Arsenic and cobalt detected results for two soil samples were qualified as estimated biased low due to calibration noncompliances.

Chromium and vanadium detected results for several soil samples were qualified as estimated biased low due to matrix spike recovery noncompliance.

Antimony, selenium, silver, and thallium nondetected results for several soil samples were qualified as estimated biased low due to calibration and/or matrix spike recovery noncompliances.

Zinc detected result for one soil sample was qualified as estimated due to a calibration noncompliance.

Hexavalent chromium nondetected results for two water samples were qualified as estimated due to a hold time noncompliance.

Nickel detected results for several soil samples were qualified as estimated due to serial dilution noncompliances.

Carbon disulfide, naphthalene and total petroleum hydrocarbons [TPH] (C10-32) detected results for several soil samples were qualified as estimated due to calibration noncompliances.

Blank contamination was noted in both water and soil samples. The following parameters were qualified due to blank contamination:

- Water – antimony, copper, lead, molybdenum, silver, thallium, TPH (C06-C10), TPH (C10-C32) and zinc.
- Soil – antimony, beryllium, bis(2-ethylhexyl)phthalate, methylene chloride, molybdenum, naphthalene, n-butylbenzene and TPH (C10-C32).

With the exception of the few directional bias issues noted, there is no overall directional bias to the data.

Laboratory Precision

Precision is a measure of the degree to which two or more measurements are in agreement and describes the reproducibility of measurements of the same parameter for samples analyzed under similar conditions.

Precision for chemical parameters is expressed as a relative percent difference (RPD), which is defined as the ratio of the difference to the mean for the two values being evaluated. RPDs, typically expressed as percentages, are used to evaluate both field and laboratory duplicate precision and are calculated as follows:

$$RPD = \frac{|V1 - V2|}{(V1 + V2)/2} \times 100$$

where RPD = relative percent difference
V1, V2 = two results obtained by analyzing duplicate samples

All laboratory precision parameters met quality control limits.

Comparability

Comparability is defined as the confidence with which one data set can be compared with another (e.g., among sampling points and among sampling events). Comparability was achieved by using standardized sampling and analysis methods, as well as standardized data reporting formats. Comparability of laboratory measurements was achieved primarily through the use and documentation of standard sampling and analytical methods. Results were reported in units that ensured comparability with previous data. Comparability of laboratory measurements was assessed primarily through the use of QC samples. No comparability issues were noted.

Representativeness

Representativeness is an expression of the degree to which data accurately and precisely depict the actual characteristics of a population or environmental condition existing at the site.

The use of standardized sampling, sample handling, sample analysis, and data reporting procedures were designed so that the final data would be accurate representations of actual site conditions. It is believed that all reported data are adequately representative of site conditions and intended populations.

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **JUNE 26, 2012**

FROM: **EDWARD SEDLMYER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC / 1,4-DIOXANE / TOTAL PETROLEUM HYDROCARBONS / PERCHLORATE / SELECT METALS**
MIDDLE RIVER COMPLEX – GROUNDWATER - FULL REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-10598-1

SAMPLES: 3/Aqueous/VOC/1,4-DIOXANE/SELECT METALS

MT-MW04S MT-MW06S TB-042412

Overview

The sample set for Middle River Complex - groundwater, SDG 240-10598-1 consists of two (2) environmental water samples and one (1) trip blank. The trip blank (TB-042412) was analyzed for volatile organic compounds (VOC) only. All other samples were analyzed for 1,4-dioxane, VOCs, total petroleum hydrocarbons, perchlorate, and select metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, tungsten, vanadium and zinc).

The samples were collected on April 24, 2012 and analyzed by Test America, North Canton. Volatile organic compound analyses were conducted in accordance with SW-846 Method 8260B. The semivolatile compound 1,4-dioxane analyses were conducted in accordance with SW-846 Method 8270D. The metals analyses were conducted in accordance with SW-846 Method 6020A and 7470A. The perchlorate analyses were conducted in accordance with SW-846 Method 6850.

Summary

The data contained in this SDG were validated with regard to the following parameters: data completeness, system performance, holding times, GC/MS tuning, initial / continuing calibrations, laboratory method blank results, surrogate spike/internal standard recoveries, laboratory control sample results, ICP interference results, ICP serial dilution results, laboratory duplicate results, matrix spike/matrix spike duplicate results, analyte identification, analyte quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems

- The volatile initial calibration of instrument A3UX16 on 04/29/12 had a relative response factor (RRF) less than the 0.05 quality control limit for tert butyl alcohol. The nondetected results for tert butyl alcohol in all samples were rejected (UR).

- The volatile continuing calibration analyzed on instrument A3UX16 on 04/30/12 @11:50 had RRFs less than the 0.05 quality control limit for tert butyl alcohol and vinyl acetate. The nondetected results for tert butyl alcohol and vinyl acetate in all samples were rejected (UR).

- The silanol tentatively identified compound (triimethyl silanol) was rejected (R) for sample TB-042412. This compound is indicative of column bleed.

Minor Problems

- The following compounds were detected in the VOC method blank at the concentrations indicated below:

Compound	Concentration	Action Level
1,2,3-Trichlorobenzene[1]	0.288 ug/L	1.44 ug/L
Methylcyclohexane[2]	0.197 ug/L	0.985 ug/L

1 – Compound detected in method blank (MB 240-42171/5) affecting all samples.
2 – Methycyclohexane was reported as a tentatively identified compound (TIC) in the method blank.

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for 1,2,3-trichloroethene and methylcyclohexane. Dilution factors and sample aliquots were taken into consideration during the application of all action levels. The methylcyclohexane detection for sample MT-MW04S was qualified (B) as a result of blank contamination. No action was taken on the trip blank because field quality control samples are not qualified for blank contamination.

- The gasoline range organic TPH (C6-C10) was detected in the method blank at the concentration indicated below:

Compound	Concentration	Action Level
TPH (C6-C10)[1]	32.9 ug/L	164.5 ug/L

1 – Compound detected in method blank (MB 240-42055/7) affecting all samples.

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for TPH (C6-C10). Dilution factors and sample aliquots were taken into consideration during the application of the action level. The TPH (C6-C10) detections for all samples were qualified (B) as a result of blank contamination.

- The diesel range organic TPH (C10-C32) was detected in the method blank at the concentration indicated below:

Compound	Concentration	Action Level
TPH (C10-C32)[1]	422 ug/L	2,110 ug/L

1 – Compound detected in method blank (MB 240-41890/15) affecting all samples.

An action level of 5X the maximum contaminant concentration was established to evaluate laboratory contamination for TPH (C10-C32). Dilution factors and sample aliquots were taken into consideration during the application of the action level. The TPH (C10-C32) detections for all samples were qualified (B) as a result of blank contamination.

- The reporting limit (RL) percent recoveries for arsenic, copper, nickel, silver, and thallium were > 110% quality control limit affecting all samples. The positive results < 2X RL for arsenic in all samples were qualified as estimated, (J), as a result of conflicting noncompliances.

- The following contaminants were detected in the metals laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Antimony	0.159 ug/L	0.795 ug/L
Barium[(1)]	2.10 ug/L	10.5 ug/L
Cobalt	0.093 ug/L	0.465 ug/L
Copper[(1)]	1.32 ug/L	6.6 ug/L
Lead[(1)]	0.268 ug/L	1.34 ug/L
Molybdenum	0.558 ug/L	2.79 ug/L
Thallium	0.899 ug/L	4.495 ug/L
Zinc[(1)]	13.7 ug/L	68.5 ug/L

  [(1)] Maximum concentration present in a preparation blank.

  An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level reported for antimony, copper, molybdenum, thallium and zinc were qualified "B" as a result of laboratory blank contamination.

- Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) for the organic analyses were qualified as estimated, (J).

Notes

The matrix spike / matrix spike duplicate (MS/MSD) performed on sample MSA-MW15D-041812 had a zero percent recovery for 2-chloroethyl vinyl ether in the MS and MSD. In addition, the relative percent difference for tert butyl alcohol exceeded the quality control limit. No action was taken on this basis because sample MSA-MW15D-041812 is contained in another SDG.

The nondetected results were reported to the method detection limit.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Blank contamination resulted in qualification of VOC, TPH, and METALS data. Two volatile compounds had RRFs less than the quality control limits in the initial and continuing calibrations resulting in the rejection of data. The RL percent recovery for arsenic resulted in qualification of the data. The TIC silanol compound was rejected.

Other Factors Affecting Data Quality: Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) for the organic analyses were qualified as estimated, (J).

The data for these analyses were reviewed with reference to the Region III EPA Functional Guidelines for Organic Data Validation (September 1994) and Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993).

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

TetraTech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	MT-MW04S			MT-MW06S			TB-042412		
SDG: 240-10598-1	LAB_ID	240-10598-2			240-10598-3			240-10598-1		
FRACTION: OV	SAMP_DATE	4/24/2012			4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U	
2-BUTANONE		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U	
ACETONE		1.1	U		1.1	U		1.1	U	
BENZENE		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U	

PROJ_NO: 04021	NSAMPLE	MT-MW04S			MT-MW06S			TB-042412		
SDG: 240-10598-1	LAB_ID	240-10598-2			240-10598-3			240-10598-1		
FRACTION: OV	SAMP_DATE	4/24/2012			4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U		0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.62	J	P	0.16	U		0.16	U	
CHLOROMETHANE		0.3	U		0.47	J	P	0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U		0.17	U		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U	
METHYLCYCLOHEXANE		0.13	B	Z1				0.16	J	Z1
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U	
SILANOL, TRIMETHYL-								1.3	R	Z2
STYRENE		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.28	U		0.28	U		0.28	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U	

PROJ_NO: 04021	NSAMPLE	MT-MW04S			MT-MW06S			TB-042412		
SDG: 240-10598-1	LAB_ID	240-10598-2			240-10598-3			240-10598-1		
FRACTION: OV	SAMP_DATE	4/24/2012			4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROETHENE		0.17	U		0.17	U		0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U	

PROJ_NO: 04021	NSAMPLE	MT-MW04S			MT-MW06S		
SDG: 240-10598-1	LAB_ID	240-10598-2			240-10598-3		
FRACTION: OS	SAMP_DATE	4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		0.49	U		0.5	U	

PROJ_NO: 04021	NSAMPLE	MT-MW04S			MT-MW06S		
SDG: 240-10598-1	LAB_ID	240-10598-2			240-10598-3		
FRACTION: PET	SAMP_DATE	4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		49	B	A	64	B	A
TPH (C10-C32)		440	B	A	480	B	A

PROJ_NO: 04021	NSAMPLE	MT-MW04S			MT-MW06S		
SDG: 240-10598-1	LAB_ID	240-10598-2			240-10598-3		
FRACTION: MISC	SAMP_DATE	4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
PERCHLORATE		0.082	U		0.16	J	P

PROJ_NO: 04021	NSAMPLE	MT-MW04S			MT-MW06S		
SDG: 240-10598-1	LAB_ID	240-10598-2			240-10598-3		
FRACTION: M	SAMP_DATE	4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.13	U		0.13	U	
ARSENIC		0.71	J	CP	1.5	J	CP
BARIUM		76			96		
BERYLLIUM		3.3			81		
CADMIUM		0.14	J	P	2		
CHROMIUM		0.71	U		0.71	U	
COBALT		210			540		
COPPER		43			46		
LEAD		0.71	B	A	2.3		
MERCURY		0.12	U		0.12	U	
MOLYBDENUM		0.093	U		0.15	B	A
NICKEL		330			1200		
SELENIUM		0.57	U		1.2	J	P
SILVER		0.08	U		0.08	U	
THALLIUM		0.16	B	A	0.77	B	A
TUNGSTEN		0.37	U		0.37	U	
VANADIUM		0.44	U		0.44	U	
ZINC		340			1900		

PROJ_NO: 04021	NSAMPLE	MT-MW04S			MT-MW06S		
SDG: 240-10598-1	LAB_ID	240-10598-2			240-10598-3		
FRACTION: MF	SAMP_DATE	4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.21	B	A	0.13	U	
ARSENIC		0.69	J	CP	1.3	J	CP
BARIUM		76			94		
BERYLLIUM		3.1			80		
CADMIUM		0.23	J	P	2.1		
CHROMIUM		0.71	U		0.71	U	
COBALT		200			530		
COPPER		44			48		
LEAD		0.64	B	A	2.3		
MERCURY		0.12	U		0.12	U	
MOLYBDENUM		0.55	B	A	0.093	U	
NICKEL		320			1200		
SELENIUM		0.57	U		0.63	J	P
SILVER		0.08	U		0.08	U	
THALLIUM		1.3	B	A	0.57	B	A
TUNGSTEN		0.78	J	P	0.37	U	
VANADIUM		0.44	U		0.44	U	
ZINC		330			1900		

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW04S Lab Sample ID: 240-10598-2

Matrix: Water Lab File ID: UXM5278.D

Analysis Method: 8260C Date Collected: 04/24/2012 11:30

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 15:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW04S | Lab Sample ID: 240-10598-2

Matrix: Water | Lab File ID: UXM5278.D

Analysis Method: 8260C | Date Collected: 04/24/2012 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 15:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.62	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW04S | Lab Sample ID: 240-10598-2

Matrix: Water | Lab File ID: UXM5278.D

Analysis Method: 8260C | Date Collected: 04/24/2012 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 15:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	95		66-117
2037-26-5	Toluene-d8 (Surr)	89		74-115
1868-53-7	Dibromofluoromethane (Surr)	87		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW04S Lab Sample ID: 240-10598-2

Matrix: Water Lab File ID: UXM5278.D

Analysis Method: 8260C Date Collected: 04/24/2012 11:30

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 15:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

Number TICs Found: 1 TIC Result Total: 0.13

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
108-87-2	Methylcyclohexane	6.21	0.13	J B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW06S | Lab Sample ID: 240-10598-3

Matrix: Water | Lab File ID: UXM5279.D

Analysis Method: 8260C | Date Collected: 04/24/2012 14:57

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 15:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW06S | Lab Sample ID: 240-10598-3

Matrix: Water | Lab File ID: UXM5279.D

Analysis Method: 8260C | Date Collected: 04/24/2012 14:57

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 15:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	0.47	J	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW06S | Lab Sample ID: 240-10598-3

Matrix: Water | Lab File ID: UXM5279.D

Analysis Method: 8260C | Date Collected: 04/24/2012 14:57

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 15:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
2037-26-5	Toluene-d8 (Surr)	93		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW06S Lab Sample ID: 240-10598-3

Matrix: Water Lab File ID: UXM5279.D

Analysis Method: 8260C Date Collected: 04/24/2012 14:57

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 15:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: TB-042412 Lab Sample ID: 240-10598-1

Matrix: Water Lab File ID: UXM5277.D

Analysis Method: 8260C Date Collected: 04/24/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: TB-042412 Lab Sample ID: 240-10598-1

Matrix: Water Lab File ID: UXM5277.D

Analysis Method: 8260C Date Collected: 04/24/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: TB-042412 Lab Sample ID: 240-10598-1

Matrix: Water Lab File ID: UXM5277.D

Analysis Method: 8260C Date Collected: 04/24/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-129
460-00-4	4-Bromofluorobenzene (Surr)	98		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	88		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: TB-042412 Lab Sample ID: 240-10598-1

Matrix: Water Lab File ID: UXM5277.D

Analysis Method: 8260C Date Collected: 04/24/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 14:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

Number TICs Found: 2 TIC Result Total: 1.46

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.60	1.3	T J N
108-87-2	Methylcyclohexane	6.21	0.16	J B

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW04S | Lab Sample ID: 240-10598-2

Matrix: Water | Lab File ID: 0501029.D

Analysis Method: 8270C | Date Collected: 04/24/2012 11:30

Extract. Method: 3520C | Date Extracted: 04/26/2012 08:59

Sample wt/vol: 1010(mL) | Date Analyzed: 05/01/2012 16:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42274 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.99	U	0.99	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	52		28-110
367-12-4	2-Fluorophenol (Surr)	48		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	60		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	49		27-111
4165-62-2	Phenol-d5 (Surr)	46		10-110
1718-51-0	Terphenyl-d14 (Surr)	69		37-119

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW06S | Lab Sample ID: 240-10598-3

Matrix: Water | Lab File ID: 0501030.D

Analysis Method: 8270C | Date Collected: 04/24/2012 14:57

Extract. Method: 3520C | Date Extracted: 04/26/2012 08:59

Sample wt/vol: 980(mL) | Date Analyzed: 05/01/2012 17:03

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42274 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0	U	1.0	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	51		28-110
367-12-4	2-Fluorophenol (Surr)	54		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	58		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	54		27-111
4165-62-2	Phenol-d5 (Surr)	49		10-110
1718-51-0	Terphenyl-d14 (Surr)	69		37-119

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW04S | Lab Sample ID: 240-10598-2

Matrix: Water | Lab File ID: YF042809.D

Analysis Method: 8015B | Date Collected: 04/24/2012 11:30

Sample wt/vol: 5(mL) | Date Analyzed: 04/28/2012 18:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	49	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	65		10-150

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW06S Lab Sample ID: 240-10598-3

Matrix: Water Lab File ID: YF042812.D

Analysis Method: 8015B Date Collected: 04/24/2012 14:57

Sample wt/vol: 5(mL) Date Analyzed: 04/28/2012 20:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	64	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	64		10-150

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW04S | Lab Sample ID: 240-10598-2

Matrix: Water | Lab File ID: P6F04308.D

Analysis Method: 8015B | Date Collected: 04/24/2012 11:30

Extraction Method: 3520C | Date Extracted: 04/27/2012 10:39

Sample wt/vol: 1020(mL) | Date Analyzed: 04/30/2012 13:30

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42140 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	440	J B	490	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	51		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: MT-MW06S | Lab Sample ID: 240-10598-3

Matrix: Water | Lab File ID: P6F04309.D

Analysis Method: 8015B | Date Collected: 04/24/2012 14:57

Extraction Method: 3520C | Date Extracted: 04/27/2012 10:39

Sample wt/vol: 1010(mL) | Date Analyzed: 04/30/2012 14:01

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42140 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	480	J B	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	44		10-110

TestAmerica Canton

Client Sample ID: **MT-MW04S**

Dissolved HPLC - Mass. Spec.

Lot-Sample #...: G2D270498-001 **Work Order #...:** MR86V1AA **Matrix.....:** WATER
Date Sampled...: 04/24/12 **Date Received..:** 04/27/12
Prep Date.....: 05/01/12 **Analysis Date..:** 05/07/12
Prep Batch #...: 2122104
Dilution Factor: 1 **Method.....:** SW846 6850

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	1.0	ug/L	0.082

TestAmerica Canton

Client Sample ID: MT-MW06S

Dissolved HPLC - Mass. Spec.

Lot-Sample #...: G2D270498-002	**Work Order #...:** MR8601AA		**Matrix.....:** WATER	
Date Sampled...: 04/24/12	**Date Received..:** 04/27/12			
Prep Date.....: 05/01/12	**Analysis Date..:** 05/04/12			
Prep Batch #...: 2122104				
Dilution Factor: 1	**Method.....:** SW846 6850			

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	**0.16 J**	**1.0**	**ug/L**	**0.082**

NOTE(S):

J Estimated result Result is less than RL

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW04S
Lab Sample ID: 240-10598-2
Lab Name: TestAmerica Canton
Job No.: 240-10598-1
SDG ID.:
Matrix: Water
Date Sampled: 04/24/2012 11:30
Reporting Basis: WET
Date Received: 04/25/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	0.71	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	3.3	1.0	0.20	ug/L			1	6020
7440-43-9	Cadmium	0.14	1.0	0.13	ug/L	J		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	210	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	43	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	0.71	1.0	0.18	ug/L	J	B	1	6020
7439-98-7	Molybdenum	10	10	0.093	ug/L	U		1	6020
7440-02-0	Nickel	330	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.16	2.0	0.14	ug/L	J		1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	340	20	2.3	ug/L		B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW04S
Lab Sample ID: 240-10598-2
Lab Name: TestAmerica Canton
Job No.: 240-10598-1
SDG ID.:
Matrix: Water
Date Sampled: 04/24/2012 11:30
Reporting Basis: WET
Date Received: 04/25/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW06S
Lab Sample ID: 240-10598-3
Lab Name: TestAmerica Canton
Job No.: 240-10598-1
SDG ID.:
Matrix: Water
Date Sampled: 04/24/2012 14:57
Reporting Basis: WET
Date Received: 04/25/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	1.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	96	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	81	1.0	0.20	ug/L			1	6020
7440-43-9	Cadmium	2.0	1.0	0.13	ug/L			1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	540	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	46	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	2.3	1.0	0.18	ug/L		B	1	6020
7439-98-7	Molybdenum	0.15	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1200	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	1.2	5.0	0.57	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.77	2.0	0.14	ug/L	J		1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	1900	20	2.3	ug/L		B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW06S
Lab Sample ID: 240-10598-3
Lab Name: TestAmerica Canton
Job No.: 240-10598-1
SDG ID.:
Matrix: Water
Date Sampled: 04/24/2012 14:57
Reporting Basis: WET
Date Received: 04/25/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW04S
Lab Sample ID: 240-10598-2
Lab Name: TestAmerica Canton
Job No.: 240-10598-1
SDG ID.:
Matrix: Water
Date Sampled: 04/24/2012 11:30
Reporting Basis: WET
Date Received: 04/25/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.21	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	0.69	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	3.1	1.0	0.20	ug/L			1	6020
7440-43-9	Cadmium	0.23	1.0	0.13	ug/L	J		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	200	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	44	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	0.64	1.0	0.18	ug/L	J	B	1	6020
7439-98-7	Molybdenum	0.55	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	320	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	1.3	2.0	0.14	ug/L	J		1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	330	20	2.3	ug/L		B	1	6020
7440-33-7	Tungsten	0.78	10	0.37	ug/L	J		1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW06S
Lab Sample ID: 240-10598-3
Lab Name: TestAmerica Canton
Job No.: 240-10598-1
SDG ID.:
Matrix: Water
Date Sampled: 04/24/2012 14:57
Reporting Basis: WET
Date Received: 04/25/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	1.3	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	94	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	80	1.0	0.20	ug/L			1	6020
7440-43-9	Cadmium	2.1	1.0	0.13	ug/L			1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	530	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	48	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	2.3	1.0	0.18	ug/L		B	1	6020
7439-98-7	Molybdenum	10	10	0.093	ug/L	U		1	6020
7440-02-0	Nickel	1200	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	0.63	5.0	0.57	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.57	2.0	0.14	ug/L	J		1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	1900	20	2.3	ug/L		B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

Appendix C

Support Documentation

HOLDTIME

SDG 240-10598-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	4/26/2012	4/27/2012	2	1	3
HG	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	4/27/2012	4/28/2012	3	1	4
M	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	4/26/2012	4/28/2012	2	2	4
M	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	4/26/2012	4/28/2012	2	2	4
HGF	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	4/27/2012	4/28/2012	3	1	4
HGF	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	4/26/2012	4/27/2012	2	1	3
MF	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	4/26/2012	4/28/2012	2	2	4
MF	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	4/26/2012	4/28/2012	2	2	4
PCL	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	5/1/2012	5/4/2012	7	3	10
PCL	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	5/1/2012	5/7/2012	7	6	13
OS	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	4/26/2012	5/1/2012	2	5	7
OS	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	4/26/2012	5/1/2012	2	5	7
OV	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	4/30/2012	4/30/2012	6	0	6
OV	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	4/30/2012	4/30/2012	6	0	6
OV	UG/L	TB-042412	240-10598-1	NM	4/24/2012	4/30/2012	4/30/2012	6	0	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
DRO	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	4/27/2012	4/30/2012	3	3	6
DRO	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	4/27/2012	4/30/2012	3	3	6
GRO	UG/L	MT-MW06S	240-10598-3	NM	4/24/2012	4/28/2012	4/28/2012	4	0	4
GRO	UG/L	MT-MW04S	240-10598-2	NM	4/24/2012	4/28/2012	4/28/2012	4	0	4

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-10598-1

Job Description: MSA Groundwater Sampling

For:
Tetra Tech, Inc formerly Tetra Tech NUS
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Patrick O'Meara

Approved for release.
Patrick J O'Meara
Project Manager II
5/15/2012 3:55 PM

Patrick J O'Meara
Project Manager II
patrick.omeara@testamericainc.com
05/15/2012

cc: Samantha Brenner
Ms. Kelly Carper
Dev Murali
Ms. Tobrena Sedlmyer
Final Data Tracking

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

CASE NARRATIVE

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Project: MSA Groundwater Sampling

Report Number: 240-10598-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 6850 Perchlorate analysis was performed at the TestAmerica West Sacramento Laboratory.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 04/25/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.2 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples TB-042412 (240-10598-1), MT-MW04S (240-10598-2) and MT-MW06S (240-10598-3) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 04/30/2012.

1,2,3-Trichlorobenzene was detected in method blank MB 240-42171/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-MW04S (240-10598-2) and MT-MW06S (240-10598-3) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 04/26/2012 and analyzed on 05/01/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No difficulties were encountered during the SVOCs analyses. All quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples MT-MW04S (240-10598-2) and MT-MW06S (240-10598-3) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 04/28/2012.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-42055/7 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the GRO analyses. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples MT-MW04S (240-10598-2) and MT-MW06S (240-10598-3) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 04/27/2012 and analyzed on 04/30/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

Total Petroleum Hydrocarbons (C10-C32) was detected in method blank MB 240-41890/15-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the DRO analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)
Samples MT-MW04S (240-10598-2) and MT-MW06S (240-10598-3) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/26/2012 and analyzed on 04/28/2012.

No difficulties were encountered during the metals analyses. All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)
Samples MT-MW04S (240-10598-2) and MT-MW06S (240-10598-3) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/26/2012 and analyzed on 04/28/2012.

Several analytes were detected in method blank MB 240-41803/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes were detected in method blank MB 240-41805/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Samples MT-MW04S (240-10598-2) and MT-MW06S (240-10598-3) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/26/2012 and 04/27/2012 and analyzed on 04/27/2012 and 04/28/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

TOTAL MERCURY
Samples MT-MW04S (240-10598-2) and MT-MW06S (240-10598-3) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/26/2012 and 04/27/2012 and analyzed on 04/27/2012 and 04/28/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech INC	Client Project Manager: Tony Apanavage	Site Contact: Walt Pryor	Lab Contact: Pat O'meara	COC No:
Address: 20251 Century Blvd.	Telephone: 301 528-3021	Telephone: 301 991-3914	Telephone: 330 497-9396	1 of 1 COCs
City/State/Zip: Germantown MD 20874	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 301 528-3021		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐ Job/SDG No.:
Project Name: MSA - Ground Water Sampling	Method of Shipment/Carrier: Fed EX			
Project Number: 112FC04021-02	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C / Grab G	VOCs	Total Mn	Diss Mn	1,4 Dioxane	DRO	GRO	Perchlorate	Sample Specific Notes / Special Instructions:
TB-042412	4-24-12	—		X						2					N	G	X							
MT-MW04S	↓	1130		X					2	5			5		↓	↓	X	X	X	X	X	X	X	
MT-MW06S	↓	1457		X					2	5			5		↓	↓	X	X	X	X	X	X	X	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Walt Pryor	TT INC.	4-24-12 / 1611	Paul Shepard	TestAmerica	4/24/12 / 1611
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	4-24-2012 / 1650			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Michael Labrie	TAL	4/25/12 9:15

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TAL-0018 (1008)

05/15/2012

TestAmerica North Canton Sample Receipt Form/Narrative Login # : 10598

Client Tetra Tech Site Name _____ By: [signature] (Signature)

Cooler Received on 4/25/12 Opened on 4/25/12

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF -2°C)	Observed Sample Temp. ____ °C	Corrected Sample Temp. ____ °C	
IR GUN# 4G	(CF -1°C)	Observed Sample Temp. ____ °C	Corrected Sample Temp. ____ °C	☐ Multiple on Back
IR GUN# 5G	(CF -1°C)	Observed Sample Temp. 1.2 °C	Corrected Sample Temp. 0.2 °C	
IR GUN# 6Y	(CF -2°C)	Observed Sample Temp. ____ °C	Corrected Sample Temp. ____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
   - Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

SOP: NC-SC-0006, Sample Receiving 05/15/2012

N:\QAQC\NARRATIVE\TestAmerica\Cooler Receipt TestAmerica\COOLER_TestAmerica_Rev 83_032612 jcs.doc

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preserved added to sample(s)? _____

Client ID	pH	Date	Initials
4	≤2 ≤2	4/25/12	MB
6	≤2 ≤2	"	"

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-042412	240-10598-1	88	90	91	98
MT-MW04S	240-10598-2	87	87	89	95
MT-MW06S	240-10598-3	88	90	93	97
	MB 240-42171/5	86	87	92	96
	LCS 240-42171/4	84	80	83	90
	240-10350-A-5 MS	86	84	90	93
	240-10350-C-5 MSD	86	83	89	88

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: A3UX16 Start Date: 04/29/2012 15:11

Analysis Batch Number: 42092 End Date: 04/29/2012 20:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-42092/1		04/29/2012 15:11	1	BFB2914.D	DB-624 0.18(mm)
STD8260 240-42092/2 IC		04/29/2012 15:41	1	UXM5239.D	DB-624 0.18(mm)
STD8260 240-42092/3 IC		04/29/2012 16:03	1	UXM5240.D	DB-624 0.18(mm)
STD8260 240-42092/4 ICIS		04/29/2012 16:26	1	UXM5241.D	DB-624 0.18(mm)
STD8260 240-42092/5 IC		04/29/2012 16:49	1	UXM5242.D	DB-624 0.18(mm)
STD8260 240-42092/6 IC		04/29/2012 17:12	1	UXM5243.D	DB-624 0.18(mm)
STD8260 240-42092/7 IC		04/29/2012 17:34	1	UXM5244.D	DB-624 0.18(mm)
STD1 240-42092/8 IC		04/29/2012 17:57	1	UXM5245.D	DB-624 0.18(mm)
STD2 240-42092/9 IC		04/29/2012 18:20	1	UXM5246.D	DB-624 0.18(mm)
STD3 240-42092/10 IC		04/29/2012 18:42	1	UXM5247.D	DB-624 0.18(mm)
STD4 240-42092/11 IC		04/29/2012 19:05	1	UXM5248.D	DB-624 0.18(mm)
STD5 240-42092/12 IC		04/29/2012 19:28	1	UXM5249.D	DB-624 0.18(mm)
STD6 240-42092/13 IC		04/29/2012 19:50	1	UXM5250.D	DB-624 0.18(mm)
ICV 240-42092/14		04/29/2012 20:13	1	UXM5251.D	DB-624 0.18(mm)
ZZZZZ		04/29/2012 20:35	1		DB-624 0.18(mm)
ZZZZZ		04/29/2012 20:57	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab File ID: BFB2914.D BFB Injection Date: 04/29/2012

Instrument ID: A3UX16 BFB Injection Time: 15:11

Analysis Batch No.: 42092

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.4	
75	30.0 - 60.0 % of mass 95	55.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.3	(0.4)1
174	50.0 - 120.00 % of mass 95	67.2	
175	5.0 - 9.0 % of mass 174	4.9	(7.4)1
176	95.0 - 101.0 % of mass 174	65.5	(97.4)1
177	5.0 - 9.0 % of mass 176	4.1	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-42092/2	UXM5239.D	04/29/2012	15:41
	STD8260 240-42092/3	UXM5240.D	04/29/2012	16:03
	STD8260 240-42092/4	UXM5241.D	04/29/2012	16:26
	STD8260 240-42092/5	UXM5242.D	04/29/2012	16:49
	STD8260 240-42092/6	UXM5243.D	04/29/2012	17:12
	STD8260 240-42092/7	UXM5244.D	04/29/2012	17:34
	STD1 240-42092/8	UXM5245.D	04/29/2012	17:57
	STD2 240-42092/9	UXM5246.D	04/29/2012	18:20
	STD3 240-42092/10	UXM5247.D	04/29/2012	18:42
	STD4 240-42092/11	UXM5248.D	04/29/2012	19:05
	STD5 240-42092/12	UXM5249.D	04/29/2012	19:28
	STD6 240-42092/13	UXM5250.D	04/29/2012	19:50
	ICV 240-42092/14	UXM5251.D	04/29/2012	20:13

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-42092/7	UXM5244.D
Level 2	STD8260 240-42092/6	UXM5243.D
Level 3	STD8260 240-42092/5	UXM5242.D
Level 4	STD8260 240-42092/4	UXM5241.D
Level 5	STD8260 240-42092/3	UXM5240.D
Level 6	STD8260 240-42092/2	UXM5239.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2475 0.3038	0.2649	0.2905	0.2889	0.3016	Ave		0.2829			0.1000	7.8		15.0			
Chloromethane	0.4695 0.4320	0.4893	0.4830	0.4487	0.4452	Ave		0.4613			0.1000	4.9		15.0			
Vinyl chloride	0.4202 0.4041	0.4409	0.4365	0.4256	0.4202	Ave		0.4246			0.1000	3.1		15.0			
Bromomethane	0.1730 0.1493	0.1760	0.1733	0.1676	0.1710	Ave		0.1684			0.0500	5.8		15.0			
Chloroethane	0.2470 0.2229	0.2473	0.2344	0.2374	0.2336	Ave		0.2371				3.9		15.0			
Trichlorofluoromethane	0.2704 0.3132	0.3068	0.3031	0.3070	0.3204	Ave		0.3035			0.1000	5.7		15.0			
Acrolein	0.0469 0.0473	0.0483	0.0502	0.0508	0.0498	Ave		0.0489				3.3		15.0			
1,1-Dichloroethene	0.2340 0.2501	0.2402	0.2424	0.2499	0.2511	Ave		0.2446			0.1000	2.8		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1512 0.1622	0.1553	0.1500	0.1479	0.1608	Ave		0.1546			0.0500	3.8		15.0			
Acetone	0.2162 0.0864	0.1595	0.1181	0.1099	0.0970	Lin1	0.2842	0.0868			0.0500				0.9960		0.9950
Iodomethane	0.3345 0.3288	0.3415	0.3505	0.3469	0.3574	Ave		0.3433				3.1		15.0			
Carbon disulfide	0.6238 0.8183	0.6509	0.6976	0.7556	0.8104	Ave		0.7261			0.1000	11.0		15.0			
Acetonitrile	0.0391 0.0299	0.0368	0.0353	0.0335	0.0333	Ave		0.0346				9.2		15.0			
Methyl acetate	0.2451 0.2094	0.2377	0.2404	0.2374	0.2264	Ave		0.2327			0.1000	5.6		15.0			
Methylene Chloride	0.4532 0.2926	0.3791	0.3449	0.3188	0.3120	Lin1	0.1763	0.2950			0.1000				0.9990		0.9950

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0187 0.0171	0.0206	0.0189	0.0189	0.0192	Ave		0.0189				6.0		15.0			
Acrylonitrile	0.1145 0.1022	0.1105	0.1139	0.1170	0.1105	Ave		0.1114				4.6		15.0			
trans-1,2-Dichloroethene	0.2839 0.2770	0.2945	0.2944	0.2851	0.2889	Ave		0.2873			0.1000	2.4		15.0			
Methyl tert-butyl ether	0.8507 0.8216	0.8205	0.8460	0.8461	0.8566	Ave		0.8402			0.1000	1.8		15.0			
Hexane	0.0529 0.0560	0.0521	0.0488	0.0501	0.0574	Ave		0.0529				6.3		15.0			
1,1-Dichloroethane	0.5478 0.5504	0.5906	0.5789	0.5698	0.5773	Ave		0.5691			0.1000	3.0		15.0			
Vinyl acetate	0.0438 0.0547	0.0420	0.0492	0.0562	0.0568	Ave		0.0505				13.0		15.0			
2-Butanone	0.1431 0.1214	0.1392	0.1413	0.1375	0.1314	Ave		0.1356			0.0500	5.9		15.0			
cis-1,2-Dichloroethene	0.3153 0.3006	0.3006	0.3107	0.3096	0.3157	Ave		0.3087			0.1000	2.2		15.0			
2,2-Dichloropropane	0.2459 0.3076	0.2799	0.2938	0.3057	0.3261	Ave		0.2932				9.5		15.0			
Bromochloromethane	0.1255 0.1262	0.1225	0.1298	0.1329	0.1330	Ave		0.1283				3.3		15.0			
Tetrahydrofuran	0.0875 0.0744	0.0826	0.0830	0.0854	0.0842	Ave		0.0828				5.4		15.0			
Chloroform	0.5169 0.5153	0.5299	0.5388	0.5290	0.5477	Ave		0.5296				2.4		15.0			
1,1,1-Trichloroethane	0.3234 0.3831	0.3500	0.3674	0.3840	0.3986	Ave		0.3678			0.1000	7.4		15.0			
Cyclohexane	0.4217 0.4832	0.4863	0.4431	0.4476	0.4809	Ave		0.4605			0.1000	5.8		15.0			
1,1-Dichloropropene	0.4359 0.4194	0.4199	0.4223	0.4252	0.4356	Ave		0.4264				1.8		15.0			
Carbon tetrachloride	0.2456 0.3072	0.2543	0.2617	0.2867	0.3066	Ave		0.2770			0.1000	9.7		15.0			
1,2-Dichloroethane	0.4838 0.4518	0.4761	0.4673	0.4667	0.4711	Ave		0.4694			0.1000	2.3		15.0			
Benzene	1.2256 1.2453	1.2535	1.2750	1.2420	1.2666	Ave		1.2513			0.5000	1.4		15.0			
Trichloroethene	0.2714 0.2655	0.2671	0.2733	0.2695	0.2719	Ave		0.2698			0.2000	1.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.3056 0.3781	0.3553	0.3486	0.3331	0.3656	Ave		0.3477			0.1000	7.4		15.0			
1,2-Dichloropropane	0.2994 0.3048	0.3058	0.3148	0.3132	0.3116	Ave		0.3083			0.1000	1.9		15.0			
Dibromomethane	0.1675 0.1555	0.1521	0.1644	0.1597	0.1644	Ave		0.1606				3.7		15.0			
1,4-Dioxane	0.0023 0.0020	0.0024	0.0025	0.0025	0.0025	Ave		0.0024				8.2		15.0			
Bromodichloromethane	0.2586 0.3533	0.2732	0.3036	0.3210	0.3455	Ave		0.3092			0.1000	12.0		15.0			
2-Chloroethyl vinyl ether	0.1532 0.1582	0.1459	0.1670	0.1699	0.1653	Ave		0.1599				5.8		15.0			
cis-1,3-Dichloropropene	0.3061 0.4576	0.3249	0.3845	0.4238	0.4469	Lin1	-0.212	0.4568			0.1500				0.9990		0.9950
4-Methyl-2-pentanone	0.2451 0.2575	0.2540	0.2759	0.2780	0.2752	Ave		0.2643			0.0500	5.3		15.0			
Toluene	1.7728 1.9294	1.8880	1.8619	1.8474	1.9604	Ave		1.8766			0.4000	3.5		15.0			
trans-1,3-Dichloropropene	0.3835 0.6056	0.4211	0.4964	0.5287	0.6010	Lin1	-0.314	0.6041			0.1000				0.9980		0.9950
Ethyl methacrylate	0.4455 0.5778	0.5229	0.5765	0.5788	0.6242	Ave		0.5543				11.0		15.0			
1,1,2-Trichloroethane	0.3279 0.3212	0.3141	0.3421	0.3341	0.3447	Ave		0.3307			0.1000	3.6		15.0			
1,3-Dichloropropane	0.6891 0.6635	0.6944	0.7152	0.6928	0.7223	Ave		0.6962				3.0		15.0			
Tetrachloroethene	0.2452 0.2600	0.2630	0.2668	0.2612	0.2738	Ave		0.2617			0.2000	3.6		15.0			
2-Hexanone	0.2323 0.2576	0.2818	0.2796	0.2822	0.2852	Ave		0.2698			0.0500	7.8		15.0			
Dibromochloromethane	0.1872 0.3114	0.2160	0.2464	0.2709	0.3057	Lin1	-0.171	0.3097							0.9980		0.9950
1,2-Dibromoethane	0.2962 0.3220	0.3089	0.3344	0.3261	0.3462	Ave		0.3223				5.5		15.0			
Chlorobenzene	1.0759 1.0855	1.1279	1.1114	1.0941	1.1299	Ave		1.1041			0.3000	2.0		15.0			
1,1,1,2-Tetrachloroethane	0.2665 0.3469	0.2706	0.3066	0.3249	0.3538	Ave		0.3116				12.0		15.0			
Ethylbenzene	0.5227 0.5869	0.5825	0.6026	0.5858	0.6163	Ave		0.5828				5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6757 0.7551	0.7220	0.7191	0.7176	0.7638	Ave		0.7256				4.3		15.0			
o-Xylene	0.6806 0.7276	0.7176	0.7304	0.7130	0.7551	Ave		0.7207				3.4		15.0			
Styrene	1.0565 1.2902	1.1310	1.1966	1.1904	1.2870	Ave		1.1920			0.3000	7.6		15.0			
Bromoform	0.0815 0.1487	0.0938	0.1133	0.1171	0.1413	Lin1	-0.094	0.1455			0.1000				0.9950		0.9950
Isopropylbenzene	1.5492 1.8304	1.6861	1.6648	1.6944	1.8507	Ave		1.7126			0.1000	6.6		15.0			
1,1,2,2-Tetrachloroethane	0.8553 0.8338	0.9184	0.9469	0.9293	0.9310	Ave		0.9025			0.3000	5.1		15.0			
Bromobenzene	0.8074 0.7779	0.8287	0.8325	0.8084	0.8409	Ave		0.8159				2.8		15.0			
1,2,3-Trichloropropane	0.2880 0.2558	0.2803	0.2925	0.2919	0.2938	Ave		0.2837				5.1		15.0			
trans-1,4-Dichloro-2-butene	0.2181 0.2689	0.2471	0.2346	0.2535	0.2845	Ave		0.2511				9.5		15.0			
n-Propylbenzene	0.7292 0.8665	0.8823	0.8741	0.8947	0.9118	Ave		0.8598				7.7		15.0			
2-Chlorotoluene	0.8583 0.7918	0.8579	0.8258	0.8361	0.8474	Ave		0.8362				3.0		15.0			
1,3,5-Trimethylbenzene	2.5787 2.8481	2.7830	2.7962	2.7951	2.9477	Ave		2.7914				4.3		15.0			
4-Chlorotoluene	0.8421 0.8602	0.8907	0.8940	0.8564	0.9136	Ave		0.8762				3.1		15.0			
tert-Butylbenzene	2.2870 2.5025	2.5077	2.4568	2.4969	2.5752	Ave		2.4710				4.0		15.0			
1,2,4-Trimethylbenzene	2.7586 2.9544	2.8331	2.8754	2.9504	3.0668	Ave		2.9065				3.7		15.0			
sec-Butylbenzene	2.8024 3.1977	3.0238	2.9596	3.0216	3.2137	Ave		3.0365				5.1		15.0			
1,3-Dichlorobenzene	1.5037 1.4698	1.4901	1.5135	1.5069	1.5495	Ave		1.5056			0.6000	1.8		15.0			
p-Isopropyltoluene	2.2069 2.6255	2.4647	2.4703	2.4761	2.6715	Ave		2.4858				6.6		15.0			
1,4-Dichlorobenzene	1.6073 1.5308	1.6512	1.5577	1.5557	1.6211	Ave		1.5873			0.5000	2.9		15.0			
n-Butylbenzene	2.0896 2.4436	2.2004	2.2368	2.2659	2.4792	Ave		2.2859				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4966 1.3945	1.5126	1.5119	1.4682	1.5239	Ave		1.4846			0.4000	3.2		15.0			
1,2-Dibromo-3-Chloropropane	0.0886 0.0950	0.0916	0.0904	0.0972	0.1086	Ave		0.0952			0.0500	7.6		15.0			
1,3,5-Trichlorobenzene	0.7904 0.7093	0.7633	0.7631	0.7837	0.8038	Ave		0.7690				4.3		15.0			
1,2,4-Trichlorobenzene	0.6476 0.5852	0.7228	0.7185	0.6951	0.7215	Ave		0.6818			0.2000	8.1		15.0			
Hexachlorobutadiene	0.2814 0.2092	0.2884	0.2495	0.2645	0.2531	Ave		0.2577				11.0		15.0			
Naphthalene	1.9527 1.6802	2.0647	2.2163	2.2497	2.2115	Ave		2.0625				11.0		15.0			
1,2,3-Trichlorobenzene	0.6221 0.4278	0.6296	0.6285	0.6505	0.5938	Ave		0.5920				14.0		15.0			
Dibromofluoromethane (Surr)	0.2331 0.2366	0.2278	0.2460	0.2403	0.2499	Ave		0.2389				3.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4238 0.3659	0.3675	0.3946	0.3884	0.3801	Ave		0.3867				5.5		15.0			
Toluene-d8 (Surr)	1.5539 1.5702	1.4814	1.5599	1.5466	1.5977	Ave		1.5516				2.5		15.0			
4-Bromofluorobenzene (Surr)	0.5499 0.5492	0.5504	0.5556	0.5412	0.5764	Ave		0.5538				2.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-42092/7	UXM5244.D
Level 2	STD8260 240-42092/6	UXM5243.D
Level 3	STD8260 240-42092/5	UXM5242.D
Level 4	STD8260 240-42092/4	UXM5241.D
Level 5	STD8260 240-42092/3	UXM5240.D
Level 6	STD8260 240-42092/2	UXM5239.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	35885 1980706	77645	213757	441965	926938	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	68054 2816599	143417	355421	686521	1368025	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	60917 2635065	129233	321221	651141	1291232	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	25083 973652	51574	127563	256449	525557	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	35804 1453341	72482	172479	363159	717903	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	39202 2042282	89918	223037	469710	984559	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	68008 3085342	141530	369770	777854	1531686	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	33918 1630889	70410	178421	382278	771598	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	21921 1057686	45508	110360	226331	494002	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Lin1	62683 1127237	93486	173839	336387	595897	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	48493 2144017	100103	257965	530730	1098294	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	90427 5335771	190797	513352	1156089	2490300	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Ave	56749 1947368	107775	259776	513045	1022838	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	71069 2730691	139317	353813	726384	1391336	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	65695 1907926	111106	253801	487762	958858	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	54296 2230486	121019	278401	577732	1181799	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	33199 1332502	64764	167664	357877	679313	2.00 80.0	4.00	10.0	20.0	40.0
trans-1,2-Dichloroethene	FB	Ave	41156 1805850	86315	216661	436186	887809	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	123316 5356990	240492	622584	1294546	2632357	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	7664 364870	15284	35939	76608	176542	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	79407 3589145	173107	426021	871835	1773954	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	6355 356768	12300	36192	86048	174699	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	41482 1583175	81587	207910	420664	807827	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	45701 1960017	88112	228624	473715	970100	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	35648 2005803	82038	216190	467681	1002264	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	18189 822935	35913	95509	203401	408648	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	12689 485231	24197	61085	130645	258628	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	74928 3359863	155328	396473	809345	1683052	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	46880 2498258	102599	270389	587525	1225053	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	61130 3150583	142538	326094	684755	1477804	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	63188 2734618	123064	310759	650531	1338590	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	35596 2003224	74531	192609	438606	942348	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	70126 2945634	139538	343914	713992	1447593	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	177668 8119748	367399	938261	1900238	3892190	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	39339 1731358	78290	201140	412335	835509	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	44297 2465241	104143	256548	509583	1123367	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	43403 1987718	89635	231666	479240	957503	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	24282 1014093	44570	121000	244410	505175	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	16576 659305	35560	90656	190747	391761	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	37481 2303873	80071	223410	491180	1061629	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	44406 2063070	85505	245756	519803	1016253	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Lin1	44366 2983706	95217	282978	648461	1373441	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	71052 3358613	148911	406020	850832	1691407	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	173321 8413844	364692	910325	1915731	3926815	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Lin1	37498 2640993	81347	242683	548215	1203917	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	43557 2519754	100996	281867	600178	1250367	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	32062 1400847	60672	167279	346503	690523	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	67375 2893528	134135	349671	718457	1446895	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	23974 1134016	50793	130464	270912	548439	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	45416 2246833	108870	273438	585245	1142606	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Lin1	18304 1357782	41724	120488	280880	612329	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	28960 1404286	59664	163482	338113	693547	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	105191 4733672	217868	543385	1134607	2263366	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	26058 1512891	52279	149910	336962	708703	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	51103 2559405	112518	294632	607431	1234615	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	132121 6585856	278940	703188	1488195	3060062	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	66541 3173134	138606	357130	739399	1512511	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	103288 5626230	218474	585061	1234437	2578106	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Lin1	7969 648344	18118	55408	121431	283016	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	151460 7982152	325696	813952	1757043	3707115	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	39154 1824334	86153	226349	464104	921979	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	36958 1702050	77737	198983	403705	832802	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	13182 559668	26291	69913	145766	291005	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	9983 588408	23177	56072	126610	281722	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	33381 1896081	82760	208940	446839	902975	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	39291 1732447	80476	197398	417562	839275	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	118040 6231859	261059	668378	1395891	2919244	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	38548 1882105	83551	213705	427671	904798	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	104687 5475645	235235	587256	1246967	2550345	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	126276 6464529	265761	687322	1473461	3037207	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	128284 6996931	283652	707440	1509023	3182710	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	68832 3216077	139781	361776	752571	1534518	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	101022 5744842	231206	590475	1236559	2645753	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	73576 3349475	154891	372339	776907	1605428	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	95655 5346731	206411	534670	1131581	2455279	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	68510 3051238	141891	361399	733205	1509157	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	4054 207890	8593	21620	48540	107543	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	36183 1552119	71605	182409	391395	796044	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	29643 1280551	67798	171750	347154	714527	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	12883 457756	27055	59629	132088	250690	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	89388 3676449	193683	529762	1123493	2190121	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	28475 936111	59064	150229	324862	588048	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	33786 1543057	66758	181044	367622	767961	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	61436 2385669	107729	290422	594253	1168069	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	151916 6847384	286160	762662	1603788	3200285	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	53765 2394878	106312	271656	561195	1154675	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD6 240-42092/13	UXM5250.D
Level 2	STD5 240-42092/12	UXM5249.D
Level 3	STD4 240-42092/11	UXM5248.D
Level 4	STD3 240-42092/10	UXM5247.D
Level 5	STD2 240-42092/9	UXM5246.D
Level 6	STD1 240-42092/8	UXM5245.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4944 0.5457	0.5179	0.5366	0.5411	0.5388	Ave		0.5291				3.7		15.0			
Ethyl ether	0.2959 0.3118	0.3149	0.3299	0.3322	0.3247	Ave		0.3182				4.3		15.0			
3-Chloro-1-propene	0.1138 0.1626	0.1307	0.1332	0.1472	0.1572	Ave		0.1408				13.0		15.0			
Diisopropyl ether	0.2325 0.3039	0.2698	0.2820	0.2880	0.2888	Ave		0.2775				8.9		15.0			
2-Chloro-1,3-butadiene	0.4443 0.5618	0.4913	0.5190	0.5386	0.5385	Ave		0.5156				8.2		15.0			
Ethyl-t-butyl ether (ETBE)	0.7557 0.9819	0.8293	0.9029	0.9314	0.9383	Ave		0.8899				9.3		15.0			
Propionitrile	0.0349 0.0408	0.0346	0.0382	0.0420	0.0412	Ave		0.0386				8.5		15.0			
Ethyl acetate	0.2532 0.2900	0.2546	0.2741	0.2771	0.2824	Ave		0.2719				5.5		15.0			
Methacrylonitrile	0.1606 0.2023	0.1897	0.1949	0.2046	0.2003	Ave		0.1921				8.5		15.0			
Isobutyl alcohol	0.0077 0.0091	0.0077	0.0086	0.0094	0.0092	Ave		0.0086				8.8		15.0			
Tert-amyl-methyl ether (TAME)	0.5871 0.7972	0.6671	0.7241	0.7535	0.7651	Ave		0.7157				11.0		15.0			
n-Heptane	0.0338 0.0458	0.0359	0.0418	0.0425	0.0440	Ave		0.0406				12.0		15.0			
n-Butanol	0.0041 0.0069	0.0052	0.0059	0.0064	0.0070	Lin1	-0.068	0.0070							0.9990		0.9950
2-Nitropropane	0.0349 0.0534	0.0349	0.0424	0.0409	0.0453	Qua	0	0.0373	0.0002						1.0000		0.9900
Cyclohexanone	0.0676 0.1071	0.0696	0.0924	0.0940	0.1083	Lin1	-0.573	0.1077							0.9980		0.9950

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trimethylbenzene	2.3062 3.3384	2.8522	3.0020	3.1126	3.2823	Ave		2.9823				13.0		15.0			
2-Methylnaphthalene	0.5487 0.8482	0.7229	0.8158	0.9225	1.0313	Qua	-2.422	1.2182	-0.004						0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD6 240-42092/13	UXM5250.D
Level 2	STD5 240-42092/12	UXM5249.D
Level 3	STD4 240-42092/11	UXM5248.D
Level 4	STD3 240-42092/10	UXM5247.D
Level 5	STD2 240-42092/9	UXM5246.D
Level 6	STD1 240-42092/8	UXM5245.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	74598 3240218	146412	376630	789014	1566079	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	44644 1851341	89012	231543	484302	943782	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	17177 965704	36949	93484	214615	456905	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	175389 9021702	381358	989616	2099629	4197719	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	67037 3335483	138884	364302	785295	1565439	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	114038 5829697	234431	633692	1358093	2727406	1.00 40.0	2.00	5.00	10.0	20.0
Propionitrile	FB	Ave	10519 484864	19537	53643	122521	239365	2.00 80.0	4.00	10.0	20.0	40.0
Ethyl acetate	FB	Ave	76413 3443932	143929	384742	808060	1641769	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	24236 1201419	53633	136829	298324	582158	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	23378 1085228	43306	121353	274103	534944	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	88590 4733198	188598	508209	1098573	2224035	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	5104 272147	10152	29307	62019	127766	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	FB	Lin1	12500 823386	29417	83258	186498	409174	20.0 800	40.0	100	200	400
2-Nitropropane	FB	Qua	10528 633675	19709	59496	119215	263103	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Lin1	32243 1979275	60655	200382	427297	962192	10.0 400	20.0	50.0	100	200
1,2,3-Trimethylbenzene	DCB	Ave	110047 6167616	248432	651353	1415601	2917084	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
2-Methylnaphthalene	DCB	Qua	52371 3134049	125934	353992	839119	1833171	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-42092/14 Calibration Date: 04/29/2012 20:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2829	0.2340	0.1000	8.27	10.0	-17.3	20.0
Chloromethane	Ave	0.4613	0.4720	0.1000	10.2	10.0	2.3	20.0
Vinyl chloride	Ave	0.4246	0.4443	0.1000	10.5	10.0	4.6	20.0
Bromomethane	Ave	0.1684	0.1539	0.0500	9.14	10.0	-8.6	20.0
Chloroethane	Ave	0.2371	0.2329	0.0500	9.82	10.0	-1.8	20.0
Trichlorofluoromethane	Ave	0.3035	0.3240	0.1000	10.7	10.0	6.8	20.0
Acrolein	Ave	0.0489	0.0264		16.2	30.0	-46.0*	20.0
1,1-Dichloroethene	Ave	0.2446	0.2652	0.1000	10.8	10.0	8.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1546	0.1709	0.0500	11.1	10.0	10.6	20.0
Acetone	Lin1		0.1057	0.0500	21.1	20.0	5.5	20.0
Iodomethane	Ave	0.3433	0.3416		9.95	10.0	-0.5	20.0
Carbon disulfide	Ave	0.7261	0.7042	0.1000	9.70	10.0	-3.0	20.0
Acetonitrile	Ave	0.0346	0.0393		34.0	30.0	13.4	20.0
Methyl acetate	Ave	0.2327	0.2751	0.1000	11.8	10.0	18.2	20.0
Methylene Chloride	Lin1		0.3299	0.1000	10.6	10.0	6.0	20.0
tert-Butyl alcohol	Ave	0.0189	0.0195		207	200	3.2	20.0
Acrylonitrile	Ave	0.1114	0.1186		31.9	30.0	6.5	20.0
Methyl tert-butyl ether	Ave	0.8402	0.8405	0.1000	10.0	10.0	0.0	20.0
trans-1,2-Dichloroethene	Ave	0.2873	0.2952	0.1000	10.3	10.0	2.7	20.0
Hexane	Ave	0.0529	0.0579		10.9	10.0	9.4	20.0
1,1-Dichloroethane	Ave	0.5691	0.6028	0.1000	10.6	10.0	5.9	20.0
Vinyl acetate	Ave	0.0505	0.0387		7.67	10.0	-23.3*	20.0
2-Butanone	Ave	0.1356	0.1389	0.0500	20.5	20.0	2.4	20.0
2,2-Dichloropropane	Ave	0.2932	0.2855		9.74	10.0	-2.6	20.0
cis-1,2-Dichloroethene	Ave	0.3087	0.3186	0.1000	10.3	10.0	3.2	20.0
Bromochloromethane	Ave	0.1283	0.1312		10.2	10.0	2.2	20.0
Tetrahydrofuran	Ave	0.0828	0.0852		10.3	10.0	2.9	20.0
Chloroform	Ave	0.5296	0.5462	0.2000	10.3	10.0	3.1	20.0
1,1,1-Trichloroethane	Ave	0.3678	0.3794	0.1000	10.3	10.0	3.2	20.0
Cyclohexane	Ave	0.4605	0.4767	0.1000	10.4	10.0	3.5	20.0
1,1-Dichloropropene	Ave	0.4264	0.4383		10.3	10.0	2.8	20.0
Carbon tetrachloride	Ave	0.2770	0.2912	0.1000	10.5	10.0	5.1	20.0
1,2-Dichloroethane	Ave	0.4694	0.4938	0.1000	10.5	10.0	5.2	20.0
Benzene	Ave	1.251	1.319	0.5000	10.5	10.0	5.4	20.0
Trichloroethene	Ave	0.2698	0.2968	0.2000	11.0	10.0	10.0	20.0
1,2-Dichloropropane	Ave	0.3083	0.3319	0.1000	10.8	10.0	7.7	20.0
Methylcyclohexane	Ave	0.3477	0.3665	0.1000	10.5	10.0	5.4	20.0
Dibromomethane	Ave	0.1606	0.1738		10.8	10.0	8.2	20.0
Bromodichloromethane	Ave	0.3092	0.3331	0.1000	10.8	10.0	7.7	20.0
2-Chloroethyl vinyl ether	Ave	0.1599	0.1722		10.8	10.0	7.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-42092/14 Calibration Date: 04/29/2012 20:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.4089	0.1500	9.41	10.0	-5.9	20.0
4-Methyl-2-pentanone	Ave	0.2643	0.2914	0.0500	22.1	20.0	10.3	20.0
Toluene	Ave	1.877	1.918	0.4000	10.2	10.0	2.2	20.0
trans-1,3-Dichloropropene	Lin1		0.5291	0.1000	9.28	10.0	-7.2	20.0
1,1,2-Trichloroethane	Ave	0.3307	0.3442	0.1000	10.4	10.0	4.1	20.0
1,3-Dichloropropane	Ave	0.6962	0.7105		10.2	10.0	2.0	20.0
Tetrachloroethene	Ave	0.2617	0.2644	0.2000	10.1	10.0	1.0	20.0
2-Hexanone	Ave	0.2698	0.2927	0.0500	21.7	20.0	8.5	20.0
Dibromochloromethane	Lin1		0.2623		9.02	10.0	-9.8	20.0
1,2-Dibromoethane	Ave	0.3223	0.3341		10.4	10.0	3.7	20.0
Chlorobenzene	Ave	1.104	1.136	0.3000	10.3	10.0	2.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3116	0.3283		10.5	10.0	5.4	20.0
Ethylbenzene	Ave	0.5828	0.6250		10.7	10.0	7.2	20.0
m-Xylene & p-Xylene	Ave	0.7256	0.7452		20.5	20.0	2.7	20.0
o-Xylene	Ave	0.7207	0.7518		10.4	10.0	4.3	20.0
Styrene	Ave	1.192	1.255	0.3000	10.5	10.0	5.3	20.0
Bromoform	Lin1		0.1220	0.1000	9.03	10.0	-9.7	20.0
Isopropylbenzene	Ave	1.713	1.779	0.1000	10.4	10.0	3.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9025	0.9195	0.3000	10.2	10.0	1.9	20.0
Bromobenzene	Ave	0.8159	0.8010		9.82	10.0	-1.8	20.0
1,2,3-Trichloropropane	Ave	0.2837	0.2982		10.5	10.0	5.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2511	0.2617		20.8	20.0	4.2	20.0
n-Propylbenzene	Ave	0.8598	0.9010		10.5	10.0	4.8	20.0
2-Chlorotoluene	Ave	0.8362	0.8214		9.82	10.0	-1.8	20.0
1,3,5-Trimethylbenzene	Ave	2.791	2.836		10.2	10.0	1.6	20.0
4-Chlorotoluene	Ave	0.8762	0.8813		10.1	10.0	0.6	20.0
tert-Butylbenzene	Ave	2.471	2.497		10.1	10.0	1.1	20.0
1,2,4-Trimethylbenzene	Ave	2.906	2.988		10.3	10.0	2.8	20.0
sec-Butylbenzene	Ave	3.036	3.064		10.1	10.0	0.9	20.0
1,3-Dichlorobenzene	Ave	1.506	1.484	0.6000	9.85	10.0	-1.5	20.0
p-Isopropyltoluene	Ave	2.486	2.579		10.4	10.0	3.8	20.0
1,4-Dichlorobenzene	Ave	1.587	1.584	0.5000	9.98	10.0	-0.2	20.0
n-Butylbenzene	Ave	2.286	2.295		10.0	10.0	0.4	20.0
1,2-Dichlorobenzene	Ave	1.485	1.504	0.4000	10.1	10.0	1.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0952	0.1049	0.0500	11.0	10.0	10.1	20.0
1,2,4-Trichlorobenzene	Ave	0.6818	0.6660	0.2000	9.77	10.0	-2.3	20.0
Hexachlorobutadiene	Ave	0.2577	0.2217		8.60	10.0	-14.0	20.0
Naphthalene	Ave	2.063	2.211		10.7	10.0	7.2	20.0
1,2,3-Trichlorobenzene	Ave	0.5920	0.6250		10.6	10.0	5.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2389	0.2274		9.72	10.2	-4.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3867	0.3583		9.46	10.2	-7.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-42092/14 Calibration Date: 04/29/2012 20:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.552	1.491		9.81	10.2	-3.9	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5538	0.5469		10.1	10.2	-1.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-42092/14 Calibration Date: 04/29/2012 20:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 17:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 19:50

Lab File ID: UXM5251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3182	0.3065		9.63	10.0	-3.7	20.0
Diisopropyl ether	Ave	0.2775	0.2745		9.89	10.0	-1.1	20.0
Isobutyl alcohol	Ave	0.0086	0.0091		527	500	5.4	20.0
Cyclohexanone	Lin1		0.0256		52.9	200	-73.6*	20.0
1,2,3-Trimethylbenzene	Ave	2.982	3.178		10.7	10.0	6.6	20.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: A3UX16 Start Date: 04/30/2012 11:22

Analysis Batch Number: 42171 End Date: 04/30/2012 18:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-42171/1		04/30/2012 11:22	1	BFB2916.D	DB-624 0.18(mm)
CCVIS 240-42171/2		04/30/2012 11:50	1	UXM5270.D	DB-624 0.18(mm)
CCV 240-42171/3		04/30/2012 12:13	1	UXM5271.D	DB-624 0.18(mm)
LCS 240-42171/4		04/30/2012 12:36	1	UXM5272.D	DB-624 0.18(mm)
MB 240-42171/5		04/30/2012 12:59	1	UXM5273.D	DB-624 0.18(mm)
ZZZZZ		04/30/2012 13:34	1		DB-624 0.18(mm)
ZZZZZ		04/30/2012 14:00	1		DB-624 0.18(mm)
ZZZZZ		04/30/2012 14:23	1		DB-624 0.18(mm)
240-10598-1	TB-042412	04/30/2012 14:46	1	UXM5277.D	DB-624 0.18(mm)
240-10598-2	MT-MW04S	04/30/2012 15:09	1	UXM5278.D	DB-624 0.18(mm)
240-10598-3	MT-MW06S	04/30/2012 15:31	1	UXM5279.D	DB-624 0.18(mm)
ZZZZZ		04/30/2012 15:54	1		DB-624 0.18(mm)
ZZZZZ		04/30/2012 16:17	1		DB-624 0.18(mm)
ZZZZZ		04/30/2012 16:40	1		DB-624 0.18(mm)
ZZZZZ		04/30/2012 17:03	1		DB-624 0.18(mm)
240-10350-A-5 MS		04/30/2012 17:25	1	UXM5284.D	DB-624 0.18(mm)
240-10350-C-5 MSD		04/30/2012 17:48	1	UXM5285.D	DB-624 0.18(mm)
ZZZZZ		04/30/2012 18:11	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab File ID: BFB2916.D BFB Injection Date: 04/30/2012

Instrument ID: A3UX16 BFB Injection Time: 11:22

Analysis Batch No.: 42171

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.2	
75	30.0 - 60.0 % of mass 95	53.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.1	(0.2)1
174	50.0 - 120.00 % of mass 95	66.2	
175	5.0 - 9.0 % of mass 174	4.8	(7.3)1
176	95.0 - 101.0 % of mass 174	63.9	(96.5)1
177	5.0 - 9.0 % of mass 176	4.2	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-42171/2	UXM5270.D	04/30/2012	11:50
	CCV 240-42171/3	UXM5271.D	04/30/2012	12:13
	LCS 240-42171/4	UXM5272.D	04/30/2012	12:36
	MB 240-42171/5	UXM5273.D	04/30/2012	12:59
TB-042412	240-10598-1	UXM5277.D	04/30/2012	14:46
MT-MW04S	240-10598-2	UXM5278.D	04/30/2012	15:09
MT-MW06S	240-10598-3	UXM5279.D	04/30/2012	15:31
	240-10350-A-5 MS	UXM5284.D	04/30/2012	17:25
	240-10350-C-5 MSD	UXM5285.D	04/30/2012	17:48

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCVIS 240-42171/2 Calibration Date: 04/30/2012 11:50

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5270.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2829	0.2885	0.1000	10.2	10.0	2.0	20.0
Chloromethane	Ave	0.4613	0.4195	0.1000	9.10	10.0	-9.0	20.0
Vinyl chloride	Ave	0.4246	0.4029	0.1000	9.49	10.0	-5.1	20.0
Bromomethane	Ave	0.1684	0.1518	0.0500	9.02	10.0	-9.8	20.0
Chloroethane	Ave	0.2371	0.2197	0.0500	9.27	10.0	-7.3	20.0
Trichlorofluoromethane	Ave	0.3035	0.3119	0.1000	10.3	10.0	2.8	20.0
Acrolein	Ave	0.0489	0.0440		89.9	100	-10.1	20.0
1,1-Dichloroethene	Ave	0.2446	0.2428	0.1000	9.93	10.0	-0.7	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.1546	0.1669	0.0500	10.8	10.0	8.0	20.0
Acetone	Lin1		0.0864	0.0500	16.6	20.0	-17.0	20.0
Iodomethane	Ave	0.3433	0.3500		10.2	10.0	1.9	20.0
Carbon disulfide	Ave	0.7261	0.7265	0.1000	10.0	10.0	0.0	20.0
Acetonitrile	Ave	0.0346	0.0292		84.2	100	-15.8	20.0
Methyl acetate	Ave	0.2327	0.1967	0.1000	16.9	20.0	-15.5	20.0
Methylene Chloride	Lin1		0.3004	0.1000	9.58	10.0	-4.2	20.0
tert-Butyl alcohol	Ave	0.0189	0.0158		167	200	-16.6	20.0
Acrylonitrile	Ave	0.1114	0.0998		17.9	20.0	-10.5	20.0
Methyl tert-butyl ether	Ave	0.8402	0.7869	0.1000	9.36	10.0	-6.4	20.0
trans-1,2-Dichloroethene	Ave	0.2873	0.2775	0.1000	9.66	10.0	-3.4	20.0
Hexane	Ave	0.0529	0.0551		10.4	10.0	4.1	20.0
1,1-Dichloroethane	Ave	0.5691	0.5381	0.1000	9.45	10.0	-5.5	20.0
Vinyl acetate	Ave	0.0505	0.0473		9.37	10.0	-6.3	20.0
2-Butanone	Ave	0.1356	0.1228	0.0500	18.1	20.0	-9.5	20.0
cis-1,2-Dichloroethene	Ave	0.3087	0.2944	0.1000	9.54	10.0	-4.6	20.0
2,2-Dichloropropane	Ave	0.2932	0.3012		10.3	10.0	2.7	20.0
Bromochloromethane	Ave	0.1283	0.1246		9.71	10.0	-2.9	20.0
Tetrahydrofuran	Ave	0.0828	0.0713		8.61	10.0	-13.9	20.0
Chloroform	Ave	0.5296	0.5127	0.2000	9.68	10.0	-3.2	20.0
1,1,1-Trichloroethane	Ave	0.3678	0.3764	0.1000	10.2	10.0	2.3	20.0
Cyclohexane	Ave	0.4605	0.4777	0.1000	10.4	10.0	3.7	20.0
1,1-Dichloropropene	Ave	0.4264	0.4061		9.53	10.0	-4.7	20.0
Carbon tetrachloride	Ave	0.2770	0.2871	0.1000	10.4	10.0	3.7	20.0
1,2-Dichloroethane	Ave	0.4694	0.4390	0.1000	9.35	10.0	-6.5	20.0
Benzene	Ave	1.251	1.173	0.5000	9.38	10.0	-6.2	20.0
Trichloroethene	Ave	0.2698	0.2578	0.2000	9.56	10.0	-4.4	20.0
1,2-Dichloropropane	Ave	0.3083	0.2961	0.1000	9.61	10.0	-3.9	20.0
Methylcyclohexane	Ave	0.3477	0.3809	0.1000	11.0	10.0	9.5	20.0
Dibromomethane	Ave	0.1606	0.1478		9.20	10.0	-8.0	20.0
1,4-Dioxane	Ave	0.0024	0.0019		403	500	-19.5	20.0
Bromodichloromethane	Ave	0.3092	0.3153	0.1000	10.2	10.0	2.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCVIS 240-42171/2 Calibration Date: 04/30/2012 11:50

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5270.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1599	0.1432		17.9	20.0	-10.4	20.0
cis-1,3-Dichloropropene	Lin1		0.3918	0.1500	9.04	10.0	-9.6	20.0
4-Methyl-2-pentanone	Ave	0.2643	0.2348	0.0500	17.8	20.0	-11.1	20.0
Toluene	Ave	1.877	1.787	0.4000	9.52	10.0	-4.8	20.0
trans-1,3-Dichloropropene	Lin1		0.5043	0.1000	8.87	10.0	-11.3	20.0
Ethyl methacrylate	Ave	0.5543	0.5335		9.62	10.0	-3.8	20.0
1,1,2-Trichloroethane	Ave	0.3307	0.3148	0.1000	9.52	10.0	-4.8	20.0
1,3-Dichloropropane	Ave	0.6962	0.6368		9.15	10.0	-8.5	20.0
Tetrachloroethene	Ave	0.2617	0.2605	0.2000	9.95	10.0	-0.5	20.0
2-Hexanone	Ave	0.2698	0.2379	0.0500	17.6	20.0	-11.8	20.0
Dibromochloromethane	Lin1		0.2633		9.05	10.0	-9.5	20.0
1,2-Dibromoethane	Ave	0.3223	0.3055		9.48	10.0	-5.2	20.0
Chlorobenzene	Ave	1.104	1.033	0.3000	9.36	10.0	-6.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3116	0.3137		10.1	10.0	0.7	20.0
Ethylbenzene	Ave	0.5828	0.5604		9.61	10.0	-3.9	20.0
m-Xylene & p-Xylene	Ave	0.7256	0.7011		19.3	20.0	-3.4	20.0
o-Xylene	Ave	0.7207	0.6828		9.47	10.0	-5.3	20.0
Styrene	Ave	1.192	1.161	0.3000	9.74	10.0	-2.6	20.0
Bromoform	Lin1		0.1180	0.1000	8.76	10.0	-12.4	20.0
Isopropylbenzene	Ave	1.713	1.674	0.1000	9.78	10.0	-2.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9025	0.8145	0.3000	9.03	10.0	-9.7	20.0
Bromobenzene	Ave	0.8159	0.7672		9.40	10.0	-6.0	20.0
1,2,3-Trichloropropane	Ave	0.2837	0.2411		8.50	10.0	-15.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2511	0.2253		8.97	10.0	-10.3	20.0
n-Propylbenzene	Ave	0.8598	0.8408		9.78	10.0	-2.2	20.0
2-Chlorotoluene	Ave	0.8362	0.7704		9.21	10.0	-7.9	20.0
1,3,5-Trimethylbenzene	Ave	2.791	2.685		9.62	10.0	-3.8	20.0
4-Chlorotoluene	Ave	0.8762	0.8030		9.16	10.0	-8.4	20.0
tert-Butylbenzene	Ave	2.471	2.377		9.62	10.0	-3.8	20.0
1,2,4-Trimethylbenzene	Ave	2.906	2.768		9.52	10.0	-4.8	20.0
sec-Butylbenzene	Ave	3.036	2.929		9.65	10.0	-3.5	20.0
1,3-Dichlorobenzene	Ave	1.506	1.415	0.6000	9.40	10.0	-6.0	20.0
p-Isopropyltoluene	Ave	2.486	2.404		9.67	10.0	-3.3	20.0
1,4-Dichlorobenzene	Ave	1.587	1.474	0.5000	9.29	10.0	-7.1	20.0
n-Butylbenzene	Ave	2.286	2.220		9.71	10.0	-2.9	20.0
1,2-Dichlorobenzene	Ave	1.485	1.388	0.4000	9.35	10.0	-6.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0952	0.0894	0.0500	9.39	10.0	-6.1	20.0
1,3,5-Trichlorobenzene	Ave	0.7690	0.7641		9.94	10.0	-0.6	20.0
1,2,4-Trichlorobenzene	Ave	0.6818	0.6748	0.2000	9.90	10.0	-1.0	20.0
Hexachlorobutadiene	Ave	0.2577	0.2544		9.87	10.0	-1.3	20.0
Naphthalene	Ave	2.063	1.886		9.14	10.0	-8.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCVIS 240-42171/2 Calibration Date: 04/30/2012 11:50

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5270.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.5920	0.5682		9.60	10.0	-4.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2389	0.2170		9.27	10.2	-9.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3867	0.3153		8.32	10.2	-18.5	20.0
Toluene-d8 (Surr)	Ave	1.552	1.338		8.81	10.2	-13.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5538	0.5067		9.34	10.2	-8.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42171/3 Calibration Date: 04/30/2012 12:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5271.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2389	0.2197		9.39	10.2	-8.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3867	0.3395		8.96	10.2	-12.2	20.0
Toluene-d8 (Surr)	Ave	1.552	1.410		9.28	10.2	-9.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5538	0.5352		9.87	10.2	-3.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42171/3 Calibration Date: 04/30/2012 12:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 17:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 19:50

Lab File ID: UXM5271.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.5291	0.4967		9.39	10.0	-6.1	20.0
Ethyl ether	Ave	0.3182	0.2722		8.56	10.0	-14.4	20.0
3-Chloro-1-propene	Ave	0.1408	0.1458		10.4	10.0	3.5	20.0
Diisopropyl ether	Ave	0.2775	0.2702		48.7	50.0	-2.6	20.0
2-Chloro-1,3-butadiene	Ave	0.5156	0.4999		9.70	10.0	-3.0	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8899	0.8664		9.74	10.0	-2.6	20.0
Propionitrile	Ave	0.0386	0.0384		19.9	20.0	-0.6	20.0
Ethyl acetate	Ave	0.2719	0.2478		18.2	20.0	-8.9	20.0
Methacrylonitrile	Ave	0.1921	0.1753		9.13	10.0	-8.7	20.0
Isobutyl alcohol	Ave	0.0086	0.0076		176	200	-12.2	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7157	0.6972		9.74	10.0	-2.6	20.0
n-Heptane	Ave	0.0406	0.0438		10.8	10.0	7.7	20.0
n-Butanol	Lin1		0.0054		165	200	-17.6	20.0
2-Nitropropane	Qua		0.0379		18.5	20.0	-7.5	20.0
Cyclohexanone	Lin1		0.0798		79.4	100	-20.6*	20.0
1,2,3-Trimethylbenzene	Ave	2.982	2.888		9.68	10.0	-3.2	20.0
2-Methylnaphthalene	Qua		0.8088		16.2	20.0	-19.0	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab File ID: UXM5273.D Lab Sample ID: MB 240-42171/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 04/30/2012 12:59

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-42171/4	UXM5272.D	04/30/2012 12:36
TB-042412	240-10598-1	UXM5277.D	04/30/2012 14:46
MT-MW04S	240-10598-2	UXM5278.D	04/30/2012 15:09
MT-MW06S	240-10598-3	UXM5279.D	04/30/2012 15:31
	240-10350-A-5 MS	UXM5284.D	04/30/2012 17:25
	240-10350-C-5 MSD	UXM5285.D	04/30/2012 17:48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-42171/5

Matrix: Water | Lab File ID: UXM5273.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 12:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	0.288	J	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-42171/5

Matrix: Water Lab File ID: UXM5273.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-42171/5

Matrix: Water Lab File ID: UXM5273.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-42171/5

Matrix: Water Lab File ID: UXM5273.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

Number TICs Found: 1 TIC Result Total: 0.197

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
108-87-2	Methylcyclohexane	6.21	0.197	J

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5272.D

Lab ID: LCS 240-42171/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.29	93	72-116	
1,1,1-Trichloroethane	10.0	9.17	92	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.61	86	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.47	95	74-151	
1,1-Dichloroethane	10.0	9.12	91	82-115	
1,1-Dichloroethene	10.0	9.37	94	78-131	
1,1-Dichloropropene	10.0	8.82	88	83-114	
1,2,3-Trichlorobenzene	10.0	9.27	93	54-126	
1,2,3-Trichloropropane	10.0	8.58	86	73-129	
1,2,3-Trimethylbenzene	10.0	9.34	93	70-130	
1,2,4-Trichlorobenzene	10.0	9.24	92	48-135	
1,2,4-Trimethylbenzene	10.0	9.09	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.48	85	42-136	
1,2-Dichlorobenzene	10.0	8.87	89	81-110	
1,2-Dichloroethane	10.0	9.10	91	71-127	
1,2-Dichloropropane	10.0	9.15	92	81-115	
1,3-Dichlorobenzene	10.0	9.09	91	80-110	
1,3-Dichloropropane	10.0	8.52	85	79-116	
1,4-Dichlorobenzene	10.0	8.91	89	82-110	
2,2-Dichloropropane	10.0	9.51	95	50-129	
2-Chloroethyl vinyl ether	10.0	8.76 J	88	52-131	
2-Chlorotoluene	10.0	8.59	86	76-116	
2-Hexanone	20.0	17.5	88	55-133	
Bromobenzene	10.0	9.12	91	76-115	
Bromochloromethane	10.0	9.21	92	77-120	
4-Chlorotoluene	10.0	8.82	88	77-115	
p-Isopropyltoluene	10.0	9.20	92	74-120	
Acetone	20.0	16.4	82	43-136	
Benzene	10.0	9.16	92	83-112	
Bromoform	10.0	8.16	82	40-131	
Bromomethane	10.0	7.64	76	11-185	
Carbon disulfide	10.0	8.61	86	62-142	
Carbon tetrachloride	10.0	9.19	92	66-128	
Chlorobenzene	10.0	8.95	90	85-110	
Chloroethane	10.0	8.17	82	25-153	
Chloroform	10.0	8.84	88	79-117	
Chloromethane	10.0	7.91	79	44-126	
cis-1,2-Dichloroethene	10.0	9.23	92	80-113	
cis-1,3-Dichloropropene	10.0	8.36	84	61-115	
Hexachlorobutadiene	10.0	8.77	88	36-134	
Dibromomethane	10.0	9.18	92	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5272.D

Lab ID: LCS 240-42171/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.60	96	72-121	
Dichlorodifluoromethane	10.0	5.86	59	19-129	
Ethylbenzene	10.0	9.06	91	83-112	
1,2-Dibromoethane	10.0	8.75	88	79-113	
Diisopropyl ether	10.0	8.74 J	87	77-118	
Naphthalene	10.0	8.79	88	32-141	
m-Xylene & p-Xylene	20.0	18.0	90	83-113	
n-Butylbenzene	10.0	8.83	88	66-125	
Isopropylbenzene	10.0	9.08	91	75-114	
n-Propylbenzene	10.0	9.50	95	74-121	
2-Butanone	20.0	16.7	84	60-126	
4-Methyl-2-pentanone	20.0	17.3	87	63-128	
sec-Butylbenzene	10.0	8.78	88	70-117	
Methyl tert-butyl ether	10.0	8.66	87	52-144	
Methylene Chloride	10.0	8.84	88	66-131	
o-Xylene	10.0	9.15	92	83-113	
Styrene	10.0	9.27	93	79-114	
tert-Butylbenzene	10.0	8.95	90	71-115	
Tetrachloroethene	10.0	9.17	92	79-114	
Toluene	10.0	8.87	89	84-111	
trans-1,2-Dichloroethene	10.0	9.08	91	83-117	
trans-1,3-Dichloropropene	10.0	8.11	81	58-117	
Trichloroethene	10.0	9.17	92	76-117	
Trichlorofluoromethane	10.0	9.25	93	49-157	
Vinyl acetate	10.0	8.12	81	46-161	
Vinyl chloride	10.0	8.25	83	53-127	
tert-Butyl alcohol	200	167	84	70-130	
Xylenes, Total	30.0	27.2	91	83-112	
Dibromochloromethane	10.0	8.13	81	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5284.D

Lab ID: 240-10350-A-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	1.0 U	9.57	96	64-118	
1,1,1-Trichloroethane	10.0	1.0 U	9.42	94	68-121	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	9.56	96	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	11.6	116	70-152	
1,1-Dichloroethane	10.0	1.0 U	9.26	93	79-116	
1,1-Dichloroethene	10.0	1.0 U	10.0	100	74-135	
1,1-Dichloropropene	10.0	1.0 U	9.55	96	80-114	
1,2,3-Trichlorobenzene	10.0	1.0 U	9.86	99	45-129	
1,2,3-Trichloropropane	10.0	1.0 U	9.72	97	67-132	
1,2,3-Trimethylbenzene	10.0	5.0 U	9.43	94	70-130	
1,2,4-Trichlorobenzene	10.0	1.0 U	9.37	94	38-138	
1,2,4-Trimethylbenzene	10.0	1.0 U	9.37	94	67-124	
1,2-Dibromo-3-Chloropropane	10.0	2.0 U	9.54	95	32-139	
1,2-Dichlorobenzene	10.0	1.0 U	9.15	92	75-111	
1,2-Dichloroethane	10.0	1.0 U	9.37	94	68-129	
1,2-Dichloropropane	10.0	1.0 U	9.68	97	78-115	
1,3-Dichlorobenzene	10.0	1.0 U	9.16	92	73-110	
1,3-Dichloropropane	10.0	1.0 U	9.44	94	74-118	
1,4-Dichlorobenzene	10.0	1.0 U	9.01	90	75-110	
2,2-Dichloropropane	10.0	1.0 U	9.23	92	38-127	
2-Chloroethyl vinyl ether	10.0	10 U	10 U	0	10-150	F
2-Chlorotoluene	10.0	1.0 U	8.96	90	69-117	
2-Hexanone	20.0	10 U	21.3	107	47-139	
Bromobenzene	10.0	1.0 U	9.39	94	71-116	
Bromochloromethane	10.0	1.0 U	9.28	93	73-121	
4-Chlorotoluene	10.0	1.0 U	8.98	90	71-116	
p-Isopropyltoluene	10.0	1.0 U	9.57	96	64-122	
Acetone	20.0	10 U	17.7	89	33-145	
Benzene	10.0	1.0 U	9.36	94	72-121	
Bromoform	10.0	1.0 U	8.55	86	32-128	
Bromomethane	10.0	1.0 U	4.44	44	10-186	
Carbon disulfide	10.0	1.0 U	8.83	88	57-147	
Carbon tetrachloride	10.0	1.0 U	9.67	97	59-129	
Chlorobenzene	10.0	1.0 U	9.37	94	80-110	
Chloroethane	10.0	1.0 U	6.84	68	21-165	
Chloroform	10.0	1.0 U	9.03	90	76-118	
Chloromethane	10.0	1.0 U	7.92	79	33-132	
cis-1,2-Dichloroethene	10.0	1.0 U	9.38	94	70-120	
cis-1,3-Dichloropropene	10.0	1.0 U	8.26	83	51-110	
Hexachlorobutadiene	10.0	1.0 U	8.51	85	27-132	
Dibromomethane	10.0	1.0 U	9.68	97	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5284.D

Lab ID: 240-10350-A-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	1.0 U	9.64	96	67-120	
Dichlorodifluoromethane	10.0	1.0 U	7.19	72	17-128	
Ethylbenzene	10.0	1.0 U	9.51	95	75-116	
1,2-Dibromoethane	10.0	1.0 U	9.96	100	74-113	
Diisopropyl ether	10.0	10 U	8.79 J	88	73-118	
Naphthalene	10.0	1.0 U	9.96	100	15-158	
m-Xylene & p-Xylene	20.0	2.0 U	19.0	95	75-117	
n-Butylbenzene	10.0	1.0 U	9.11	91	56-127	
Isopropylbenzene	10.0	1.0 U	9.45	95	68-116	
n-Propylbenzene	10.0	1.0 U	9.58	96	64-124	
2-Butanone	20.0	10 U	19.4	97	54-129	
4-Methyl-2-pentanone	20.0	10 U	20.9	105	56-131	
sec-Butylbenzene	10.0	1.0 U	9.33	93	60-119	
Methyl tert-butyl ether	10.0	5.0 U	9.03	90	46-144	
Methylene Chloride	10.0	1.0 U	8.65	87	63-128	
o-Xylene	10.0	1.0 U	9.39	94	76-116	
Styrene	10.0	1.0 U	9.60	96	71-117	
tert-Butylbenzene	10.0	1.0 U	9.33	93	61-119	
Tetrachloroethene	10.0	1.0 U	10.0	100	70-117	
Toluene	10.0	1.0 U	9.36	94	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	9.18	92	80-119	
trans-1,3-Dichloropropene	10.0	1.0 U	8.16	82	46-116	
Trichloroethene	10.0	1.0 U	9.41	94	66-120	
Trichlorofluoromethane	10.0	1.0 U	8.71	87	46-157	
Vinyl acetate	10.0	2.0 U	8.93	89	43-157	
Vinyl chloride	10.0	1.0 U	9.08	91	49-130	
tert-Butyl alcohol	200	50 U	217	109	70-130	
Xylenes, Total	30.0	2.0 U	28.4	95	76-116	
Dibromochloromethane	10.0	1.0 U	8.56	86	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5285.D

Lab ID: 240-10350-C-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.67	97	1	30	64-118	
1,1,1-Trichloroethane	10.0	9.09	91	4	30	68-121	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	5	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.92	99	16	30	70-152	
1,1-Dichloroethane	10.0	9.28	93	0	30	79-116	
1,1-Dichloroethene	10.0	9.69	97	3	30	74-135	
1,1-Dichloropropene	10.0	9.22	92	4	30	80-114	
1,2,3-Trichlorobenzene	10.0	8.21	82	18	30	45-129	
1,2,3-Trichloropropane	10.0	9.80	98	1	30	67-132	
1,2,3-Trimethylbenzene	10.0	9.03	90	4	30	70-130	
1,2,4-Trichlorobenzene	10.0	7.84	78	18	30	38-138	
1,2,4-Trimethylbenzene	10.0	9.00	90	4	30	67-124	
1,2-Dibromo-3-Chloropropane	10.0	9.69	97	2	30	32-139	
1,2-Dichlorobenzene	10.0	8.74	87	5	30	75-111	
1,2-Dichloroethane	10.0	9.04	90	4	30	68-129	
1,2-Dichloropropane	10.0	9.25	93	5	30	78-115	
1,3-Dichlorobenzene	10.0	8.99	90	2	30	73-110	
1,3-Dichloropropane	10.0	9.43	94	0	30	74-118	
1,4-Dichlorobenzene	10.0	8.88	89	1	30	75-110	
2,2-Dichloropropane	10.0	8.87	89	4	30	38-127	
2-Chloroethyl vinyl ether	10.0	10 U	0	NC	30	10-150	F
2-Chlorotoluene	10.0	9.37	94	4	30	69-117	
2-Hexanone	20.0	20.5	103	4	30	47-139	
Bromobenzene	10.0	9.57	96	2	30	71-116	
Bromochloromethane	10.0	8.92	89	4	30	73-121	
4-Chlorotoluene	10.0	9.06	91	1	30	71-116	
p-Isopropyltoluene	10.0	8.93	89	7	30	64-122	
Acetone	20.0	13.9	70	24	30	33-145	
Benzene	10.0	9.16	92	2	30	72-121	
Bromoform	10.0	8.51	85	0	30	32-128	
Bromomethane	10.0	5.19	52	16	30	10-186	
Carbon disulfide	10.0	8.03	80	9	30	57-147	
Carbon tetrachloride	10.0	9.13	91	6	30	59-129	
Chlorobenzene	10.0	9.23	92	2	30	80-110	
Chloroethane	10.0	6.73	67	2	30	21-165	
Chloroform	10.0	8.90	89	1	30	76-118	
Chloromethane	10.0	8.81	88	11	30	33-132	
cis-1,2-Dichloroethene	10.0	9.27	93	1	30	70-120	
cis-1,3-Dichloropropene	10.0	7.99	80	3	30	51-110	
Hexachlorobutadiene	10.0	6.53	65	26	30	27-132	
Dibromomethane	10.0	9.52	95	2	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5285.D

Lab ID: 240-10350-C-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	10.0	9.34	93	3	30	67-120	
Dichlorodifluoromethane	10.0	5.82	58	21	30	17-128	
Ethylbenzene	10.0	9.29	93	2	30	75-116	
1,2-Dibromoethane	10.0	9.55	96	4	30	74-113	
Diisopropyl ether	10.0	8.71 J	87	1	30	73-118	
Naphthalene	10.0	8.36	84	17	30	15-158	
m-Xylene & p-Xylene	20.0	18.3	92	4	30	75-117	
n-Butylbenzene	10.0	8.35	84	9	30	56-127	
Isopropylbenzene	10.0	9.07	91	4	30	68-116	
n-Propylbenzene	10.0	9.61	96	0	30	64-124	
2-Butanone	20.0	17.6	88	10	30	54-129	
4-Methyl-2-pentanone	20.0	20.2	101	3	30	56-131	
sec-Butylbenzene	10.0	8.71	87	7	30	60-119	
Methyl tert-butyl ether	10.0	8.88	89	2	30	46-144	
Methylene Chloride	10.0	8.38	84	3	30	63-128	
o-Xylene	10.0	9.08	91	3	30	76-116	
Styrene	10.0	9.26	93	4	30	71-117	
tert-Butylbenzene	10.0	9.04	90	3	30	61-119	
Tetrachloroethene	10.0	9.57	96	4	30	70-117	
Toluene	10.0	9.29	93	1	30	78-114	
trans-1,2-Dichloroethene	10.0	8.99	90	2	30	80-119	
trans-1,3-Dichloropropene	10.0	8.50	85	4	30	46-116	
Trichloroethene	10.0	9.19	92	2	30	66-120	
Trichlorofluoromethane	10.0	8.33	83	4	30	46-157	
Vinyl acetate	10.0	9.09	91	2	30	43-157	
Vinyl chloride	10.0	8.71	87	4	30	49-130	
tert-Butyl alcohol	200	159	79	31	30	70-130	F
Xylenes, Total	30.0	27.4	91	4	30	76-116	
Dibromochloromethane	10.0	8.69	87	2	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Sample No.: STD8260 240-42092/4 Date Analyzed: 04/29/2012 16:26

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM5241.D Heated Purge: (Y/N) N

Calibration ID: 8426

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1530000	5.70	1036987	8.39	499405	10.64
UPPER LIMIT		3060000	6.20	2073974	8.89	998810	11.14
LOWER LIMIT		765000	5.20	518494	7.89	249703	10.14
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-42092/14		1382789	5.70	929711	8.39	462842	10.64
CCVIS 240-42171/2		1827438	5.70	1228317	8.39	614323	10.64

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Sample No.: CCVIS 240-42171/2 Date Analyzed: 04/30/2012 11:50

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM5270.D Heated Purge: (Y/N) N

Calibration ID: 8428

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1827438	5.70	1228317	8.39	614323	10.64
UPPER LIMIT		3654876	6.20	2456634	8.89	1228646	11.14
LOWER LIMIT		913719	5.20	614159	7.89	307162	10.14
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-42171/3		1675303	5.70	1143405	8.39	543922	10.64
LCS 240-42171/4		1858112	5.70	1240826	8.39	615173	10.64
MB 240-42171/5		1636782	5.70	1107392	8.39	536650	10.64
240-10598-1	TB-042412	1623556	5.70	1081632	8.39	523267	10.64
240-10598-2	MT-MW04S	1638447	5.70	1095228	8.39	524543	10.64
240-10598-3	MT-MW06S	1598458	5.70	1050881	8.39	504682	10.64
240-10350-A-5 MS		1710874	5.70	1135916	8.39	559548	10.64
240-10350-C-5 MSD		1786806	5.70	1151558	8.39	541302	10.64

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

SDG 240-10598-1

SAMPLE ID MT-MW06S

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST AREA	IS AMOUNT (NG)	Final Extract Volume (UL)	AVE RRF	CONCENTRATION PPB
1598458	1	34980	10	5	0.4613	0.47

Sample Volume (ML)
5

Chloromethane = 0.47 ug/L

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX16\20120430-9532.b\UXM5279.D
Lims ID: 240-10598-C-3 Client ID: MT-MW06S
Inject. Date: 30-Apr-2012 15:31:30 Dil. Factor: 1.0000
Sample Type: Client
Sample ID: 240-0009532-011
Misc. Info.: M20430A,8260LLUX16,,1904
Operator: 1904 Instrument ID: A3UX16
Vol. Injected: 1.0000 ALS Bottle#: 10
Lims Batch ID: 42171 Lims Sample ID: 11
Detector: MS SCAN

Method: \\Ncchrom\ChromData\A3UX16\20120430-9532.b\8260_16.m
Last Update: 01-May-2012 09:03:45 Calib Date: 29-Apr-2012 19:50:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX16\20120429-9509.b\UXM5250.D
Limit Group: MSV 8260DOD ICAL
Integrator: RTE ID Type: Deconvolution ID
Process Host: CORP-CTX-15

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 141 1-Chlorooctane	1		0.000					
* 1 Fluorobenzene	96	5.702	5.702	0.0	98	1598458	10.0	
* 2 Chlorobenzene-d5	117	8.393	8.394	-0.001	90	1050881	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.635	10.635	0.0	98	504682	10.0	
$ 5 Dibromofluoromethane (Surr)	113	5.120	5.121	-0.001	63	343604	9.00	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.405	5.405	0.0	0	566885	9.17	
$ 7 Toluene-d8 (Surr)	98	7.077	7.077	0.0	85	1553101	9.53	
$ 131 4-Bromofluorobenzene (Surr)	95	9.508	9.508	0.0	82	575188	9.88	
134 Chlorodifluoromethane TIC	1		0.000					
12 Dichlorodifluoromethane	85		1.670					
13 Chloromethane	50	1.824	1.836	-0.012	99	34980	0.4744	
14 Vinyl chloride	62		1.954					
15 Bromomethane	94		2.298					
16 Chloroethane	64		2.405					
18 Trichlorofluoromethane	101		2.666					
21 1,1-Dichloroethene	96		3.152					
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.176					
22 Acetone	43		3.176					
26 Carbon disulfide	76		3.365					
30 Methylene Chloride	84		3.591					
31 2-Methyl-2-propanol	59		3.674					
34 Methyl tert-butyl ether	73		3.840					
33 trans-1,2-Dichloroethene	96		3.840					
36 1,1-Dichloroethane	63		4.207					
37 Vinyl acetate	86		4.243					
38 Isopropyl ether	87		4.279					
40 Tert-butyl ethyl ether	59		4.587					
42 cis-1,2-Dichloroethene	96		4.705					
41 2-Butanone (MEK)	43		4.705					
43 2,2-Dichloropropane	77		4.717					
47 Chlorobromomethane	128		4.919					
49 Chloroform	83		4.978					
50 1,1,1-Trichloroethane	97		5.156					

Method 8270C

Semivolatile Organic Compounds (GC/MS) by Method 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MT-MW04S	240-10598-2	48	46	49	52	60	69
MT-MW06S	240-10598-3	54	49	54	51	58	69
	MB 240-41671/21-A	47	46	45	47	45	66
	LCS 240-41671/22-A	70	67	69	68	72	81
	240-10552-Q-15-A MS	61	59	56	61	68	57
	240-10552-U-15-A MSD	58	61	55	62	73	59

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	10-110
NBZ = Nitrobenzene-d5 (Surr)	27-111
FBP = 2-Fluorobiphenyl (Surr)	28-110
TBP = 2,4,6-Tribromophenol (Surr)	22-120
TPH = Terphenyl-d14 (Surr)	37-119

Column to be used to flag recovery values

FORM II 8270C

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: A4AG2 Start Date: 04/30/2012 12:57

Analysis Batch Number: 42126 End Date: 04/30/2012 15:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-42126/1		04/30/2012 12:57	1	0430001.D	RXI-5SILMS 0.45(mm)
STD9 240-42126/2 IC		04/30/2012 13:15	1	0430002.D	RXI-5SILMS 0.45(mm)
STD8 240-42126/3 IC		04/30/2012 13:33	1	0430003.D	RXI-5SILMS 0.45(mm)
STD7 240-42126/4 IC		04/30/2012 13:50	1	0430004.D	RXI-5SILMS 0.45(mm)
STD6 240-42126/5 ICIS		04/30/2012 14:08	1	0430005.D	RXI-5SILMS 0.45(mm)
STD5 240-42126/6 IC		04/30/2012 14:26	1	0430006.D	RXI-5SILMS 0.45(mm)
STD4 240-42126/7 IC		04/30/2012 14:44	1	0430007.D	RXI-5SILMS 0.45(mm)
STD3 240-42126/8 IC		04/30/2012 15:02	1	0430008.D	RXI-5SILMS 0.45(mm)
STD2 240-42126/9 IC		04/30/2012 15:19	1	0430009.D	RXI-5SILMS 0.45(mm)
STD1 240-42126/10 IC		04/30/2012 15:37	1	0430010.D	RXI-5SILMS 0.45(mm)

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab File ID: 0430001.D DFTPP Injection Date: 04/30/2012

Instrument ID: A4AG2 DFTPP Injection Time: 12:57

Analysis Batch No.: 42126

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	39.9	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	41.8	
70	Less than 2.0% of mass 69	0.1	(0.3)1
127	25.0 - 75.0% of mass 198	54.1	
197	Less than 1.0% of mass 198	0.4	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0- 30.0% of mass 198	25.2	
365	Greater than 0.75% of mass 198	3.1	
441	Present, but less than mass 443	11.7	
442	40.0 - 110.0% of mass 198	78.1	
443	15.0 - 24.0% of mass 442	15.2	(19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD9 240-42126/2	0430002.D	04/30/2012	13:15
	STD8 240-42126/3	0430003.D	04/30/2012	13:33
	STD7 240-42126/4	0430004.D	04/30/2012	13:50
	STD6 240-42126/5	0430005.D	04/30/2012	14:08
	STD5 240-42126/6	0430006.D	04/30/2012	14:26
	STD4 240-42126/7	0430007.D	04/30/2012	14:44
	STD3 240-42126/8	0430008.D	04/30/2012	15:02
	STD2 240-42126/9	0430009.D	04/30/2012	15:19
	STD1 240-42126/10	0430010.D	04/30/2012	15:37

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42126

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2012 13:15 Calibration End Date: 04/30/2012 15:37 Calibration ID: 8434

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-42126/10	0430010.D
Level 2	STD2 240-42126/9	0430009.D
Level 3	STD3 240-42126/8	0430008.D
Level 4	STD4 240-42126/7	0430007.D
Level 5	STD5 240-42126/6	0430006.D
Level 6	STD6 240-42126/5	0430005.D
Level 7	STD7 240-42126/4	0430004.D
Level 8	STD8 240-42126/3	0430003.D
Level 9	STD9 240-42126/2	0430002.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5728	0.6355 0.5627	0.5798 0.5463	0.6017 0.5108	0.5466	Ave		0.5695				6.7		15.0			
N-Nitrosodimethylamine	0.9615	1.0109 0.9653	1.0216 0.9356	1.0312 0.9342	0.9214	Ave		0.9727				4.4		15.0			
Pyridine	1.5363	1.4068 1.5922	1.4798 1.6124	1.5198 1.5216	1.4854	Ave		1.5193				4.3		15.0			
Benzaldehyde	1.5900 0.8200	1.3435 +++++	1.3737 +++++	1.3465 +++++	1.2256	Ave		1.2832				20.0	*	15.0			
Ethyl methacrylate	1.1729	1.3426 1.2068	1.3271 1.1778	1.3285 1.0865	1.2100	Ave		1.2315				7.5		15.0			
3-Chloropropionitrile	0.7915	0.8829 0.8090	0.8963 0.8283	0.8661 0.7801	0.7944	Ave		0.8311				5.4		15.0			
Malononitrile	1.6253	1.8858 1.4486	1.9479 1.2781	1.9508 1.1074	1.7573	Qua	0.0069	1.9584	-0.034						1.0000		0.9900
Benzoic acid	0.2189	+++++ 0.2575	+++++ 0.2753	0.1467 0.2823	0.2527	Qua	-0.197	0.2226	0.0013						0.9970		0.9900
Phenol	1.9116	1.9760 1.8999	2.0509 1.9403	2.0005 1.8064	1.9443	Ave		1.9412				3.8		15.0			
Aniline	2.3974	2.3054 2.4734	2.5181 2.4654	2.5390 2.4046	2.4402	Ave		2.4430				3.0		15.0			
Bis(2-chloroethyl)ether	1.5855	1.8212 1.5616	1.6973 1.7905	1.7143 1.5521	1.6590	Ave		1.6727				6.1		15.0			
2-Chlorophenol	1.5738	1.5746 1.5760	1.6506 1.6053	1.6202 1.4704	1.5891	Ave		1.5825				3.3		15.0			
1,3-Dichlorobenzene	1.5595	1.5935 1.5555	1.6495 1.5861	1.6596 1.4544	1.5619	Ave		1.5775				4.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 42126

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/30/2012 13:15 Calibration End Date: 04/30/2012 15:37 Calibration ID: 8434

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-42126/10	0430010.D
Level 2	STD2 240-42126/9	0430009.D
Level 3	STD3 240-42126/8	0430008.D
Level 4	STD4 240-42126/7	0430007.D
Level 5	STD5 240-42126/6	0430006.D
Level 6	STD6 240-42126/5	0430005.D
Level 7	STD7 240-42126/4	0430004.D
Level 8	STD8 240-42126/3	0430003.D
Level 9	STD9 240-42126/2	0430002.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	424737	34525 698155	59329 1089823	96941 1392728	225836	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	712967	54920 1197641	104539 1866625	166150 2547134	380658	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	1139143	76430 1975525	151423 3216851	244874 4148954	613675	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	16789 608024	72994 +++++	140563 +++++	216950 +++++	506348	0.100 10.0	0.500 +++++	1.00 +++++	2.00 +++++	5.00
Ethyl methacrylate	DCB	Ave	869681	72941 1497340	135794 2349655	214038 2962559	499908	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Chloropropionitrile	DCB	Ave	586866	47970 1003735	91718 1652394	139548 2127126	328194	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Malononitrile	DCB	Qua	1205153	102454 1797394	199325 2549764	314312 3019484	725985	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Qua	1396719	+++++ 2715923	+++++ 4683771	199326 6526044	895953	20.0	+++++ 30.0	+++++ 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	1417389	107357 2357330	209868 3870975	322318 4925325	803237	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1777623	125253 3068884	257675 4918602	409078 6556455	1008141	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	1175639	98947 1937554	173675 3572007	276199 4231991	685390	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	1166966	85547 1955365	168901 3202550	261047 4009323	656527	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	1156335	86576 1930027	168787 3164252	267392 3965541	645275	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	1183285	92421 1994148	174319 3215876	273135 4044012	665983	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: A4AG2 Start Date: 05/01/2012 08:29

Analysis Batch Number: 42274 End Date: 05/01/2012 20:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-42274/1		05/01/2012 08:29	1	0501001.D	RXI-5SILMS 0.45(mm)
CCV 240-42274/2 CCVIS		05/01/2012 08:47	1	0501002.D	RXI-5SILMS 0.45(mm)
ICV 240-42274/3		05/01/2012 09:05	1	0501003.D	RXI-5SILMS 0.45(mm)
MB 240-41671/21-A		05/01/2012 09:23	1	0501004.D	RXI-5SILMS 0.45(mm)
LCS 240-41671/22-A		05/01/2012 09:40	1	0501005.D	RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 09:58	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 10:15	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 10:33	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 10:51	20		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 11:09	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 11:26	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 11:44	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 12:02	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 12:19	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 12:37	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 12:55	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 13:13	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 13:30	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 13:48	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 14:06	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 14:23	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 14:41	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 14:59	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 15:17	1		RXI-5SILMS 0.45(mm)
240-10552-Q-15-A MS		05/01/2012 15:34	1	0501025.D	RXI-5SILMS 0.45(mm)
240-10552-U-15-A MSD		05/01/2012 15:52	1	0501026.D	RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 16:10	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 16:28	1		RXI-5SILMS 0.45(mm)
240-10598-2	MT-MW04S	05/01/2012 16:45	1	0501029.D	RXI-5SILMS 0.45(mm)
240-10598-3	MT-MW06S	05/01/2012 17:03	1	0501030.D	RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 17:21	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 17:39	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 17:56	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 18:14	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 18:32	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 18:50	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 19:07	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 19:25	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 19:43	1		RXI-5SILMS 0.45(mm)
ZZZZZ		05/01/2012 20:01	1		RXI-5SILMS 0.45(mm)

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab File ID: 0501001.D DFTPP Injection Date: 05/01/2012

Instrument ID: A4AG2 DFTPP Injection Time: 08:29

Analysis Batch No.: 42274

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	36.5	
68	Less than 2.0% of mass 69	0.1	(0.2)1
69	Mass 69 relative abundance	39.7	
70	Less than 2.0% of mass 69	0.0	(0.1)1
127	25.0 - 75.0% of mass 198	53.6	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	24.7	
365	Greater than 0.75% of mass 198	3.0	
441	Present, but less than mass 443	11.1	
442	40.0 - 110.0% of mass 198	77.5	
443	15.0 - 24.0% of mass 442	15.1	(19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-42274/2	0501002.D	05/01/2012	08:47
	ICV 240-42274/3	0501003.D	05/01/2012	09:05
	MB 240-41671/21-A	0501004.D	05/01/2012	09:23
	LCS 240-41671/22-A	0501005.D	05/01/2012	09:40
	240-10552-Q-15-A MS	0501025.D	05/01/2012	15:34
	240-10552-U-15-A MSD	0501026.D	05/01/2012	15:52
MT-MW04S	240-10598-2	0501029.D	05/01/2012	16:45
MT-MW06S	240-10598-3	0501030.D	05/01/2012	17:03

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42274/2 Calibration Date: 05/01/2012 08:47

Instrument ID: A4AG2 Calib Start Date: 04/30/2012 13:15

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/30/2012 15:37

Lab File ID: 0501002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5695	0.5365		9.42	10.0	-5.8	50.0
N-Nitrosodimethylamine	Ave	0.9727	0.8871		9.12	10.0	-8.8	50.0
Pyridine	Ave	1.519	1.492		9.82	10.0	-1.8	50.0
Ethyl methacrylate	Ave	1.232	1.144		9.29	10.0	-7.1	50.0
3-Chloropropionitrile	Ave	0.8311	0.7435		8.95	10.0	-10.5	50.0
Malononitrile	Qua		1.550		9.47	10.0	-5.3	50.0
Benzaldehyde	Ave	1.283	0.5752		4.48	10.0	-55.2*	50.0
Phenol	Ave	1.941	1.826		9.40	10.0	-6.0	20.0
Aniline	Ave	2.443	2.281		9.34	10.0	-6.6	50.0
Bis(2-chloroethyl)ether	Ave	1.673	1.608		9.62	10.0	-3.8	50.0
2-Chlorophenol	Ave	1.583	1.530		9.67	10.0	-3.3	50.0
1,3-Dichlorobenzene	Ave	1.578	1.534		9.72	10.0	-2.8	50.0
1,4-Dichlorobenzene	Ave	1.626	1.573		9.67	10.0	-3.3	50.0
Benzyl alcohol	Ave	1.031	0.9947		9.64	10.0	-3.6	50.0
1,2-Dichlorobenzene	Ave	1.477	1.471		9.96	10.0	-0.4	50.0
2-Methylphenol	Ave	1.429	1.418		9.92	10.0	-0.8	50.0
bis (2-chloroisopropyl) ether	Ave	1.954	1.740		8.90	10.0	-11.0	50.0
3 & 4 Methylphenol	Ave	1.552	1.476		9.51	10.0	-4.9	50.0
N-Nitrosodi-n-propylamine	Ave	1.129	1.028	0.0500	9.11	10.0	-8.9	50.0
Acetophenone	Ave	2.073	1.969		9.50	10.0	-5.0	50.0
Hexachloroethane	Ave	0.5884	0.5711		9.71	10.0	-2.9	50.0
Nitrobenzene	Ave	0.3725	0.3501		9.40	10.0	-6.0	50.0
Isophorone	Ave	0.7185	0.6609		9.20	10.0	-8.0	50.0
2,4-Dimethylphenol	Ave	0.3623	0.3428		9.46	10.0	-5.4	50.0
2-Nitrophenol	Ave	0.1926	0.1895		9.84	10.0	-1.6	20.0
1,3,5-Trichlorobenzene	Ave	0.2834	0.2766		9.76	10.0	-2.4	50.0
Bis(2-chloroethoxy)methane	Ave	0.4206	0.3929		9.34	10.0	-6.6	50.0
Benzoic acid	Qua		0.2078		17.7	20.0	-11.5	50.0
2,4-Dichlorophenol	Ave	0.2673	0.2706		10.1	10.0	1.2	20.0
1,2,4-Trichlorobenzene	Ave	0.2822	0.2771		9.82	10.0	-1.8	50.0
Naphthalene	Ave	1.129	1.064		9.43	10.0	-5.7	50.0
4-Chloroaniline	Ave	0.4756	0.4532		9.53	10.0	-4.7	50.0
Hexachlorobutadiene	Ave	0.1264	0.1237		9.79	10.0	-2.1	20.0
1,2,3-Trichlorobenzene	Ave	0.2653	0.2636		9.94	10.0	-0.6	50.0
Caprolactam	Qua		0.1304		8.96	10.0	-10.4	50.0
4-Chloro-3-methylphenol	Ave	0.3144	0.3081		9.80	10.0	-2.0	20.0
2-Methylnaphthalene	Ave	0.7092	0.6887		9.71	10.0	-2.9	50.0
1-Methylnaphthalene	Ave	0.6791	0.6501		9.57	10.0	-4.3	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.4537	0.4525		9.97	10.0	-0.3	50.0
Hexachlorocyclopentadiene	Ave	0.2414	0.2513	0.0500	10.4	10.0	4.1	50.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-42274/3 Calibration Date: 05/01/2012 09:05

Instrument ID: A4AG2 Calib Start Date: 04/30/2012 13:15

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 04/30/2012 15:37

Lab File ID: 0501003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5695	0.5708		10.0	10.0	0.2	50.0
N-Nitrosodimethylamine	Ave	0.9727	0.9032		9.29	10.0	-7.1	50.0
Pyridine	Ave	1.519	1.532		10.1	10.0	0.8	50.0
Ethyl methacrylate	Ave	1.232	1.194		9.70	10.0	-3.0	50.0
3-Chloropropionitrile	Ave	0.8311	0.7699		9.26	10.0	-7.4	50.0
Malononitrile	Qua		1.585		9.73	10.0	-2.7	50.0
Benzaldehyde	Ave	1.283	0.6291		4.90	10.0	-51.0*	50.0
Phenol	Ave	1.941	1.827		9.41	10.0	-5.9	20.0
Aniline	Ave	2.443	2.303		9.43	10.0	-5.7	50.0
Bis(2-chloroethyl)ether	Ave	1.673	1.621		9.69	10.0	-3.1	50.0
2-Chlorophenol	Ave	1.583	1.558		9.84	10.0	-1.6	50.0
1,3-Dichlorobenzene	Ave	1.578	1.567		9.93	10.0	-0.7	50.0
1,4-Dichlorobenzene	Ave	1.626	1.611		9.91	10.0	-0.9	20.0
Benzyl alcohol	Ave	1.031	0.9846		9.55	10.0	-4.5	50.0
1,2-Dichlorobenzene	Ave	1.477	1.490		10.1	10.0	0.9	50.0
2-Methylphenol	Ave	1.429	1.431		10.0	10.0	0.2	50.0
bis (2-chloroisopropyl) ether	Ave	1.954	1.755		8.98	10.0	-10.2	50.0
3 & 4 Methylphenol	Ave	1.552	1.495		9.63	10.0	-3.7	50.0
N-Nitrosodi-n-propylamine	Ave	1.129	1.041	0.0500	9.22	10.0	-7.8	50.0
Acetophenone	Ave	2.073	2.000		9.65	10.0	-3.5	50.0
Hexachloroethane	Ave	0.5884	0.5789		9.84	10.0	-1.6	50.0
Nitrobenzene	Ave	0.3725	0.3562		9.56	10.0	-4.4	50.0
Isophorone	Ave	0.7185	0.6691		9.31	10.0	-6.9	50.0
2,4-Dimethylphenol	Ave	0.3623	0.3453		9.53	10.0	-4.7	50.0
2-Nitrophenol	Ave	0.1926	0.1966		10.2	10.0	2.1	20.0
1,3,5-Trichlorobenzene	Ave	0.2834	0.2834		10.0	10.0	-0.0	50.0
Bis(2-chloroethoxy)methane	Ave	0.4206	0.4016		9.55	10.0	-4.5	50.0
Benzoic acid	Qua		0.2014		17.2	20.0	-14.0	50.0
2,4-Dichlorophenol	Ave	0.2673	0.2734		10.2	10.0	2.3	20.0
1,2,4-Trichlorobenzene	Ave	0.2822	0.2834		10.0	10.0	0.4	50.0
Naphthalene	Ave	1.129	1.096		9.70	10.0	-3.0	50.0
4-Chloroaniline	Ave	0.4756	0.4518		9.50	10.0	-5.0	50.0
Hexachlorobutadiene	Ave	0.1264	0.1288		10.2	10.0	1.9	20.0
1,2,3-Trichlorobenzene	Ave	0.2653	0.2680		10.1	10.0	1.0	50.0
Caprolactam	Qua		0.1313		9.03	10.0	-9.7	50.0
4-Chloro-3-methylphenol	Ave	0.3144	0.3094		9.84	10.0	-1.6	20.0
2-Methylnaphthalene	Ave	0.7092	0.6990		9.86	10.0	-1.4	50.0
1-Methylnaphthalene	Ave	0.6791	0.6603		9.72	10.0	-2.8	50.0
Hexachlorocyclopentadiene	Ave	0.2414	0.2610	0.0500	10.8	10.0	8.1	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.4537	0.4620		10.2	10.0	1.8	50.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab File ID: 0501004.D Lab Sample ID: MB 240-41671/21-A

Matrix: Water Date Extracted: 04/26/2012 08:59

Instrument ID: A4AG2 Date Analyzed: 05/01/2012 09:23

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-41671/22-A	0501005.D	05/01/2012 09:40
	240-10552-Q-15-A MS	0501025.D	05/01/2012 15:34
	240-10552-U-15-A MSD	0501026.D	05/01/2012 15:52
MT-MW04S	240-10598-2	0501029.D	05/01/2012 16:45
MT-MW06S	240-10598-3	0501030.D	05/01/2012 17:03

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-41671/21-A

Matrix: Water | Lab File ID: 0501004.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 04/26/2012 08:59

Sample wt/vol: 1000(mL) | Date Analyzed: 05/01/2012 09:23

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42274 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	47		28-110
367-12-4	2-Fluorophenol (Surr)	47		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	45		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	45		27-111
4165-62-2	Phenol-d5 (Surr)	46		10-110
1718-51-0	Terphenyl-d14 (Surr)	66		37-119

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 0501005.D

Lab ID: LCS 240-41671/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	13.0	65	10-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Sample No.: STD6 240-42126/5 Date Analyzed: 04/30/2012 14:08

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0430005.D Heated Purge: (Y/N) N

Calibration ID: 8434

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		296592	3.68	1276255	4.59	695164	5.86
UPPER LIMIT		593184	4.18	2552510	5.09	1390328	6.36
LOWER LIMIT		148296	3.18	638128	4.09	347582	5.36
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-42274/2 CCVIS		360379	3.58	1508108	4.47	812845	5.75
ICV 240-42274/3		356861	3.58	1483234	4.47	792419	5.75

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Sample No.: STD6 240-42126/5 Date Analyzed: 04/30/2012 14:08

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0430005.D Heated Purge: (Y/N) N

Calibration ID: 8434

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1087336	6.96	992470	8.96	923665	10.52
UPPER LIMIT		2174672	7.46	1984940	9.46	1847330	11.02
LOWER LIMIT		543668	6.46	496235	8.46	461833	10.02
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-42274/2 CCVIS		1259704	6.84	1089704	8.82	1027957	10.28
ICV 240-42274/3		1218080	6.84	1073389	8.82	992749	10.28

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Sample No.: CCV 240-42274/2 Date Analyzed: 05/01/2012 08:47

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0501002.D Heated Purge: (Y/N) N

Calibration ID: 8434

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		360379	3.58	1508108	4.47	812845	5.75
UPPER LIMIT		720758	4.08	3016216	4.97	1625690	6.25
LOWER LIMIT		180190	3.08	754054	3.97	406423	5.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-41671/21-A		370468	3.58	1523922	4.47	835901	5.74
LCS 240-41671/22-A		357218	3.58	1488091	4.47	830775	5.75
240-10552-Q-15-A MS		373991	3.58	1524197	4.48	843121	5.75
240-10552-U-15-A MSD		303516	3.58	1275017	4.48	724837	5.75
240-10598-2	MT-MW04S	339346	3.58	1363317	4.47	715088	5.75
240-10598-3	MT-MW06S	423247	3.58	1566985	4.48	736253	5.75

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Sample No.: CCV 240-42274/2 Date Analyzed: 05/01/2012 08:47

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0501002.D Heated Purge: (Y/N) N

Calibration ID: 8434

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1259704	6.84	1089704	8.82	1027957	10.28
UPPER LIMIT		2519408	7.34	2179408	9.32	2055914	10.78
LOWER LIMIT		629852	6.34	544852	8.32	513979	9.78
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-41671/21-A		1287166	6.84	1117554	8.81	1053124	10.28
LCS 240-41671/22-A		1296597	6.84	1135359	8.82	1065151	10.28
240-10552-Q-15-A MS		1324424	6.84	1203069	8.83	1118651	10.30
240-10552-U-15-A MSD		1156933	6.84	1084502	8.83	1040979	10.31
240-10598-2	MT-MW04S	1257376	6.84	1134277	8.83	1084082	10.30
240-10598-3	MT-MW06S	1457348	6.84	1290432	8.83	1211618	10.30

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Batch Number: 41671 Batch Start Date: 04/26/12 11:10 Batch Analyst: Matthews, Brandon

Batch Method: 3520C Batch End Date: 04/27/12 05:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	FirstAdjustpH	EXBNALCS1 00020	EXBNASURRW 00012
240-10598-L-2	MT-MW04S	3520C, 8270C	T	5 SU	1010 mL	2 mL	2 SU		1 mL
240-10598-J-3	MT-MW06S	3520C, 8270C	T	5 SU	980 mL	2 mL	2 SU		1 mL
240-10552-Q-15 MS		3520C, 8270C	T	7 SU	1050 mL	2 mL	2 SU	1 mL	1 mL
240-10552-U-15 MSD		3520C, 8270C	T	7 SU	1020 mL	2 mL	2 SU	1 mL	1 mL
MB 240-41671/21		3520C, 8270C		7 SU	1000 mL	2 mL	2 SU		1 mL
LCS 240-41671/22		3520C, 8270C		7 SU	1000 mL	2 mL	2 SU	1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXRESTEKSPKW 00010					
240-10598-L-2	MT-MW04S	3520C, 8270C	T						
240-10598-J-3	MT-MW06S	3520C, 8270C	T						
240-10552-Q-15 MS		3520C, 8270C	T	1 mL					
240-10552-U-15 MSD		3520C, 8270C	T	1 mL					
MB 240-41671/21		3520C, 8270C							
LCS 240-41671/22		3520C, 8270C		1 mL					

Batch Notes	
Acid used for pH adjust Lot #	178762
Batch Comment	s/s bpm
Na2SO4 Lot Number	275335
Prep Solvent Lot #	454500

Basis	Basis Description
T	Total/NA

Method 8015B - GRO

Gasoline Range Organics (GC) by Method 8015B

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
MT-MW04S	240-10598-2	65
MT-MW06S	240-10598-3	64
	MB 240-42055/7	63
	LCS 240-42055/8	73
MT-MW04S MS	240-10598-2 MS	75
MT-MW04S MSD	240-10598-2 MSD	71

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015B

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 33435

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/10/2012 16:17 Calibration End Date: 02/10/2012 19:27 Calibration ID: 6924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-33435/12	YF021012.D
Level 2	STD2 240-33435/13	YF021013.D
Level 3	STD3 240-33435/14	YF021014.D
Level 4	STD4 240-33435/15	YF021015.D
Level 5	STD5 240-33435/16	YF021016.D
Level 6	STD6 240-33435/17	YF021017.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.810	11.810	11.810	11.810	11.810	11.810					4.817 - 18.802	11.810
C6-C12	13.469	13.469	13.469	13.469	13.469	13.469					4.917 - 22.022	13.469
Trifluorotoluene (Surr)	9.768	9.772	9.769	9.772	9.771	9.774					9.522 - 10.022	9.771

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 33435

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/10/2012 16:17 Calibration End Date: 02/10/2012 19:27 Calibration ID: 6924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-33435/12	YF021012.D
Level 2	STD2 240-33435/13	YF021013.D
Level 3	STD3 240-33435/14	YF021014.D
Level 4	STD4 240-33435/15	YF021015.D
Level 5	STD5 240-33435/16	YF021016.D
Level 6	STD6 240-33435/17	YF021017.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	318103 289067	320460 294590	282575	294457	Ave		299875.299				5.2		20.0			
C6-C12	375472 318195	363940 323226	316555	324196	Ave		336930.834				7.7		20.0			
Trifluorotoluene (Surr)	384133 460736	375012 483108	395882	424093	Ave		420494.083				10.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 33435

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/10/2012 16:17 Calibration End Date: 02/10/2012 19:27 Calibration ID: 6924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-33435/12	YF021012.D
Level 2	STD2 240-33435/13	YF021013.D
Level 3	STD3 240-33435/14	YF021014.D
Level 4	STD4 240-33435/15	YF021015.D
Level 5	STD5 240-33435/16	YF021016.D
Level 6	STD6 240-33435/17	YF021017.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Total Petroleum Hydrocarbons (C6-C10)	Ave	31810312 471343808	64091921	113029874	235565977	346880438	100 1600	200	400	800	1200
C6-C12	Ave	37547242 517161889	72788086	126621830	259357128	381833988	100 1600	200	400	800	1200
Trifluorotoluene (Surr)	Ave	3841333 4831084	3750122	3958818	4240925	4607363	10.0 10.0	10.0	10.0	10.0	10.0

Curve Type Legend:
Ave = Average

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-33435/18 Calibration Date: 02/10/2012 20:05

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF021018.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	333932		891	800	11.4	20.0
C6-C12	Ave	336931	375679		892	800	11.5	20.0
Trifluorotoluene (Surr)	Ave	420494	416828		9.91	10.0	-0.9	20.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-33435/18 Calibration Date: 02/10/2012 20:05

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF021018.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.81	4.82	18.80
C6-C12	13.47	4.92	22.02
Trifluorotoluene (Surr)	9.77	9.52	10.02

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Sample No.: CCV 240-42055/6 Date Analyzed: 04/28/2012 16:30

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF042806.D Heated Purge: (Y/N) N

Calibration ID: 6924

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.75		
UPPER LIMIT				9.85		
LOWER LIMIT				9.65		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-42055/6 CCVRT		04/28/2012 16:30	YF042806.D	9.75		
MB 240-42055/7		04/28/2012 17:07	YF042807.D	9.75		
LCS 240-42055/8		04/28/2012 17:45	YF042808.D	9.76		
240-10598-2	MT-MW04S	04/28/2012 18:22	YF042809.D	9.75		
240-10598-2 MS	MT-MW04S MS	04/28/2012 18:59	YF042810.D	9.75		
240-10598-2 MSD	MT-MW04S MSD	04/28/2012 19:36	YF042811.D	9.76		
240-10598-3	MT-MW06S	04/28/2012 20:13	YF042812.D	9.75		
CCV 240-42055/16		04/28/2012 22:43	YF042816.D	9.75		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015B

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42055/6 Calibration Date: 04/28/2012 16:30

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF042806.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	319489		852	800	6.5	15.0
C6-C12	Ave	336931	355619		844	800	5.5	15.0
Trifluorotoluene (Surr)	Ave	420494	318723		7.58	10.0	-24.2*	15.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42055/6 Calibration Date: 04/28/2012 16:30

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF042806.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.80	4.81	18.78
C6-C12	13.41	4.91	21.91
Trifluorotoluene (Surr)	9.75	9.50	10.00

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42055/16 Calibration Date: 04/28/2012 22:43

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF042816.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	304088		811	800	1.4	15.0
C6-C12	Ave	336931	340309		808	800	1.0	15.0
Trifluorotoluene (Surr)	Ave	420494	314986		7.49	10.0	-25.1*	15.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42055/16 Calibration Date: 04/28/2012 22:43

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF042816.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.80	4.81	18.78
C6-C12	13.41	4.91	21.91
Trifluorotoluene (Surr)	9.75	9.50	10.00

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: MB 240-42055/7

Matrix: Water Date Extracted: 04/28/2012 17:07

Lab File ID:(1) YF042807.D Lab File ID:(2)

Date Analyzed:(1) 04/28/2012 17:07 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-42055/8	04/28/2012 17:45	
MT-MW04S	240-10598-2	04/28/2012 18:22	
MT-MW04S MS	240-10598-2 MS	04/28/2012 18:59	
MT-MW04S MSD	240-10598-2 MSD	04/28/2012 19:36	
MT-MW06S	240-10598-3	04/28/2012 20:13	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-42055/7

Matrix: Water | Lab File ID: YF042807.D

Analysis Method: 8015B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/28/2012 17:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	32.9	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	63		10-150

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF042808.D

Lab ID: LCS 240-42055/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	896	112	72-140	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF042810.D

Lab ID: 240-10598-2 MS Client ID: MT-MW04S MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	49 J	963	114	63-143	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III

GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF042811.D

Lab ID: 240-10598-2 MSD Client ID: MT-MW04S MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	930	110	4	20	63-143	

Column to be used to flag recovery and RPD values

FORM III 8015B

Method 8015B - DRO

Diesel Range Organics (DRO) (GC) by Method 8015B

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-5 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	C91 #
MT-MW04S	240-10598-2	51
MT-MW06S	240-10598-3	44
	MB 240-41890/15-A	62
	LCS 240-41890/16-A	47

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015B

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 41691

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/26/2012 12:11 Calibration End Date: 04/26/2012 14:16 Calibration ID: 8406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-41691/4	P6F04264.D
Level 2	STD2 240-41691/5	P6F04265.D
Level 3	STD3 240-41691/6	P6F04266.D
Level 4	STD4 240-41691/7	P6F04267.D
Level 5	STD5 240-41691/8	P6F04268.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	9.493	9.493	9.493	9.493	9.493						5.280 - 13.709	9.493
n-Nonane	4.296	4.295	4.296	4.296	4.298						4.246 - 4.346	4.296

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 41691

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/26/2012 12:11 Calibration End Date: 04/26/2012 14:16 Calibration ID: 8406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-41691/4	P6F04264.D
Level 2	STD2 240-41691/5	P6F04265.D
Level 3	STD3 240-41691/6	P6F04266.D
Level 4	STD4 240-41691/7	P6F04267.D
Level 5	STD5 240-41691/8	P6F04268.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	198430 174115	188482	182432	173562	Ave		183404.386				5.7		20.0			
n-Nonane	213382 212758	214563	217346	210050	Ave		213619.735				1.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10598-1 Analy Batch No.: 41691

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/26/2012 12:11 Calibration End Date: 04/26/2012 14:16 Calibration ID: 8406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-41691/4	P6F04264.D
Level 2	STD2 240-41691/5	P6F04265.D
Level 3	STD3 240-41691/6	P6F04266.D
Level 4	STD4 240-41691/7	P6F04267.D
Level 5	STD5 240-41691/8	P6F04268.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel	Ave	19843021	37696404	91215944	173562318	348230992	100	200	500	1000	2000
n-Nonane	Ave	2133821	4291261	10867284	21005029	42551511	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-41691/9 Calibration Date: 04/26/2012 14:47

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04269.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	183404	171101		467	500	-6.7	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICV 240-41691/9 Calibration Date: 04/26/2012 14:47

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04269.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.49	5.28	13.71

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Sample No.: CCVRT 240-42140/4 Date Analyzed: 04/30/2012 11:25

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F04304.D Heated Purge: (Y/N) N

Calibration ID: 8406

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.29		
UPPER LIMIT				4.39		
LOWER LIMIT				4.19		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-42140/4		04/30/2012 11:25	P6F04304.D	4.29		
240-10598-2	MT-MW04S	04/30/2012 13:30	P6F04308.D	4.29		
240-10598-3	MT-MW06S	04/30/2012 14:01	P6F04309.D	4.29		
MB 240-41890/15-A		04/30/2012 19:13	P6F04319.D	4.29		
LCS 240-41890/16-A		04/30/2012 19:44	P6F04320.D	4.29		
CCV 240-42140/21		04/30/2012 20:15	P6F04321.D	4.30		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015B

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCVRT 240-42140/4 Calibration Date: 04/30/2012 11:25

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04304.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	183404	184302		502	500	0.5	15.0
n-Nonane	Ave	213620	221736		51.9	50.0	3.8	15.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCVRT 240-42140/4 Calibration Date: 04/30/2012 11:25

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04304.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.49	5.27	13.70
n-Nonane	4.29	4.24	4.34

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42140/21 Calibration Date: 04/30/2012 20:15

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04321.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	183404	202278		552	500	10.3	15.0
n-Nonane	Ave	213620	238934		55.9	50.0	11.8	15.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: CCV 240-42140/21 Calibration Date: 04/30/2012 20:15

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04321.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.49	5.27	13.70
n-Nonane	4.30	4.24	4.34

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: MB 240-41890/15-A

Matrix: Water Date Extracted: 04/27/2012 10:39

Lab File ID:(1) P6F04319.D Lab File ID:(2)

Date Analyzed:(1) 04/30/2012 19:13 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MT-MW04S	240-10598-2	04/30/2012 13:30	
MT-MW06S	240-10598-3	04/30/2012 14:01	
	LCS 240-41890/16-A	04/30/2012 19:44	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10598-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-41890/15-A

Matrix: Water | Lab File ID: P6F04319.D

Analysis Method: 8015B | Date Collected:

Extraction Method: 3520C | Date Extracted: 04/27/2012 10:39

Sample wt/vol: 1000(mL) | Date Analyzed: 04/30/2012 19:13

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42140 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	422	J	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	62		10-110

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P6F04320.D

Lab ID: LCS 240-41890/16-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2500	1860	74	36-124	

Column to be used to flag recovery and RPD values

FORM III 8015B

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

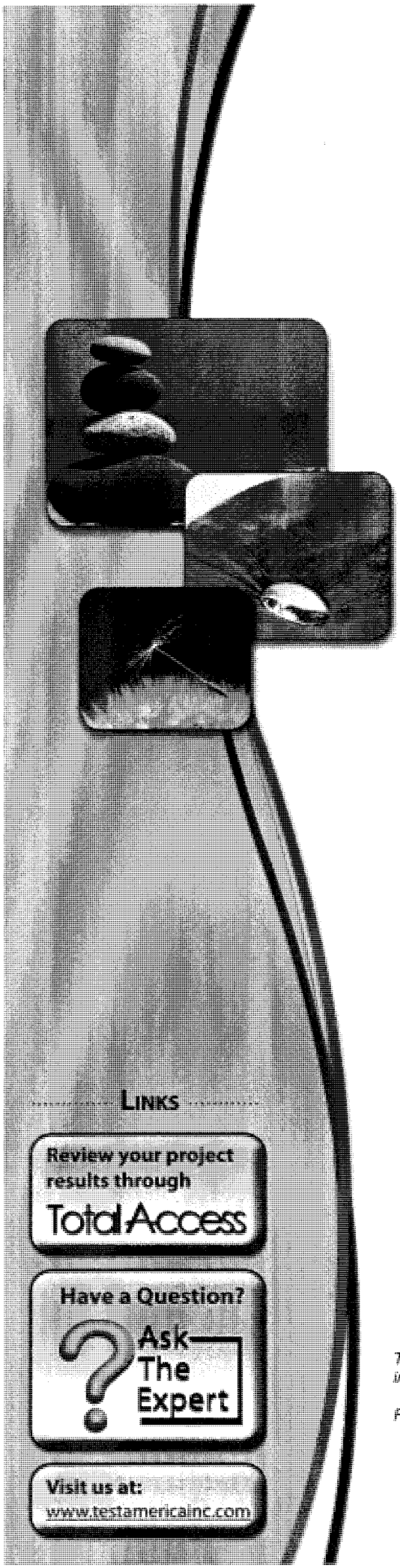
Batch Number: 41890 Batch Start Date: 04/27/12 12:00 Batch Analyst: Kendall, Aaron

Batch Method: 3520C Batch End Date: 04/28/12 06:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	EXDIESELSPKW 00015	EXTPHSURR 00011
240-10598-K-2	MT-MW04S	3520C, 8015B	T	1020 mL	5 mL	6	2		1 mL
240-10598-I-3	MT-MW06S	3520C, 8015B	T	1010 mL	5 mL	5	2		1 mL
MB 240-41890/15		3520C, 8015B		1000 mL	5 mL	7	2		1 mL
LCS 240-41890/16		3520C, 8015B		1000 mL	5 mL	7	2	1 mL	1 mL

Batch Notes	
Na2SO4 Lot Number	275338
Prep Solvent Lot #	454506

Basis	Basis Description
T	Total/NA



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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica West Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

TestAmerica Job ID: G2D270498
Client Project/Site: 240-10598
Client Project Description: 240-10598/MSA GW

For:
TestAmerica North Canton
4101 Shuffel Street NW
North Canton, OH 44720

Attn: Patrick Omeara

Authorized for release by:
5/11/2012 4:54:37 PM

Karen Dahl
Project Manager
karen.dahl@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Case Narrative

TestAmerica West Sacramento Project Number G2D270498

WATER, 6850, Perchlorate
Sample(s): 1, 1, 1, 2
In accordance with the requirements of Method 6850, both a Laboratory Control Sample (LCS) and a Synthetic Matrix Check Sample (SMCS) were analyzed with the associated samples. Both are reported on the LCS data evaluation and recovery reports, and are differentiated from one another by their workorder number:

LCS: MTAGP1AC
SMCS: MTAGP1AD

There were no other anomalies associated with this project.

ANALYTICAL METHODS SUMMARY

G2D270498

PARAMETER	ANALYTICAL METHOD
Perchlorate by 6850	SW846 6850

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

QC DATA ASSOCIATION SUMMARY

G2D270498

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6850		2122104	2122054
002	WATER	SW846 6850		2122104	2122054

METHOD BLANK REPORT

HPLC - Mass. Spec.

Client Lot #...: G2D270498 **Work Order #...:** MTAGP1AA **Matrix.....:** WATER
MB Lot-Sample #: G2E010000-104

Prep Date.....: 05/01/12
Analysis Date..: 05/04/12 **Prep Batch #...:** 2122104
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	1.0	ug/L	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC - Mass. Spec.

Client Lot #...: G2D270498 Work Order #...: MTAGP1AC Matrix.....: WATER
LCS Lot-Sample#: G2E010000-104
Prep Date.....: 05/01/12 Analysis Date..: 05/04/12
Prep Batch #...: 2122104
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	95	(80 - 120)	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC - Mass. Spec.

Client Lot #...: G2D270498 **Work Order #...:** MTAGP1AD **Matrix.....:** WATER
LCS Lot-Sample#: G2E010000-104
Prep Date.....: 05/01/12 **Analysis Date..:** 05/04/12
Prep Batch #...: 2122104
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	**100**	**(80 - 120)**	**SW846 6850**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC - Mass. Spec.

Client Lot #...: G2D270498 **Work Order #...:** MR86V1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: G2D270498-001 MR86V1AD-MSD
Date Sampled...: 04/24/12 **Date Received..:** 04/27/12
Prep Date.....: 05/01/12 **Analysis Date..:** 05/04/12
Prep Batch #...: 2122104
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	**100**	**(80 - 120)**			**SW846 6850**
	97	**(80 - 120)**	**2.5**	**(0-15)**	**SW846 6850**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
04MAY12-perc-005.d	Blank No IS	P2-A5		Sample	5/4/2012 13:46
04MAY12-perc-006.d	LC6850L9_00001 Blank + IS	P2-B1		Sample	5/4/2012 14:02
04MAY12-perc-007.d	LC6850L1_00001 12LCMS0064, 0.15ng/mL	P2-B2	1	Calibration	5/4/2012 14:19
04MAY12-perc-008.d	LC6850L2_00001 12LCMS0065, 0.30ng/mL	P2-B3	2	Calibration	5/4/2012 14:35
04MAY12-perc-009.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-B4	3	Calibration	5/4/2012 14:51
04MAY12-perc-010.d	LC6850L4_00001 12LCMS0067, 1.0ng/mL	P2-B5	4	Calibration	5/4/2012 15:07
04MAY12-perc-011.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-B6	5	Calibration	5/4/2012 15:23
04MAY12-perc-012.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-B7	6	Calibration	5/4/2012 15:40
04MAY12-perc-013.d	LC6850L7_00001 12LCMS0070, 10ng/mL	P2-B8	7	Calibration	5/4/2012 15:56
04MAY12-perc-014.d	LC6850L8_00001 12LCMS0071, 20ng/mL	P2-B9	8	Calibration	5/4/2012 16:12
04MAY12-perc-015.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/4/2012 16:28
04MAY12-perc-016.d	LC6850IC_00001 12LCMS0073, 5.0ng/mL	P2-C2	ICV	QC	5/4/2012 16:45
04MAY12-perc-017.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/4/2012 17:01
04MAY12-perc-018.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-C4	CCV3	QC	5/4/2012 17:17
04MAY12-perc-019.d	LC6850L1_00001 12LCMS0064, 0.15ng/mL	P2-C3	LODV	QC	5/4/2012 17:33
04MAY12-perc-020.d	G2E010000-MB, 2122104, 2.00mL/2.00mL, 6850-L	P1-A1		Sample	5/4/2012 17:49
04MAY12-perc-021.d	G2E010000-LCS, 2122104, 2.00mL/2.00mL	P1-A2	LCS_5	QC	5/4/2012 18:06
04MAY12-perc-022.d	G2E010000-SMCS, 2122104, 2.00mL/2.00mL	P1-A3	LCS_5	QC	5/4/2012 18:22
04MAY12-perc-023.d	G2D270498-1, 2122104, - *IS missing-see RI*	P1-A4		Sample	5/4/2012 18:38
04MAY12-perc-024.d	G2D270498-1MS, 2122104, 2.00mL/2.00mL,	P1-A5	MS_5	QC	5/4/2012 18:54
04MAY12-perc-025.d	G2D270498-1SD, 2122104, 2.00mL/2.00mL,	P1-A6	MS_5	QC	5/4/2012 19:10
04MAY12-perc-026.d	G2D270498-2, 2122104, 2.00mL/2.00mL,	P1-A7		Sample	5/4/2012 19:27
04MAY12-perc-027.d	G2D270500-1, 2122104, 2.00mL/2.00mL,	P1-A8		Sample	5/4/2012 19:43
04MAY12-perc-028.d	G2D300415-1, 2122104, *- IS failed criteria - see 5x dilution*	P1-A9		Sample	5/4/2012 19:59
04MAY12-perc-029.d	G2D300415-2, 2122104, *- IS failed criteria - see 5x dilution*	P1-B1		Sample	5/4/2012 20:15
04MAY12-perc-030.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-C6	CCV5	QC	5/4/2012 20:32
04MAY12-perc-031.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-C4	CCV3	QC	5/4/2012 20:48

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Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

04MAY12-perc-032.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/4/2012 21:04
04MAY12-perc-033.d	G2D300000-MB, 2121147, 3.00g/10mL, 6850-DOD-S	P1-B2		Sample	5/4/2012 21:20
04MAY12-perc-034.d	G2D300000-LCS, 2121147, 3.00g/10mL,	P1-B3	LCS_5	QC	5/4/2012 21:36
04MAY12-perc-035.d	G2D300000-SMCS, 2121147, 3.00g/10mL,	P1-B4	LCS_5	QC	5/4/2012 21:53
04MAY12-perc-036.d	G2D240413-1, 2121147, 3.00g/10mL,	P1-B5		Sample	5/4/2012 22:09
04MAY12-perc-037.d	G2D240413-1MS, 2121147, 3.04g/10mL,	P1-B6	MS_5	QC	5/4/2012 22:25
04MAY12-perc-038.d	G2D240413-1SD, 2121147, 3.06g/10mL,	P1-B7	MS_5	QC	5/4/2012 22:41
04MAY12-perc-039.d	G2D240413-2, 2121147, 2.99g/10mL,	P1-B8		Sample	5/4/2012 22:58
04MAY12-perc-040.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/4/2012 23:14
04MAY12-perc-041.d	LC6850L1_00001 12LCMS0064, 0.15ng/mL	P2-C3	LODV	QC	5/4/2012 23:30
04MAY12-perc-042.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/4/2012 23:46
04MAY12-perc-043.d	G2E020000-MB, 2123122, 3.00g/10mL, 6850-DOD-S	P1-B9		Sample	5/5/2012 00:02
04MAY12-perc-044.d	G2E020000-LCS, 2123122, 3.00g/10mL,	P1-C1	LCS_5	QC	5/5/2012 00:19
04MAY12-perc-045.d	G2E020000-SMCS, 2123122, 3.00g/10mL,	P1-C2	LCS_5	QC	5/5/2012 00:35
04MAY12-perc-046.d	G2D270504-1, 2123122, 3.00g/10mL,	P1-C3		Sample	5/5/2012 00:51
04MAY12-perc-047.d	G2D270504-2, 2123122, 3.01g/10mL,	P1-C4		Sample	5/5/2012 01:07
04MAY12-perc-048.d	G2D270504-3, 2123122, 3.00g/10mL,	P1-C5		Sample	5/5/2012 01:24
04MAY12-perc-049.d	G2D270504-4, 2123122, 3.09g/10mL,	P1-C6		Sample	5/5/2012 01:40
04MAY12-perc-050.d	G2D270504-5, 2123122, 3.01g/10mL,	P1-C7		Sample	5/5/2012 01:56
04MAY12-perc-051.d	G2D270504-6, 2123122, 3.10g/10mL,	P1-C8		Sample	5/5/2012 02:12
04MAY12-perc-052.d	G2D270504-7, 2123122, 3.06g/10mL,	P1-C9		Sample	5/5/2012 02:28
04MAY12-perc-053.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-C6	CCV5	QC	5/5/2012 02:45
04MAY12-perc-054.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/5/2012 03:01
04MAY12-perc-055.d	G2D270504-8, 2123122, 3.07g/10mL,	P1-D1		Sample	5/5/2012 03:17
04MAY12-perc-056.d	G2D270504-9, 2123122, 3.01g/10mL,	P1-D2		Sample	5/5/2012 03:33
04MAY12-perc-057.d	G2D270504-10, 2123122, 3.03g/10mL,	P1-D3		Sample	5/5/2012 03:50
04MAY12-perc-058.d	G2D270504-10MS, 2123122, 3.05g/10mL,	P1-D4	MS_5	QC	5/5/2012 04:06
04MAY12-perc-059.d	G2D270504-10SD, 2123122, 3.07g/10mL,	P1-D5	MS_5	QC	5/5/2012 04:22
04MAY12-perc-060.d	G2D270504-11, 2123122, 3.00g/10mL,	P1-D6		Sample	5/5/2012 04:38
04MAY12-perc-061.d	G2D270504-12, 2123122, 3.01g/10mL,	P1-D7		Sample	5/5/2012 04:54

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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TestAmerica Inc.
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04MAY12-perc-062.d	G2D270504-13, 2123122, 3.04g/10mL,	P1-D8		Sample	5/5/2012 05:11
04MAY12-perc-063.d	G2D270504-14, 2123122, 3.04g/10mL,	P1-D9		Sample	5/5/2012 05:27
04MAY12-perc-064.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/5/2012 05:43
04MAY12-perc-065.d	LC6850L1_00001 12LCMS0064, 0.15ng/mL	P2-C3	LODV	QC	5/5/2012 05:59
04MAY12-perc-066.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/5/2012 06:15
04MAY12-perc-067.d	G2E020000-MB, 2123123, 3.00g/10mL, 6850-DOD-S	P1-E1		Sample	5/5/2012 06:32
04MAY12-perc-068.d	G2E020000-LCS, 2123123, 3.00g/10mL,	P1-E2	LCS_5	QC	5/5/2012 06:48
04MAY12-perc-069.d	G2E020000-SMCS, 2123123, 3.00g/10mL,	P1-E3	LCS_5	QC	5/5/2012 07:04
04MAY12-perc-070.d	G2D270504-15, 2123123, 3.08g/10mL,	P1-E4		Sample	5/5/2012 07:20
04MAY12-perc-071.d	G2D270504-15MS, 2123123, 3.00g/10mL,	P1-E5	MS_5	QC	5/5/2012 07:36
04MAY12-perc-072.d	G2D270504-15SD, 2123123, 3.01g/10mL,	P1-E6	MS_5	QC	5/5/2012 07:53
04MAY12-perc-073.d	G2D270504-16, 2123123, 3.09g/10mL,	P1-E7		Sample	5/5/2012 08:09
04MAY12-perc-074.d	G2D270504-17, 2123123, 3.03g/10mL,	P1-E8		Sample	5/5/2012 08:25
04MAY12-perc-075.d	G2D270504-18, 2123123, 3.00g/10mL,	P1-E9		Sample	5/5/2012 08:41
04MAY12-perc-076.d	G2D270504-19, 2123123, 3.08g/10mL,	P1-F1		Sample	5/5/2012 08:58
04MAY12-perc-077.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-C6	CCV5	QC	5/5/2012 09:14
04MAY12-perc-078.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/5/2012 09:30
04MAY12-perc-079.d	G2D270504-20, 2123123, 3.04g/10mL,	P1-F2		Sample	5/5/2012 09:46
04MAY12-perc-080.d	G2D270504-21, 2123123, 3.05g/10mL,	P1-F3		Sample	5/5/2012 10:02
04MAY12-perc-081.d	G2D270504-22, 2123123, 3.08g/10mL,	P1-F4		Sample	5/5/2012 10:19
04MAY12-perc-082.d	G2D270504-23, 2123123, 3.00g/10mL,	P1-F5		Sample	5/5/2012 10:35
04MAY12-perc-083.d	G2D270504-24, 2123123, 3.03g/10mL,	P1-F6		Sample	5/5/2012 10:51
04MAY12-perc-084.d	G2D270504-25, 2123123, 3.02g/10mL,	P1-F7		Sample	5/5/2012 11:07
04MAY12-perc-085.d	G2D270504-26, 2123123, 3.01g/10mL,	P1-F8		Sample	5/5/2012 11:23
04MAY12-perc-086.d	G2D270504-27, 2123123, 3.02g/10mL,	P1-F9		Sample	5/5/2012 11:40
04MAY12-perc-087.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/5/2012 11:56
04MAY12-perc-088.d	LC6850L1_00001 12LCMS0064, 0.15ng/mL	P2-C3	LODV	QC	5/5/2012 12:12
04MAY12-perc-089.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/5/2012 12:28

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Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\07MAY2012\QuantResults\07May2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
07MAY12-perc-005.d	Blank No IS	P2-A5		Sample	5/7/2012 13:21
07MAY12-perc-006.d	LC6850L9_00001 Blank + IS	P2-B1		Sample	5/7/2012 13:37
07MAY12-perc-007.d	LC6850L1_00001 12LCMS0064, 0.15ng/mL	P2-B2	1	Calibration	5/7/2012 13:53
07MAY12-perc-008.d	LC6850L2_00001 12LCMS0065, 0.30ng/mL	P2-B3	2	Calibration	5/7/2012 14:09
07MAY12-perc-009.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-B4	3	Calibration	5/7/2012 14:26
07MAY12-perc-010.d	LC6850L4_00001 12LCMS0067, 1.0ng/mL	P2-B5	4	Calibration	5/7/2012 14:42
07MAY12-perc-011.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-B6	5	Calibration	5/7/2012 14:58
07MAY12-perc-012.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-B7	6	Calibration	5/7/2012 15:14
07MAY12-perc-013.d	LC6850L7_00001 12LCMS0070, 10ng/mL	P2-B8	7	Calibration	5/7/2012 15:31
07MAY12-perc-014.d	LC6850L8_00001 12LCMS0071, 20ng/mL	P2-B9	8	Calibration	5/7/2012 15:47
07MAY12-perc-015.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/7/2012 16:03
07MAY12-perc-016.d	LC6850IC_00001 12LCMS0073, 5.0ng/mL	P2-C2	ICV	QC	5/7/2012 16:19
07MAY12-perc-017.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/7/2012 16:35
07MAY12-perc-018.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-C4	CCV3	QC	5/7/2012 16:52
07MAY12-perc-019.d ✓	G2D270498-1, 2122104, 2.00mL/2.00mL, RI	P1-A1		Sample	5/7/2012 17:08
07MAY12-perc-020.d	G2D300415-1, 2122104, 2.00mL/2.00mL, 5x	P1-A2		Sample	5/7/2012 17:24
07MAY12-perc-021.d	G2D300415-2, 2122104, 2.00mL/2.00mL, 5x	P1-A3		Sample	5/7/2012 17:40
07MAY12-perc-022.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-C6	CCV5	QC	5/7/2012 17:57
07MAY12-perc-023.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-C4	CCV3	QC	5/7/2012 18:13
07MAY12-perc-024.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/7/2012 18:29

ICAL Data

G2D270498

QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-05-04 12:21		
Data Path	D:\MassHunter\Tune\QQQ\atunes.TUNE.XML		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.10	0.00	[illegible]	0.69	0.70	0.10	-0.01	[illegible]	47276	0	[illegible]
301.98	302.00	0.10	-0.02	[illegible]	0.71	0.70	0.10	0.01	[illegible]	272911	0	[illegible]
601.96	601.98	0.10	-0.02	[illegible]	0.69	0.70	0.10	-0.01	[illegible]	700864	0	[illegible]
1033.94	1033.99	0.10	-0.05	[illegible]	0.70	0.70	0.10	0.00	[illegible]	309536	0	[illegible]
1333.93	1333.97	0.10	-0.04	[illegible]	0.68	0.70	0.10	-0.02	[illegible]	488183	0	[illegible]
1633.91	1633.95	0.10	-0.04	[illegible]	0.72	0.70	0.10	0.02	[illegible]	427994	0	[illegible]

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.00	112.99	0.10	0.01	[illegible]	0.71	0.70	0.10	0.01	[illegible]	175059	0	[illegible]
301.99	302.00	0.10	-0.01	[illegible]	0.71	0.70	0.10	0.01	[illegible]	260034	0	[illegible]
601.99	601.98	0.10	0.01	[illegible]	0.70	0.70	0.10	0.00	[illegible]	392769	0	[illegible]
1034.00	1033.99	0.10	0.01	[illegible]	0.70	0.70	0.10	0.00	[illegible]	166060	0	[illegible]
1333.98	1333.97	0.10	0.01	[illegible]	0.70	0.70	0.10	0.00	[illegible]	412304	0	[illegible]
1633.94	1633.95	0.10	-0.01	[illegible]	0.67	0.70	0.10	-0.03	[illegible]	301887	0	[illegible]

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.01	112.99	0.30	0.02	[illegible]	1.17	1.20	0.60	-0.03	[illegible]	54893	0	[illegible]
301.93	302.00	0.30	-0.07	[illegible]	1.29	1.20	0.60	0.09	[illegible]	397274	0	[illegible]
601.92	601.98	0.30	-0.06	[illegible]	1.31	1.20	0.60	0.11	[illegible]	1215911	0	[illegible]
1033.91	1033.99	0.30	-0.08	[illegible]	1.30	1.20	0.60	0.10	[illegible]	637311	0	[illegible]
1333.91	1333.97	0.30	-0.06	[illegible]	1.28	1.20	0.60	0.08	[illegible]	1184873	0	[illegible]
1633.89	1633.95	0.30	-0.06	[illegible]	1.20	1.20	0.60	0.00	[illegible]	1165571	0	[illegible]

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QQQ Checktune Report

Analyzer: MS2 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.03	112.99	0.30	0.04	[illegible]	1.18	1.20	0.60	-0.02	[illegible]	230119	0	[illegible]
301.97	302.00	0.30	-0.03	[illegible]	1.23	1.20	0.60	0.03	[illegible]	386564	0	[illegible]
601.93	601.98	0.30	-0.05	[illegible]	1.25	1.20	0.60	0.05	[illegible]	624630	0	[illegible]
1033.94	1033.99	0.30	-0.05	[illegible]	1.25	1.20	0.60	0.05	[illegible]	318821	0	[illegible]
1333.91	1333.97	0.30	-0.06	[illegible]	1.26	1.20	0.60	0.06	[illegible]	751870	0	[illegible]
1633.92	1633.95	0.30	-0.03	[illegible]	1.25	1.20	0.60	0.05	[illegible]	591402	0	[illegible]

Analyzer: MS1 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.89	112.99	0.50	-0.10	[illegible]	2.78	2.50	1.25	0.28	[illegible]	63235	0	[illegible]
301.86	302.00	0.50	-0.14	[illegible]	2.86	2.50	1.25	0.36	[illegible]	473017	0	[illegible]
601.88	601.98	0.50	-0.10	[illegible]	2.86	2.50	1.25	0.36	[illegible]	1348564	0	[illegible]
1033.92	1033.99	0.50	-0.07	[illegible]	2.77	2.50	1.25	0.27	[illegible]	850342	0	[illegible]
1333.97	1333.97	0.50	0.00	[illegible]	2.69	2.50	1.25	0.19	[illegible]	1720350	0	[illegible]
1633.98	1633.95	0.50	0.03	[illegible]	2.58	2.50	1.25	0.08	[illegible]	1899649	0	[illegible]

Analyzer: MS2 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.89	112.99	0.50	-0.10	[illegible]	2.58	2.50	1.25	0.08	[illegible]	280008	0	[illegible]
301.92	302.00	0.50	-0.08	[illegible]	2.57	2.50	1.25	0.07	[illegible]	527407	0	[illegible]
601.91	601.98	0.50	-0.07	[illegible]	2.54	2.50	1.25	0.04	[illegible]	998661	0	[illegible]
1034.00	1033.99	0.50	0.01	[illegible]	2.46	2.50	1.25	-0.04	[illegible]	627135	0	[illegible]
1333.96	1333.97	0.50	-0.01	[illegible]	2.47	2.50	1.25	-0.03	[illegible]	1540124	0	[illegible]
1634.02	1633.95	0.50	0.07	[illegible]	2.41	2.50	1.25	-0.09	[illegible]	1445837	0	[illegible]

[1] *NOTE* *1) Actual abundances depend on many factors and are instrument specific.*
To change the minimum abundance, edit the values on the "Options" sheet.

TestAmerica Inc.
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Batch Info

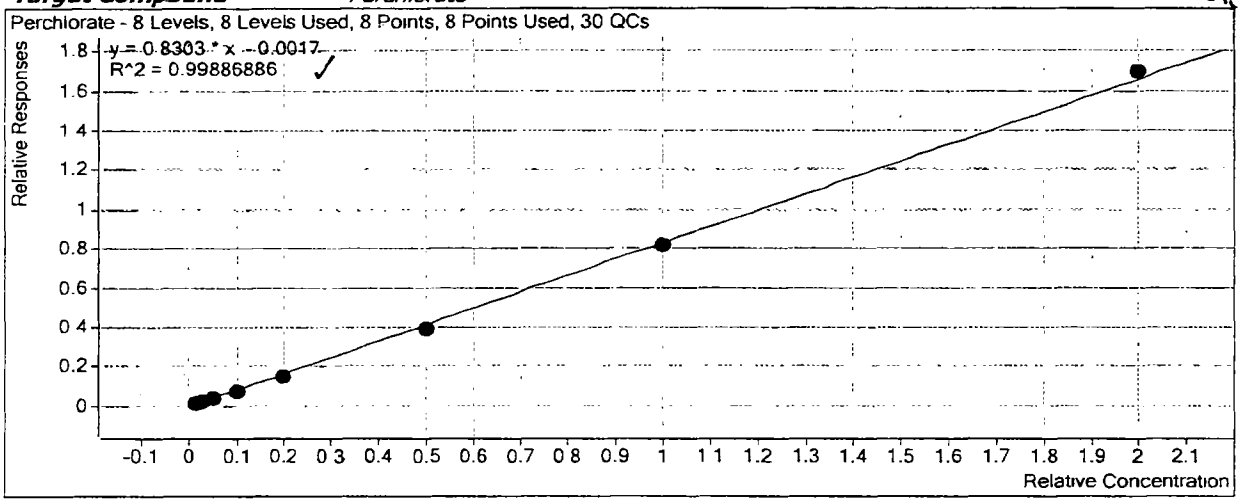
Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml		
Analysis Time	5/7/2012 7:54 AM	**Analyst Name**	lores
Report Time	5/7/2012 8:02 AM	**Reporter Name**	lores
Last Calib Update	5/7/2012 7:54 AM	**Batch State**	Processed

Calibration Info Linear fit, 1/x weighting, and origin ignored.

m 5/9/12

DCL 5-7-12

Target Compound *Perchlorate*



TestAmerica Inc.

Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
04MAY12-perc-007.d	1	☑	2556	0.7938	0.1500
04MAY12-perc-008.d	2	☑	3716	0.8134	0.3000
04MAY12-perc-009.d	3	☑	6142	0.7990	0.5000
04MAY12-perc-010.d	4	☑	12141	0.7713	1.0000
04MAY12-perc-011.d	5	☑	24634	0.7678	2.0000
04MAY12-perc-012.d	6	☑	59680	0.7879	5.0000
04MAY12-perc-013.d	7	☑	128590	0.8176	10.0000
04MAY12-perc-014.d	8	☑	216604	0.8507	20.0000
04MAY12-perc-018.d	CCV3	☑	6508	0.7991	0.5000
04MAY12-perc-031.d	CCV3	☑	4954	0.7617	0.5000
04MAY12-perc-030.d	CCV5	☑	18265	0.8103	2.0000
04MAY12-perc-053.d	CCV5	☑	22923	0.7848	2.0000
04MAY12-perc-077.d	CCV5	☑	23800	0.7832	2.0000
04MAY12-perc-017.d	CCV6	☑	65545	0.8005	5.0000
04MAY12-perc-040.d	CCV6	☑	57437	0.7933	5.0000
04MAY12-perc-064.d	CCV6	☑	56986	0.8166	5.0000
04MAY12-perc-087.d	CCV6	☑	57822	0.8078	5.0000
04MAY12-perc-016.d	ICV	☑	74936	0.8309	5.0000
04MAY12-perc-021.d	LCS_5	☑	52596	0.7880	5.0000
04MAY12-perc-022.d	LCS_5	☑	52815	0.8303	5.0000
04MAY12-perc-034.d	LCS_5	☑	19193	0.2341	5.0000
04MAY12-perc-035.d	LCS_5	☑	17969	0.2372	5.0000
04MAY12-perc-044.d	LCS_5	☑	18559	0.2333	5.0000
04MAY12-perc-045.d	LCS_5	☑	17619	0.2266	5.0000
04MAY12-perc-068.d	LCS_5	☑	17642	0.2325	5.0000
04MAY12-perc-069.d	LCS_5	☑	17538	0.2352	5.0000
04MAY12-perc-019.d	LODV	☑	1905	0.8366	0.1500
04MAY12-perc-041.d	LODV	☑	1678	0.7868	0.1500
04MAY12-perc-065.d	LODV	☑	1729	0.7748	0.1500
04MAY12-perc-088.d	LODV	☑	1952	0.8471	0.1500
04MAY12-perc-024.d	MS_5	☑	53221	0.8226	5.0000
04MAY12-perc-025.d	MS_5	☑	39719	0.8019	5.0000
04MAY12-perc-037.d	MS_5	☑	15926	0.2439	5.0000
04MAY12-perc-038.d	MS_5	☑	16294	0.2398	5.0000
04MAY12-perc-058.d	MS_5	☑	22072	0.3207	5.0000
04MAY12-perc-059.d	MS_5	☑	22495	0.3453	5.0000
04MAY12-perc-071.d	MS_5	☑	15760	0.2464	5.0000
04MAY12-perc-072.d	MS_5	☑	18578	0.2493	5.0000

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Target Compound	*Perchlorate-(35Cl1804)*				
Calibration STD	**Level**	**Enabled**	**Response**	**RF**	**Exp Conc**
04MAY12-perc-007.d	1	☑	214678	21467.8200	10.0000
04MAY12-perc-008.d	2	☑	152282	15228.1955	10.0000
04MAY12-perc-009.d	3	☑	153759	15375.9420	10.0000
04MAY12-perc-010.d	4	☑	157412	15741.2495	10.0000
04MAY12-perc-011.d	5	☑	160423	16042.3023	10.0000
04MAY12-perc-012.d	6	☑	151483	15148.3132	10.0000
04MAY12-perc-013.d	7	☑	157276	15727.6221	10.0000
04MAY12-perc-014.d	8	☑	127308	12730.7669	10.0000
04MAY12-perc-018.d	CCV3	☑	162869	16286.9092	10.0000
04MAY12-perc-031.d	CCV3	☑	130082	13008.1719	10.0000
04MAY12-perc-030.d	CCV5	☑	112705	11270.4702	10.0000
04MAY12-perc-053.d	CCV5	☑	146039	14603.9196	10.0000
04MAY12-perc-077.d	CCV5	☑	151937	15193.7214	10.0000
04MAY12-perc-017.d	CCV6	☑	163763	16376.2776	10.0000
04MAY12-perc-040.d	CCV6	☑	144799	14479.8704	10.0000
04MAY12-perc-064.d	CCV6	☑	139577	13957.7259	10.0000
04MAY12-perc-087.d	CCV6	☑	143153	14315.2820	10.0000
04MAY12-perc-016.d	ICV	☑	180367	18036.7158	10.0000
04MAY12-perc-021.d	LCS_5	☑	133495	13349.5034	10.0000
04MAY12-perc-022.d	LCS_5	☑	127219	12721.8618	10.0000
04MAY12-perc-034.d	LCS_5	☑	163995	16399.5129	10.0000
04MAY12-perc-035.d	LCS_5	☑	151525	15152.4519	10.0000
04MAY12-perc-044.d	LCS_5	☑	159073	15907.3269	10.0000
04MAY12-perc-045.d	LCS_5	☑	155481	15548.0511	10.0000
04MAY12-perc-068.d	LCS_5	☑	151757	15175.7361	10.0000
04MAY12-perc-069.d	LCS_5	☑	149103	14910.3263	10.0000
04MAY12-perc-019.d	LODV	☑	151824	15182.3853	10.0000
04MAY12-perc-041.d	LODV	☑	142211	14221.1355	10.0000
04MAY12-perc-065.d	LODV	☑	148755	14875.5092	10.0000
04MAY12-perc-088.d	LODV	☑	153604	15360.3929	10.0000
04MAY12-perc-024.d	MS_5	☑	129389	12938.8979	10.0000
04MAY12-perc-025.d	MS_5	☑	99068	9906.7834	10.0000
04MAY12-perc-037.d	MS_5	☑	130602	13060.1589	10.0000
04MAY12-perc-038.d	MS_5	☑	135881	13588.0962	10.0000
04MAY12-perc-058.d	MS_5	☑	137638	13763.7587	10.0000
04MAY12-perc-059.d	MS_5	☑	130306	13030.5854	10.0000
04MAY12-perc-071.d	MS_5	☑	127944	12794.3806	10.0000
04MAY12-perc-072.d	MS_5	☑	149059	14905.9329	10.0000

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/4/2012 16:45
Analyst	lores
Data File	04MAY12-perc-016 d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850IC_00001 12LCMS0073, 5 0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

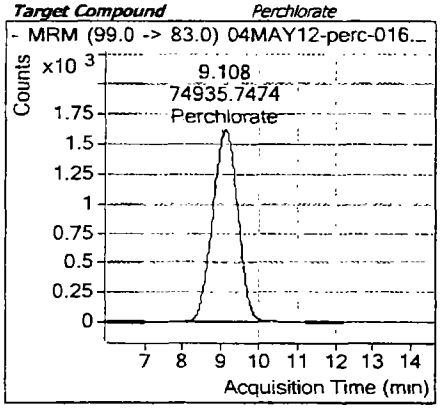
Quantitation Results

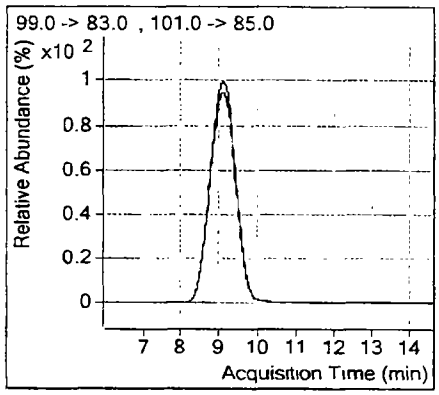
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 108	74936	99	83	**5.02496**	**5.02496**	1
Perchlorate-(35Cl18O4)	ISTD	9 101	180367	107	89			1
							0.5 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24551	101	85	3.05	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	57011	109	91	3 16	2 30	3.80	In Control

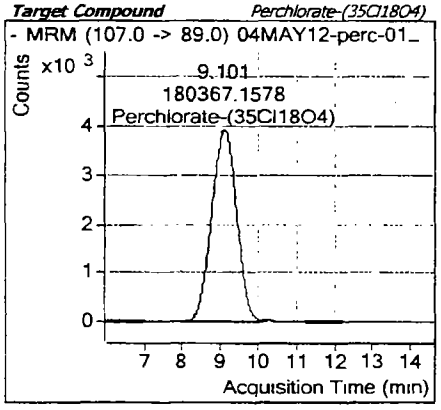
Compound Graphics

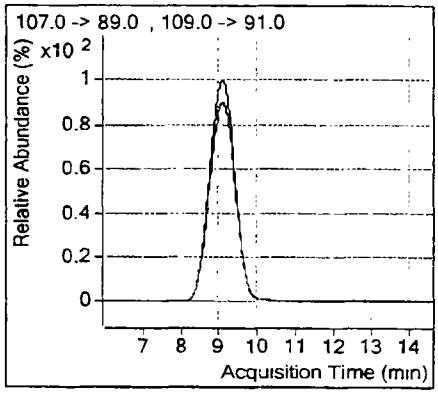
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





DF 5-7-12
MB 5/9/12

QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-05-07 12:03		
Data Path	D:\MassHunter\Tune\QQQ\atunes.TUNE.XML		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.10	0.00	Pass	0.68	0.70	0.10	-0.02	Pass	85823	0	Pass
301.98	302.00	0.10	-0.02	Pass	0.71	0.70	0.10	0.01	Pass	369624	0	Pass
601.93	601.98	0.10	-0.05	Pass	0.68	0.70	0.10	-0.02	Pass	878232	0	Pass
1033.92	1033.99	0.10	-0.07	Pass	0.70	0.70	0.10	0.00	Pass	435063	0	Pass
1333.90	1333.97	0.10	-0.07	Pass	0.70	0.70	0.10	0.00	Pass	698780	0	Pass
1633.89	1633.95	0.10	-0.06	Pass	0.73	0.70	0.10	0.03	Pass	606348	0	Pass

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.01	112.99	0.10	0.02	Pass	0.68	0.70	0.10	-0.02	Pass	257229	0	Pass
302.01	302.00	0.10	0.01	Pass	0.68	0.70	0.10	-0.02	Pass	299611	0	Pass
602.00	601.98	0.10	0.02	Pass	0.67	0.70	0.10	-0.03	Pass	405527	0	Pass
1034.01	1033.99	0.10	0.02	Pass	0.71	0.70	0.10	0.01	Pass	205063	0	Pass
1333.98	1333.97	0.10	0.01	Pass	0.69	0.70	0.10	-0.01	Pass	536959	0	Pass
1633.95	1633.95	0.10	0.00	Pass	0.68	0.70	0.10	-0.02	Pass	387382	0	Pass

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.30	0.00	Pass	1.19	1.20	0.60	-0.01	Pass	96529	0	Pass
301.93	302.00	0.30	-0.07	Pass	1.29	1.20	0.60	0.09	Pass	512492	0	Pass
601.92	601.98	0.30	-0.06	Pass	1.30	1.20	0.60	0.10	Pass	1325802	0	Pass
1033.86	1033.99	0.30	-0.13	Pass	1.33	1.20	0.60	0.13	Pass	783960	0	Pass
1333.85	1333.97	0.30	-0.12	Pass	1.32	1.20	0.60	0.12	Pass	1514499	0	Pass
1633.84	1633.95	0.30	-0.11	Pass	1.25	1.20	0.60	0.05	Pass	1521112	0	Pass

QQQ Checktune Report

Analyzer: MS2 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.04	112.99	0.30	0.05	[redacted]	1.15	1.20	0.60	-0.05	[redacted]	330523	0	[redacted]
302.01	302.00	0.30	0.01	[redacted]	1.23	1.20	0.60	0.03	[redacted]	411587	0	[redacted]
601.95	601.98	0.30	-0.03	[redacted]	1.24	1.20	0.60	0.04	[redacted]	622743	0	[redacted]
1033.96	1033.99	0.30	-0.03	[redacted]	1.26	1.20	0.60	0.06	[redacted]	377628	0	[redacted]
1333.91	1333.97	0.30	-0.06	[redacted]	1.27	1.20	0.60	0.07	[redacted]	964886	0	[redacted]
1633.92	1633.95	0.30	-0.03	[redacted]	1.25	1.20	0.60	0.05	[redacted]	767525	0	[redacted]

Analyzer: MS1 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.90	112.99	0.50	-0.09	[redacted]	2.76	2.50	1.25	0.26	[redacted]	115158	0	[redacted]
301.88	302.00	0.50	-0.12	[redacted]	2.84	2.50	1.25	0.34	[redacted]	743221	0	[redacted]
601.87	601.98	0.50	-0.11	[redacted]	2.90	2.50	1.25	0.40	[redacted]	1670203	0	[redacted]
1033.88	1033.99	0.50	-0.11	[redacted]	2.82	2.50	1.25	0.32	[redacted]	1134757	0	[redacted]
1333.91	1333.97	0.50	-0.06	[redacted]	2.71	2.50	1.25	0.21	[redacted]	2363493	0	[redacted]
1633.95	1633.95	0.50	0.00	[redacted]	2.58	2.50	1.25	0.08	[redacted]	2594574	0	[redacted]

Analyzer: MS2 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.91	112.99	0.50	-0.08	[redacted]	2.53	2.50	1.25	0.03	[redacted]	429984	0	[redacted]
301.94	302.00	0.50	-0.06	[redacted]	2.56	2.50	1.25	0.06	[redacted]	615163	0	[redacted]
601.92	601.98	0.50	-0.06	[redacted]	2.53	2.50	1.25	0.03	[redacted]	1062354	0	[redacted]
1034.02	1033.99	0.50	0.03	[redacted]	2.40	2.50	1.25	-0.10	[redacted]	789048	0	[redacted]
1333.94	1333.97	0.50	-0.03	[redacted]	2.51	2.50	1.25	0.01	[redacted]	1982928	0	[redacted]
1634.02	1633.95	0.50	0.07	[redacted]	2.42	2.50	1.25	-0.08	[redacted]	1830234	0	[redacted]

' NOTE 1) Actual abundances depend on many factors and are instrument specific
To change the minimum abundance, edit the values on the "Options" sheet

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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

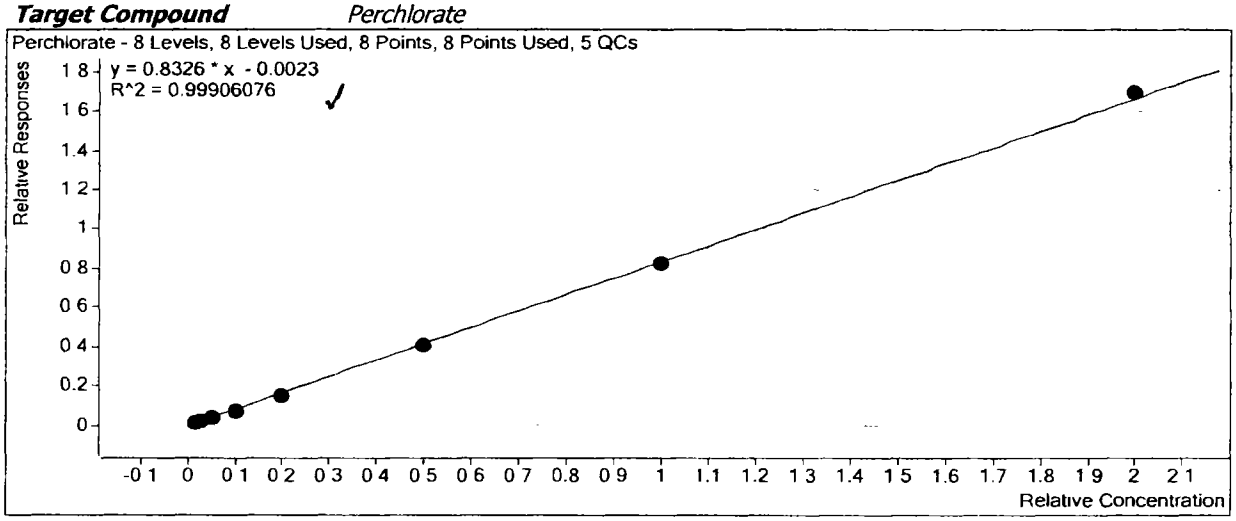
Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\07MAY2012\QuantResults\07May2012-Perchlorate.batch.xml		
Analysis Time	5/7/2012 8:03 PM	**Analyst Name**	lores
Report Time	5/7/2012 8:05 PM	**Reporter Name**	lores
Last Calib Update	5/7/2012 8:03 PM	**Batch State**	Processed

Calibration Info Linear Fit, 1/x weighting, and origin ignored.

5/9/12

Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound	*Perchlorate*				
Calibration STD	**Level**	**Enabled**	**Response**	**RF**	**Exp Conc**
07MAY12-perc-007.d	1	☑	2870	0.7690	0.1500
07MAY12-perc-008.d	2	☑	4418	0.7972	0.3000
07MAY12-perc-009.d	3	☑	7172	0.7719	0.5000
07MAY12-perc-010.d	4	☑	13861	0.7692	1.0000
07MAY12-perc-011.d	5	☑	25984	0.7491	2.0000
07MAY12-perc-012.d	6	☑	65542	0.8086	5.0000
07MAY12-perc-013.d	7	☑	125418	0.8217	10.0000
07MAY12-perc-014.d	8	☑	225026	0.8487	20.0000
07MAY12-perc-018.d	CCV3	☑	6209	0.7628	0.5000
07MAY12-perc-023.d	CCV3	☑	6870	0.8028	0.5000
07MAY12-perc-022.d	CCV5	☑	24513	0.7857	2.0000
07MAY12-perc-017.d	CCV6	☑	64534	0.7918	5.0000
07MAY12-perc-016.d	ICV	☑	79332	0.8357	5.0000
Target Compound	*Perchlorate-(35Cl18O4)*				
Calibration STD	**Level**	**Enabled**	**Response**	**RF**	**Exp Conc**
07MAY12-perc-007.d	1	☑	248858	24885.7968	10.0000
07MAY12-perc-008.d	2	☑	184723	18472.3355	10.0000
07MAY12-perc-009.d	3	☑	185820	18582.0136	10.0000
07MAY12-perc-010.d	4	☑	180202	18020.2263	10.0000
07MAY12-perc-011.d	5	☑	173439	17343.9007	10.0000
07MAY12-perc-012.d	6	☑	162110	16210.9851	10.0000
07MAY12-perc-013.d	7	☑	152630	15263.0298	10.0000
07MAY12-perc-014.d	8	☑	132575	13257.5304	10.0000
07MAY12-perc-018.d	CCV3	☑	162787	16278.7485	10.0000
07MAY12-perc-023.d	CCV3	☑	171159	17115.9280	10.0000
07MAY12-perc-022.d	CCV5	☑	155997	15599.7127	10.0000
07MAY12-perc-017.d	CCV6	☑	163016	16301.5839	10.0000
07MAY12-perc-016.d	ICV	☑	189867	18986.6752	10.0000

CCAL Data

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/4/2012 17:01
Analyst	lores
Data File	04MAY12-perc-017 d
Acquisition Method	PercMRM_2 m
Sample Name	LC6850L6_00001 12LCMS0069, 5 0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5.00
Injection Volume	50

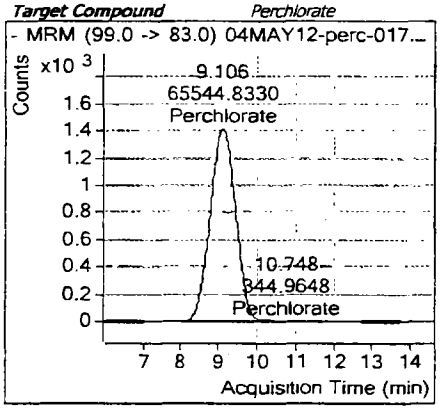
Quantitation Results

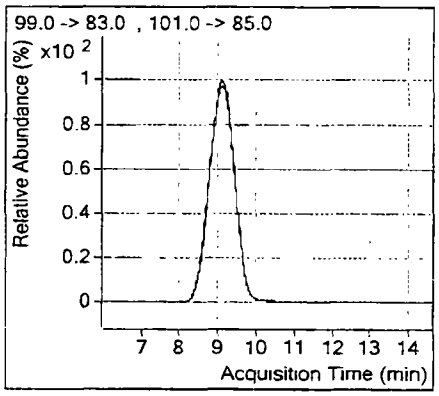
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 106	65545	99	83	**4.84164**	**4.84164**	1
Perchlorate-(35Cl18O4)	ISTD	9 098	163763	107	89			1
							-3.2 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	21979	101	85	2 98	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	50482	109	91	3.24	2.30	3.80	In Control

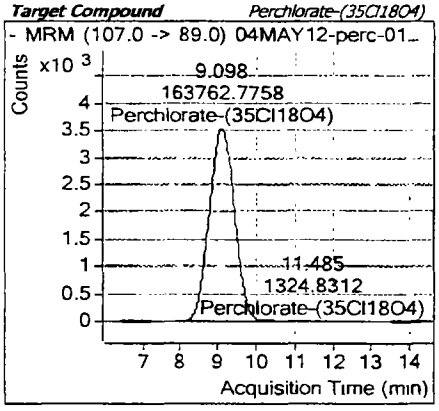
Compound Graphics

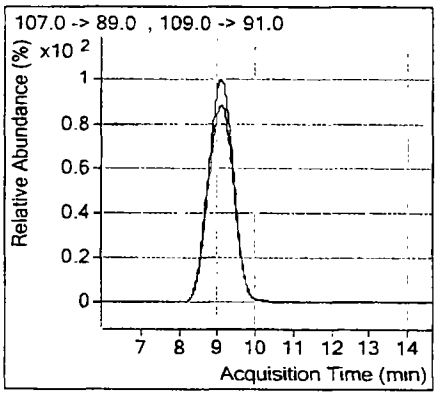
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Dev. 5-7-12
MR 5/9/12

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/4/2012 17:17
Analyst	lores
Data File	04MAY12-perc-018.d
Acquisition Method	PercMRM_2 m
Sample Name	LC6850L3_00001 12LCMS0066, 0 50ng/mL
Sample Identification	MRL
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C4
Exp. Concentration	0.50
Injection Volume	50

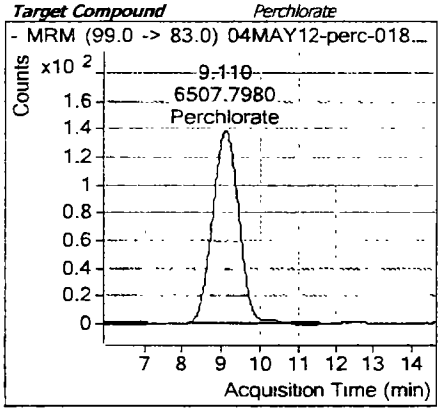
Quantitation Results

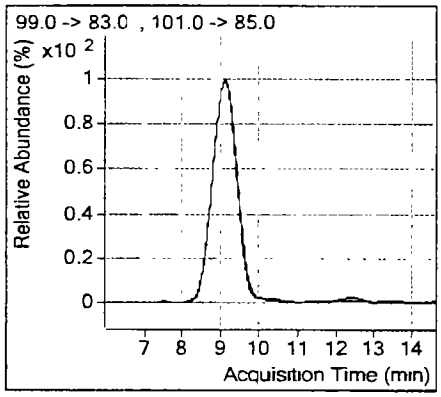
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.110	6508	99	83	**0.50219**	**0.50219**	1
Perchlorate-(35Cl18O4)	ISTD	9 103	162869	107	89			1
							0.4 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2131	101	85	3.05	2 30	3.80	In Control
Perchlorate-(35Cl18O4)	51593	109	91	3 16	2 30	3 80	In Control

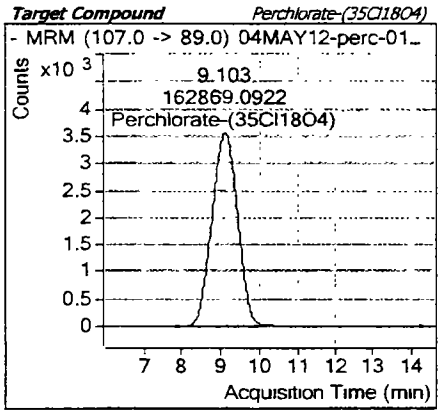
Compound Graphics

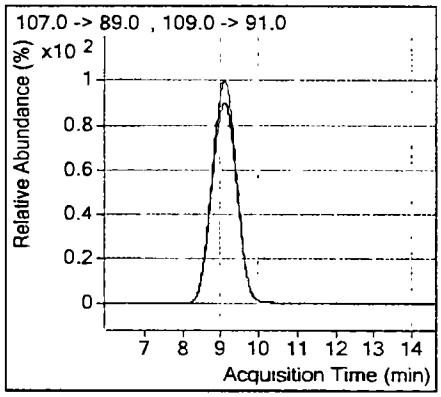
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





dg. 5-7-12
mr 5/9/12

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/4/2012 17:33
Analyst	lores
Data File	04MAY12-perc-019.d
Acquisition Method	PercMRM_2 m
Sample Name	LC6850L1_00001 12LCMS0064, 0 15ng/mL
Sample Identification	LODV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C3
Exp. Concentration	0 15
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 111	1905	99	83	**0.17206**	**0.17206**	1
Perchlorate-(35Cl18O4)	ISTD	9 099	151824	107	89			1
							14.7 % Deviation	

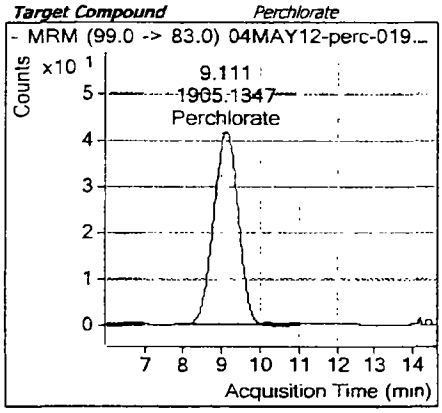
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	673	101	85	2.83	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	46645	109	91	3 25	2 30	3 80	In Control

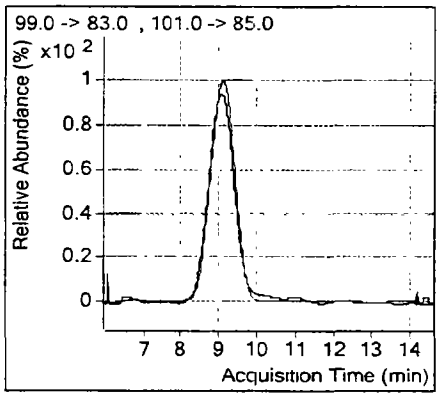
Compound Graphics

DEL 5-7-12

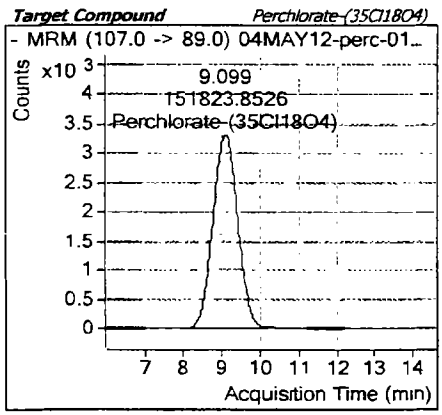
mr 5/9/12

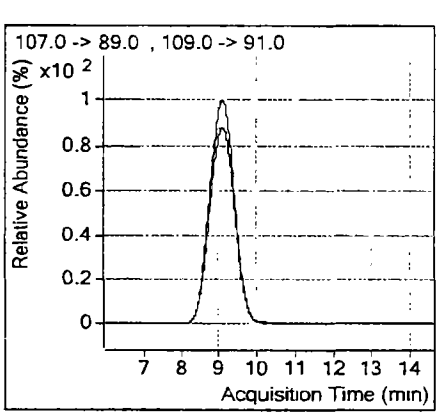
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/4/2012 20:32
Analyst	lores
Data File	04MAY12-perc-030 d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850L5_00001 12LCMS0068, 2.0ng/mL
Sample Identification	CCV 5
Sample Information	IC-Pak Anion HR 75x4 6mm T=40*C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp Concentration	2 00
Injection Volume	50

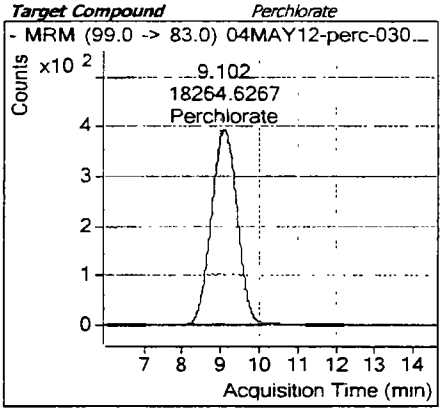
Quantitation Results

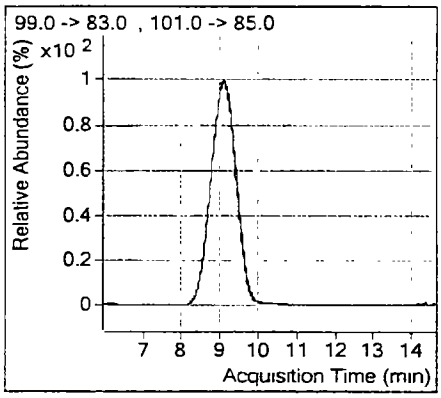
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.102	18265	99	83	1:97282	1.97282	1
Perchlorate-(35Cl18O4)	ISTD	9.102	112705	107	89			1
							-1.4 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	6165	101	85	2 96	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	35594	109	91	3 17	2 30	3 80	In Control

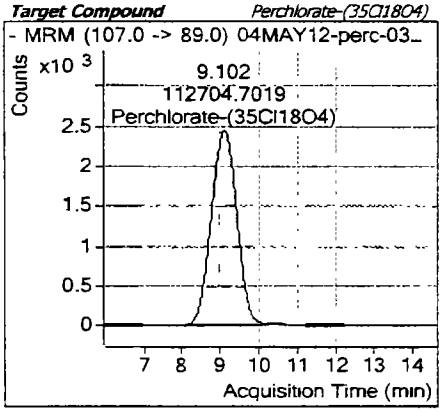
Compound Graphics

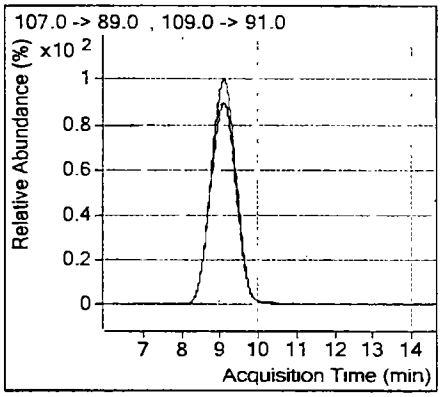
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Dtl. 5-7-12

M 5/9/12

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/4/2012 20:48
Analyst	lores
Data File	04MAY12-perc-031.d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850L3_00001 12LCMS0066, 0.50ng/mL
Sample Identification	MRL
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C4
Exp. Concentration	0 50
Injection Volume	50

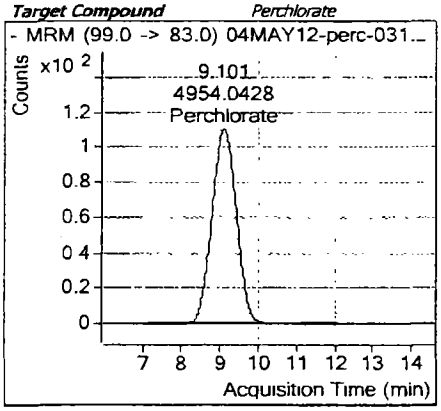
Quantitation Results

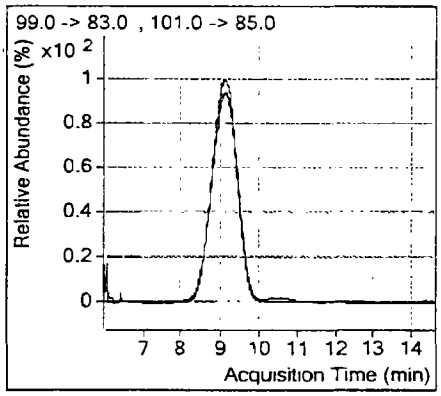
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 101	4954	99	83	**0.47962**	**0.47962**	1
Perchlorate-(35Cl18O4)	ISTD	9 102	130082	107	89			1
							-4.1 % Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	1638	101	85	3 02	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	41212	109	91	3 16	2.30	3 80	In Control

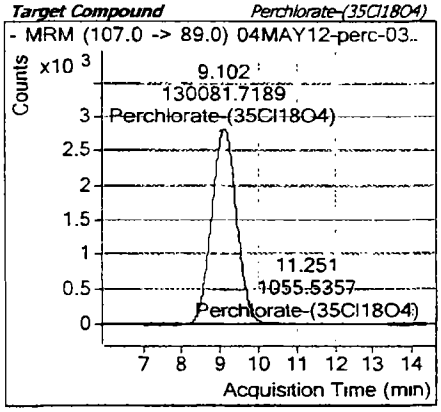
Compound Graphics

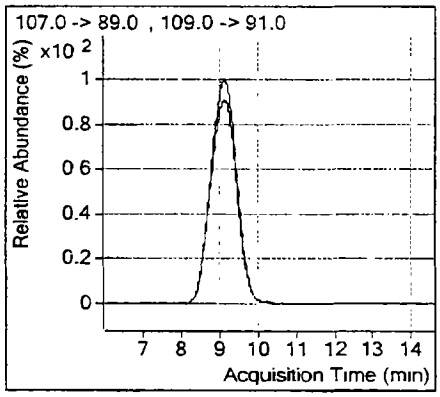
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Da 5-7-12

mr 5/9/12

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D.\Masshunter\A5-data\Perc_2RNM102911VE 09\04MAY2012\QuantResults\04MAY2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/4/2012 21:04
Analyst	lores
Data File	04MAY12-perc-032 d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850L9_00001 Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

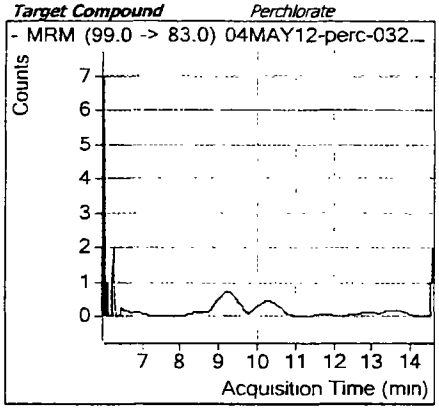
Quantitation Results

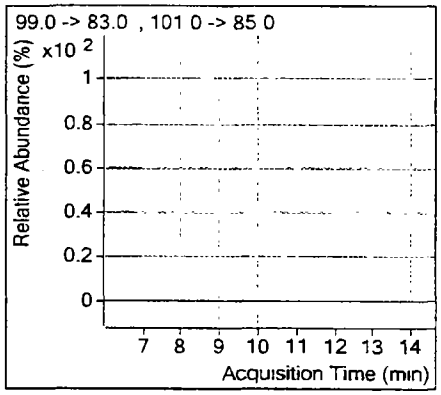
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9.101	144489	107	89	Perchlorate = ND		1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	44574	109	91	3.24	2.30	3.80	In Control

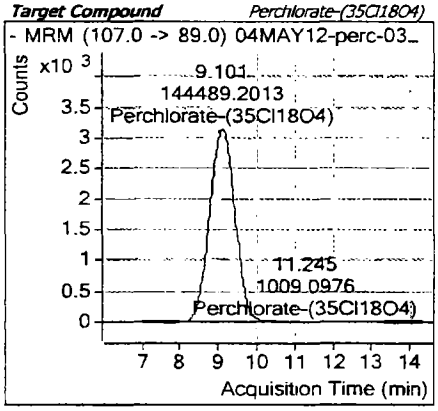
Compound Graphics

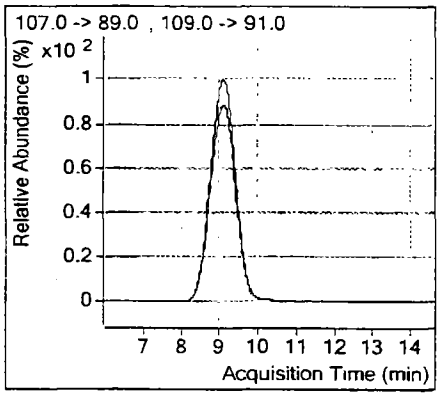
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





DG 5-7-12

MR 5/9/12

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\07MAY2012\QuantResults\07May2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/7/2012 16:35
Analyst	lores
Data File	07MAY12-perc-017 d
Acquisition Method	PercMRM_2 m
Sample Name	LC6850L6_00001 12LCMS0069, 5 0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5 00
Injection Volume	50

Quantitation Results

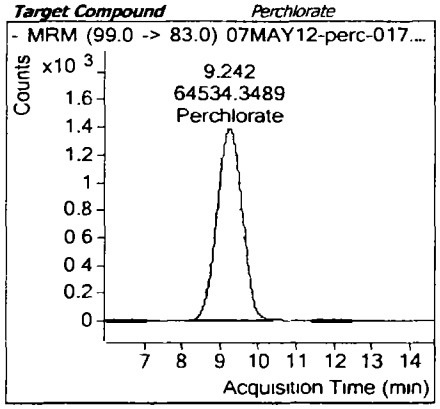
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 242	64534	99	83	**4.78299**	**4.78299**	1
Perchlorate-(35Cl18O4)	ISTD	9 232	163016	107	89			1
							-4.3 %Deviation	

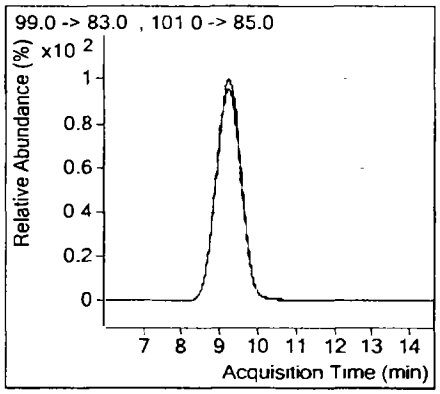
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	21403	101	85	3 02	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	51290	109	91	3 18	2 30	3 80	In Control

Compound Graphics

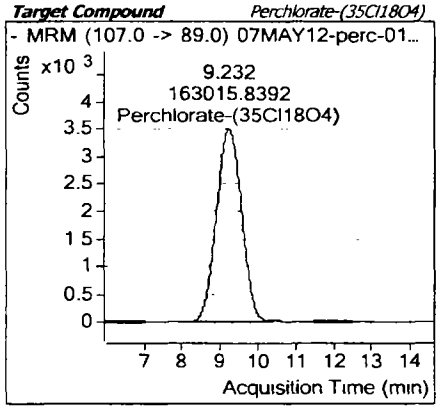
m 5/9/12

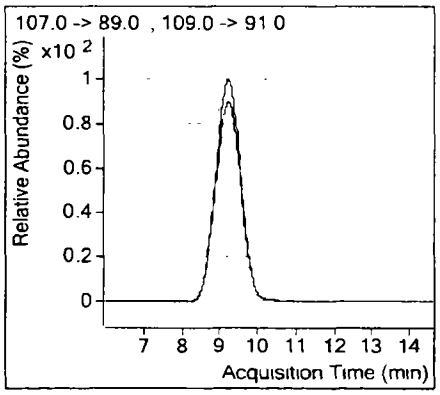
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\07MAY2012\QuantResults\07May2012-Perchlorate batch xml

Analysis Information

Acquisition Date - Time	5/7/2012 16.52
Analyst	lores
Data File	07MAY12-perc-018 d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850L3_00001 12LCMS0066, 0 50ng/mL
Sample Identification	MRL
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C4
Exp. Concentration	0 50
Injection Volume	50

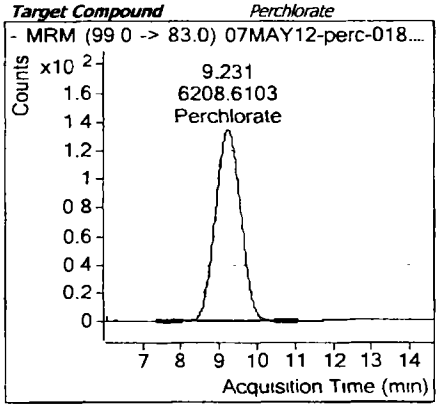
Quantitation Results

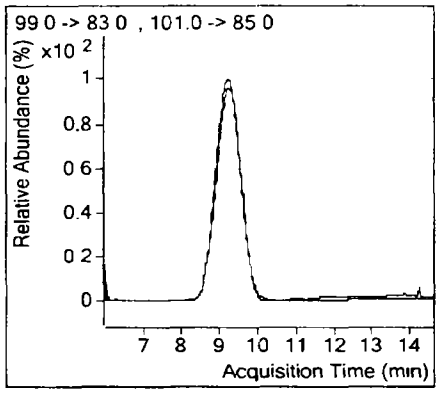
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 231	6209	99	83	**0.48630**	**0.48630**	1
Perchlorate-(35Cl18O4)	ISTD	9 234	162787	107	89			1
							-2.7 %Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2069	101	85	3 00	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	51998	109	91	3 13	2 30	3 80	In Control

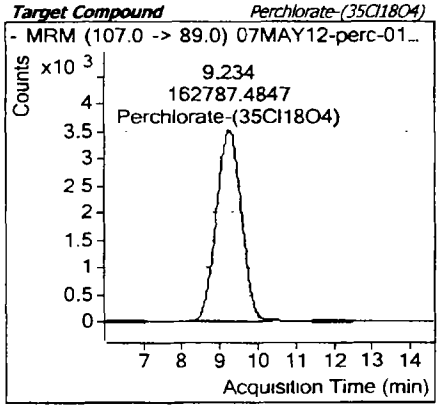
Compound Graphics

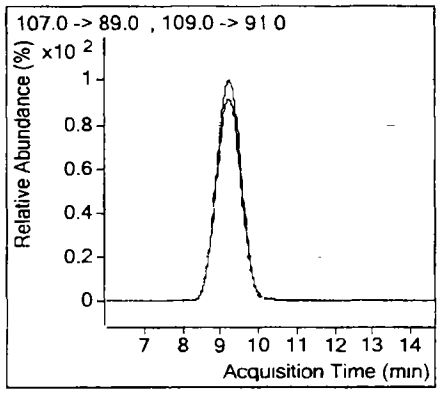
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





MB 5/9/12

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\07MAY2012\QuantResults\07May2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	5/7/2012 17:57
Analyst	lores
Data File	07MAY12-perc-022 d
Acquisition Method	PercMRM_2 m
Sample Name	LC6850L5_00001 12LCMS0068, 2 0ng/mL
Sample Identification	CCV 5
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2 00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 233	24513	99	83	**1.91559**	**1.91559**	1
Perchlorate-(35Cl18O4)	ISTD	9 220	155997	107	89			1
							-4.2 %Deviation	

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	8084	101	85	3 03	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	48765	109	91	3 20	2 30	3 80	In Control

Compound Graphics

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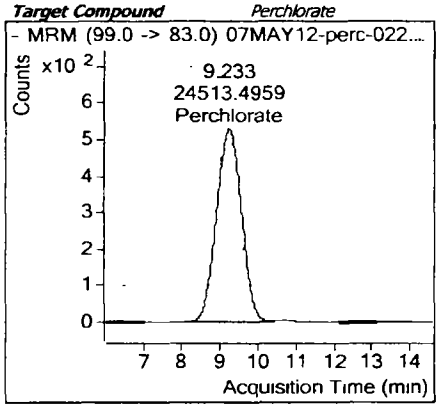
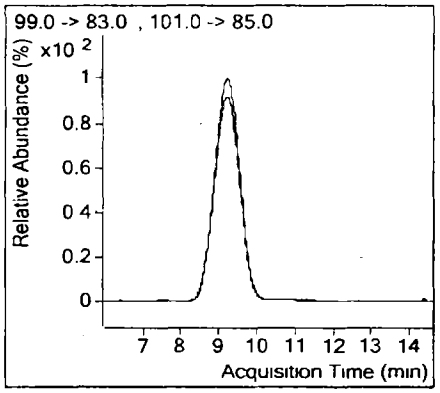
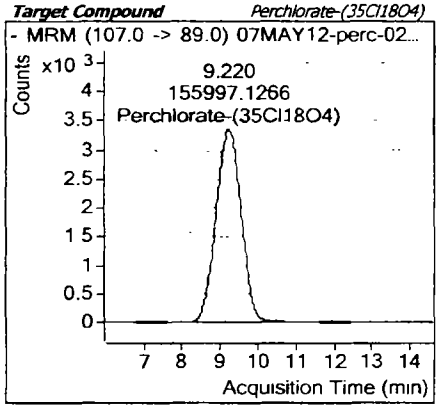
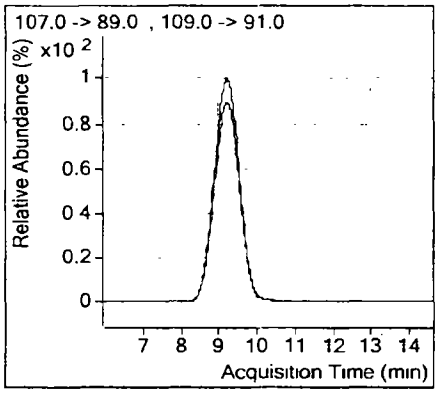
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





Batch Data Path D.\Masshunter\A5-data\Perc_2RNM102911VE 09\07MAY2012\QuantResults\07May2012-Perchlorate batch.xml

Analysis Information

Acquisition Date - Time	5/7/2012 18:13
Analyst	lores
Data File	07MAY12-perc-023 d
Acquisition Method	PercMRM_2 m
Sample Name	LC6850L3_00001 12LCMS0066, 0 50ng/mL
Sample Identification	MRL
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C4
Exp. Concentration	0 50
Injection Volume	50

Quantitation Results

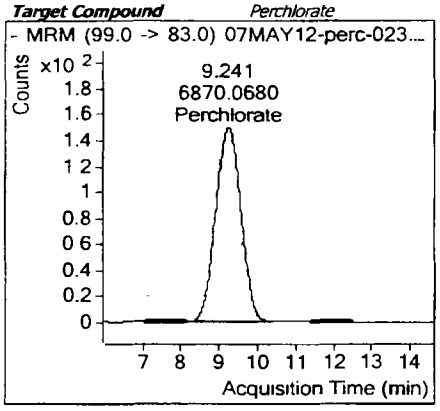
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9 241	6870	99	83	**0.51031**	**0.51031**	1
Perchlorate-(35Cl18O4)	ISTD	9 220	171159	107	89			1
							2.1 %Deviation	

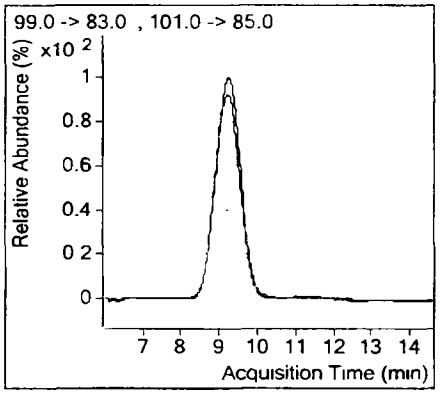
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	2219	101	85	3 10	2 30	3 80	In Control
Perchlorate-(35Cl18O4)	52678	109	91	3 25	2 30	3 80	In Control

Compound Graphics

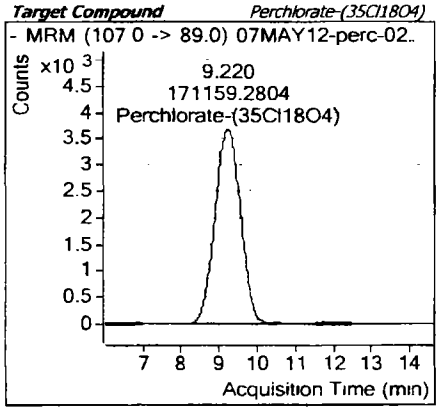
m 5/9/12

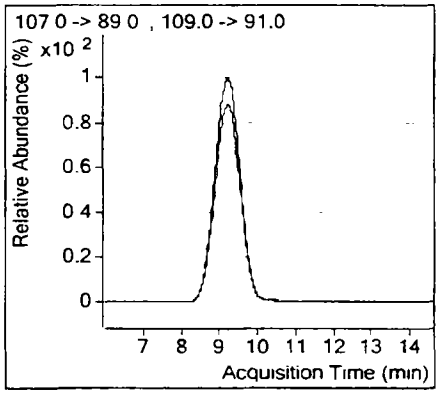
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\07MAY2012\QuantResults\07May2012-Perchlorate.batch xml

Analysis Information

Acquisition Date - Time	5/7/2012 18.29
Analyst	lores
Data File	07MAY12-perc-024 d
Acquisition Method	PercMRM_2 m
Sample Name	LC6850L9_00001 Blank + IS
Sample Identification	Blank + IS
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	Sample
Sample Position	P2-C1
Exp. Concentration	
Injection Volume	50

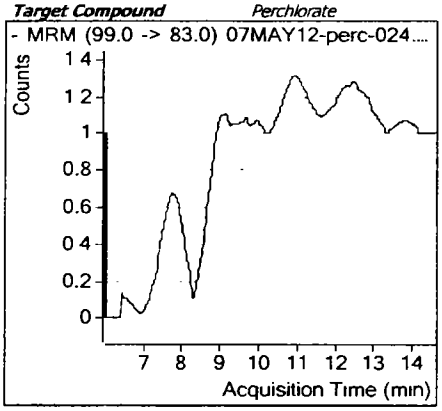
Quantitation Results

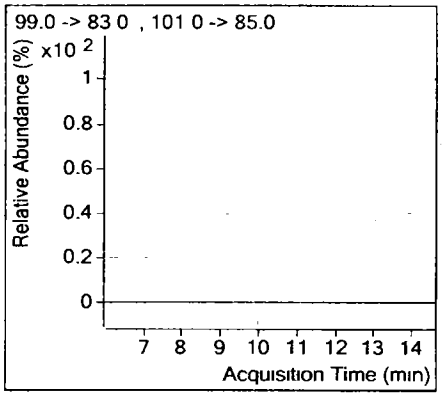
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate-(35Cl18O4)	ISTD	9 224	190362	107	89	Perchlorate = ND		1

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate-(35Cl18O4)	59064	109	91	3 22	2 30	3 80	In Control

Compound Graphics

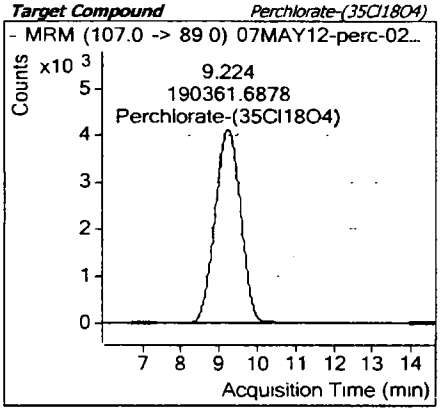
Target Compound *Perchlorate*

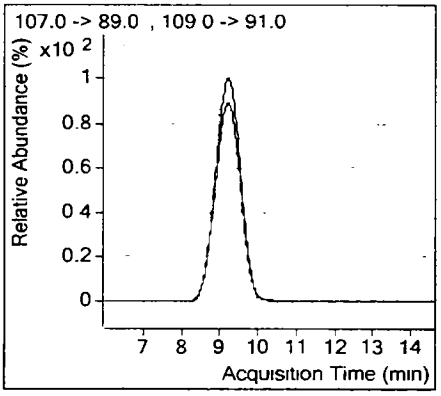




m 5/9/12

Target Compound *Perchlorate-(35Cl18O4)*





METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG No.:

Project: MSA Groundwater Sampling

Client Sample ID	Lab Sample ID
MT-MW04S	240-10598-2
MT-MW06S	240-10598-3

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICV Source: MTMSICVW_00014 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00039

Analyte	ICV 240-42093/5 04/28/2012 08:30				CCV 240-42093/46 04/28/2012 12:29				CCV 240-42093/58 04/28/2012 13:41			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	82.3		80.0	103	99.8		100	100	97.1		100	97
Arsenic	81.8		80.0	102	102		100	102	99.4		100	99
Barium	81.1		80.0	101	102		100	102	98.3		100	98
Beryllium	79.4		80.0	99	98.1		100	98	101		100	101
Cadmium	82.4		80.0	103	103		100	103	99.8		100	100
Chromium	80.8		80.0	101	102		100	102	99.1		100	99
Cobalt	81.5		80.0	102	103		100	103	99.1		100	99
Copper	83.5		80.0	104	106		100	106	102		100	102
Lead	83.1		80.0	104	104		100	104	102		100	102
Molybdenum	82.6		80.0	103	104		100	104	101		100	101
Nickel	82.9		80.0	104	103		100	103	99.1		100	99
Selenium	82.2		80.0	103	103		100	103	101		100	101
Silver	83.9		80.0	105	103		100	103	101		100	101
Thallium	81.6		80.0	102	101		100	101	100		100	100
Tungsten	81.3		80.0	102	102		100	102	100		100	100
Vanadium	80.6		80.0	101	101		100	101	98.3		100	98
Zinc	83.5		80.0	104	102		100	102	100		100	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICV Source: MTMSICVW_00014 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00039

Analyte	CCV 240-42093/70 04/28/2012 14:51				CCV 240-42093/134 04/28/2012 21:01				CCV 240-42093/146 04/28/2012 22:14			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	98.9		100	99	100		100	100	101		100	101
Arsenic	102		100	102	103		100	103	103		100	103
Barium	100		100	100	101		100	101	99.7		100	100
Beryllium	102		100	102	100		100	100	104		100	104
Cadmium	102		100	102	102		100	102	103		100	103
Chromium	103		100	103	102		100	102	102		100	102
Cobalt	103		100	103	102		100	102	101		100	101
Copper	105		100	105	104		100	104	105		100	105
Lead	105		100	105	106		100	106	105		100	105
Molybdenum	104		100	104	104		100	104	105		100	105
Nickel	104		100	104	103		100	103	103		100	103
Selenium	105		100	105	104		100	104	106		100	106
Silver	103		100	103	104		100	104	103		100	103
Thallium	105		100	105	104		100	104	106		100	106
Tungsten	103		100	103	104		100	104	105		100	105
Vanadium	101		100	101	102		100	102	101		100	101
Zinc	104		100	104	103		100	103	104		100	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICV Source: MTMSICVW_00014 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00039

Analyte	CCV 240-42093/158 04/28/2012 23:21											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	102		100	102								
Arsenic	102		100	102								
Barium	102		100	102								
Beryllium	102		100	102								
Cadmium	104		100	104								
Chromium	102		100	102								
Cobalt	101		100	101								
Copper	104		100	104								
Lead	105		100	105								
Molybdenum	104		100	104								
Nickel	103		100	103								
Selenium	101		100	101								
Silver	104		100	104								
Thallium	104		100	104								
Tungsten	104		100	104								
Vanadium	102		100	102								
Zinc	105		100	105								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICV Source: MTHGICVW_00284 Concentration Units: ug/L

CCV Source: MTHGCALW_00185

Analyte	ICV 240-41879/7-A 04/27/2012 17:54				CCVL 240-41879/10-A 04/27/2012 18:00				CCV 240-41879/12-A 04/27/2012 20:27			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.32		2.50	93	5.11		5.00	102	5.25		5.00	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICV Source: MTHGICVW_00284 Concentration Units: ug/L

CCV Source: MTHGCALW_00185

Analyte	CCV 240-41879/12-A 04/27/2012 20:52				CCV 240-41879/12-A 04/27/2012 21:17				CCV 240-41879/12-A 04/27/2012 21:42			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.17		5.00	103	5.39		5.00	108	5.22		5.00	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICV Source: MTHGICVW_00284 Concentration Units: ug/L

CCV Source: MTHGCALW_00185

Analyte	CCV 240-41879/12-A 04/27/2012 22:06											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.25		5.00	105								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICV Source: MTHGICVW_00284 Concentration Units: ug/L

CCV Source: MTHGCALW_00185

Analyte	ICV 240-41879/7-A 04/28/2012 10:19				CCVL 240-41879/10-A 04/28/2012 10:26				CCV 240-41879/12-A 04/28/2012 11:31			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.40		2.50	96	5.07		5.00	101	5.10		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICV Source: MTHGICVW_00284 Concentration Units: ug/L

CCV Source: MTHGCALW_00185

Analyte	CCV 240-41879/12-A 04/28/2012 11:55				CCV 240-41879/12-A 04/28/2012 12:20							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.03		5.00	101	5.14		5.00	103				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Method: 6020 Instrument ID: I8

Lab Sample ID: CRI 240-42093/7 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRIW_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.07		104	50-150
Arsenic	2.00	2.23	J	112	50-150
Barium	1.00	1.03	J	103	50-150
Beryllium	1.00	1.04		104	50-150
Cadmium	0.500	0.551	J	110	50-150
Chromium	2.00	1.85	J	93	50-150
Cobalt	1.00	1.04		104	50-150
Copper	2.00	2.47		124	50-150
Lead	1.00	1.10		110	50-150
Molybdenum	10.0	10.1		101	50-150
Nickel	2.00	2.85		143	50-150
Selenium	2.00	1.93	J	97	50-150
Silver	0.500	0.599	J	120	50-150
Thallium	1.00	1.25	J	125	50-150
Vanadium	5.00	5.04	J	101	50-150
Tungsten	10.0	9.61	J	96	50-150
Zinc	10.0	9.76	J	98	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Method: 7470A Instrument ID: H4

Lab Sample ID: CRA 240-41879/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00185

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.193	J	96	50-150

Lab Sample ID: CRA 240-41879/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00185

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.215		107	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-42093/6 04/28/2012 08:37		CCB 240-42093/47 04/28/2012 12:36		CCB 240-42093/59 04/28/2012 13:48		CCB 240-42093/71 04/28/2012 14:58	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Molybdenum	10	0.453	J	0.316	J	0.471	J	0.349	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	2.0	0.475	J	0.375	J	0.758	J	0.491	J
Tungsten	10	0.681	J	10	U	0.610	J	0.401	J
Vanadium	20	20	U	20	U	20	U	20	U
Zinc	20	20	U	20	U	20	U	20	U

X use use use

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-42093/135 04/28/2012 21:08		CCB 240-42093/147 04/28/2012 22:21		CCB 240-42093/159 04/28/2012 23:28			
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	0.159	J	2.0	U		
Arsenic	5.0	5.0	U	5.0	U	5.0	U		
Barium	5.0	5.0	U	5.0	U	5.0	U		
Beryllium	1.0	1.0	U	1.0	U	1.0	U		
Cadmium	1.0	1.0	U	1.0	U	1.0	U		
Chromium	2.0	2.0	U	2.0	U	2.0	U		
Cobalt	1.0	1.0	U	0.101	J	0.0930	J		
Copper	2.0	2.0	U	2.0	U	2.0	U		
Lead	1.0	1.0	U	1.0	U	1.0	U		
Molybdenum	10	0.516	J	0.558	J	0.356	J		
Nickel	2.0	2.0	U	2.0	U	2.0	U		
Selenium	5.0	5.0	U	5.0	U	5.0	U		
Silver	1.0	1.0	U	1.0	U	1.0	U		
Thallium	2.0	0.459	J	0.899	J	0.470	J		
Tungsten	10	0.456	J	0.790	J	0.392	J		
Vanadium	20	20	U	20	U	20	U		
Zinc	20	20	U	20	U	20	U		

USE USE USE

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-41879/8-A 04/27/2012 17:55		CCB 240-41879/11-A 04/27/2012 20:29		CCB 240-41879/11-A 04/27/2012 20:54		CCB 240-41879/11-A 04/27/2012 21:19	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-41879/11-A 04/27/2012 21:43		CCB 240-41879/11-A 04/27/2012 22:08					
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U				

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-41879/8-A 04/28/2012 10:22		CCB 240-41879/11-A 04/28/2012 11:33		CCB 240-41879/11-A 04/28/2012 11:59		CCB 240-41879/11-A 04/28/2012 12:22	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-41803/1-A

Instrument Code: I8 Batch No.: 42093

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	1.67	J		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	2.0	U		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	1.10	J		6020
7439-92-1	Lead	0.268	J		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	2.0	U		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	0.0910	J		6020
7440-28-0	Thallium	2.0	U		6020
7440-62-2	Vanadium	20	U		6020
7440-33-7	Tungsten	10	U		6020
7440-66-6	Zinc	13.7	J		6020

MT-MW043 Total

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-41805/1-A

Instrument Code: I8 Batch No.: 42093

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	2.18	J		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	2.0	U		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	1.32	J		6020
7439-92-1	Lead	~~0.197~~	J		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	2.0	U		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	1.0	U		6020
7440-28-0	Thallium	2.0	U		6020
7440-62-2	Vanadium	20	U		6020
7440-33-7	Tungsten	10	U		6020
7440-66-6	Zinc	11.7	J		6020

MT-MW045 Dissolved

MT-MW015 Total and dissolved

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-41755/1-A

Instrument Code: H4 Batch No.: 42025

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-41812/1-A

Instrument Code: H4 Batch No.: 42155

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICSA 240-42093/9 Instrument ID: I8

Lab File ID: I8042812A.csv ICS Source: MTMSICSAW_00014

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.170**	
Arsenic		**0.431**	
Barium		**0.184**	
Beryllium		**0.0370**	
Cadmium		**-0.527**	
Chromium		**0.373**	
Cobalt		**0.0960**	
Copper		**0.485**	
Lead		**0.0670**	
Molybdenum	**1000**	**1042**	**104**
Nickel		**0.710**	
Selenium		**-0.199**	
Silver		**0.0400**	
Thallium		**0.0950**	
Tungsten		**0.145**	
Vanadium		**0.0690**	
Zinc		**4.99**	
Aluminum	*50000*	*51080*	*102*
Boron		*0.169*	
Calcium	*50000*	*51270*	*103*
Iron	*50000*	*52480*	*105*
Magnesium	*50000*	*51630*	*103*
Manganese		*0.552*	
Potassium	*50000*	*51090*	*102*
Sodium	*50000*	*51920*	*104*
Strontium		*0.338*	
Tin		*0.0850*	
Titanium	*1000*	*1073*	*107*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICSAB 240-42093/10 Instrument ID: I8

Lab File ID: I8042812A.csv ICS Source: MTMSICSABW_00014

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**102**	**102**
Arsenic	**100**	**102**	**102**
Barium	**100**	**104**	**104**
Beryllium	**100**	**93.8**	**94**
Cadmium	**100**	**102**	**102**
Chromium	**100**	**110**	**110**
Cobalt	**100**	**103**	**103**
Copper	**100**	**103**	**103**
Lead	**100**	**110**	**110**
Molybdenum	**1100**	**1163**	**106**
Nickel	**100**	**107**	**107**
Selenium	**100**	**105**	**105**
Silver	**100**	**104**	**104**
Thallium	**100**	**108**	**108**
Tungsten	**100**	**103**	**103**
Vanadium	**100**	**103**	**103**
Zinc	**100**	**106**	**106**
Aluminum	*50000*	*50810*	*102*
Boron	*100*	*90.9*	*91*
Calcium	*50000*	*51580*	*103*
Iron	*50000*	*52740*	*105*
Magnesium	*50000*	*51780*	*104*
Manganese	*100*	*105*	*105*
Potassium	*50000*	*50640*	*101*
Sodium	*50000*	*51680*	*103*
Strontium	*100*	*97.6*	*98*
Tin	*100*	*101*	*101*
Titanium	*1100*	*1153*	*105*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICSA 240-42093/120 Instrument ID: I8

Lab File ID: I8042812A.csv ICS Source: MTMSICSAW_00014

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Found Percent Recovery
Antimony		**0.160**	
Arsenic		**0.491**	
Barium		**0.180**	
Beryllium		**0.0750**	
Cadmium		**-0.469**	
Chromium		**0.328**	
Cobalt		**0.128**	
Copper		**0.498**	
Lead		**0.0770**	
Molybdenum	**1000**	**1047**	**105**
Nickel		**0.720**	
Selenium		**0.0050**	
Silver		**0.0490**	
Thallium		**0.335**	
Tungsten		**0.115**	
Vanadium		**0.248**	
Zinc		**5.46**	
Aluminum	*50000*	*52880*	*106*
Boron		*0.472*	
Calcium	*50000*	*51610*	*103*
Iron	*50000*	*51840*	*104*
Magnesium	*50000*	*52500*	*105*
Manganese		*0.585*	
Potassium	*50000*	*51220*	*102*
Sodium	*50000*	*53550*	*107*
Strontium		*0.412*	
Tin		*0.294*	
Titanium	*1000*	*1072*	*107*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Lab Sample ID: ICSAB 240-42093/121 Instrument ID: I8

Lab File ID: I8042812A.csv ICS Source: MTMSICSABW_00014

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**101**	**101**
Arsenic	**100**	**103**	**103**
Barium	**100**	**104**	**104**
Beryllium	**100**	**102**	**102**
Cadmium	**100**	**101**	**101**
Chromium	**100**	**109**	**109**
Cobalt	**100**	**103**	**103**
Copper	**100**	**105**	**105**
Lead	**100**	**111**	**111**
Molybdenum	**1100**	**1161**	**106**
Nickel	**100**	**107**	**107**
Selenium	**100**	**104**	**104**
Silver	**100**	**102**	**102**
Thallium	**100**	**111**	**111**
Tungsten	**100**	**104**	**104**
Vanadium	**100**	**103**	**103**
Zinc	**100**	**108**	**108**
Aluminum	*50000*	*52390*	*105*
Boron	*100*	*97.0*	*97*
Calcium	*50000*	*51700*	*103*
Iron	*50000*	*51680*	*103*
Magnesium	*50000*	*52600*	*105*
Manganese	*100*	*109*	*109*
Potassium	*50000*	*50320*	*101*
Sodium	*50000*	*53210*	*106*
Strontium	*100*	*98.0*	*98*
Tin	*100*	*99.8*	*100*
Titanium	*1100*	*1183*	*108*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-10570-D-11-C MS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.11		0.20	U	1.00	111	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-10621-AL-1-B MS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	98.1		0.16	J	100	98	44-153		6020
Arsenic	1010		12		1000	100	82-123		6020
Barium	1130		100		1000	102	45-144		6020
Beryllium	962		1.0	U	1000	96	77-124		6020
Cadmium	988		1.0	U	1000	99	78-117		6020
Chromium	1010		2.0	U	1000	101	72-110		6020
Cobalt	999		2.2		1000	100	67-114		6020
Copper	985		2.0	U	1000	98	60-123		6020
Lead	1100		1.0	U	1000	110	73-115		6020
Molybdenum	107		5.1	J	100	102	80-110		6020
Nickel	994		2.7		1000	99	72-111		6020
Selenium	999		5.0	U	1000	100	72-148		6020
Silver	99.3		1.0	U	100	99	10-139		6020
Thallium	264		0.77	J	250	105	69-117		6020
Vanadium	1010		0.46	J	1000	100	70-112		6020
Tungsten	101		0.56	J	100	100	43-133		6020
Zinc	982		20	U	1000	98	49-156		6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-10615-J-4-B MS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	98.0		0.71	J	100	97	44-153		6020
Arsenic	978		0.75	J	1000	98	82-123		6020
Barium	1090		92		1000	99	45-144		6020
Beryllium	980		1.0	U	1000	98	77-124		6020
Cadmium	989		1.0	U	1000	99	78-117		6020
Chromium	983		2.0	U	1000	98	72-110		6020
Cobalt	982		0.13	J	1000	98	67-114		6020
Copper	1010		4.3		1000	100	60-123		6020
Lead	1080		1.0	U	1000	108	73-115		6020
Molybdenum	109		11		100	98	80-110		6020
Nickel	998		0.62	J	1000	100	72-111		6020
Selenium	988		5.0	U	1000	99	72-148		6020
Silver	101		1.0	U	100	101	10-139		6020
Thallium	266		0.80	J	250	106	69-117		6020
Vanadium	964		20	U	1000	96	70-112		6020
Tungsten	96.9		0.62	J	100	96	43-133		6020
Zinc	1000		20	U	1000	100	49-156		6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-10615-G-4-B MS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	96.1		0.29	J	100	96	44-153		6020
Arsenic	966		0.72	J	1000	97	82-123		6020
Barium	1080		89		1000	99	45-144		6020
Beryllium	998		1.0	U	1000	100	77-124		6020
Cadmium	975		1.0	U	1000	98	78-117		6020
Chromium	990		2.0	U	1000	99	72-110		6020
Cobalt	979		0.061	J	1000	98	67-114		6020
Copper	998		0.37	J	1000	100	60-123		6020
Lead	1080		1.0	U	1000	108	73-115		6020
Molybdenum	109		11		100	98	80-110		6020
Nickel	992		0.20	J	1000	99	72-111		6020
Selenium	990		5.0	U	1000	99	72-148		6020
Silver	99.4		1.0	U	100	99	10-139		6020
Thallium	262		1.1	J	250	104	69-117		6020
Vanadium	979		20	U	1000	98	70-112		6020
Tungsten	96.3		0.81	J	100	96	43-133		6020
Zinc	991		5.2	J	1000	99	49-156		6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-10615-J-4-E MS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.01		0.20	U	1.00	101	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-10615-G-4-E MS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.00		0.20	U	1.00	100	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-10570-D-11-D MSD

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	1.06		1.00	106	69-134	5	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-10621-AL-1-C MSD

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	96.8		100	97	44-153	1	20		6020
Arsenic	995		1000	98	82-123	2	20		6020
Barium	1110		1000	101	45-144	2	20		6020
Beryllium	968		1000	97	77-124	1	20		6020
Cadmium	969		1000	97	78-117	2	20		6020
Chromium	1010		1000	101	72-110	1	20		6020
Cobalt	987		1000	98	67-114	1	20		6020
Copper	971		1000	97	60-123	1	20		6020
Lead	1080		1000	108	73-115	2	20		6020
Molybdenum	106		100	101	80-110	1	20		6020
Nickel	983		1000	98	72-111	1	20		6020
Selenium	988		1000	99	72-148	1	20		6020
Silver	97.6		100	98	10-139	2	20		6020
Thallium	262		250	104	69-117	1	20		6020
Vanadium	996		1000	100	70-112	1	20		6020
Tungsten	100		100	100	43-133	1	20		6020
Zinc	973		1000	97	49-156	1	20		6020

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-10615-J-4-C MSD

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	96.8		100	96	44-153	1	20		6020
Arsenic	961		1000	96	82-123	2	20		6020
Barium	1080		1000	99	45-144	0	20		6020
Beryllium	976		1000	98	77-124	0	20		6020
Cadmium	982		1000	98	78-117	1	20		6020
Chromium	981		1000	98	72-110	0	20		6020
Cobalt	976		1000	98	67-114	1	20		6020
Copper	992		1000	99	60-123	1	20		6020
Lead	1070		1000	107	73-115	1	20		6020
Molybdenum	109		100	98	80-110	0	20		6020
Nickel	986		1000	99	72-111	1	20		6020
Selenium	978		1000	98	72-148	1	20		6020
Silver	99.9		100	100	10-139	1	20		6020
Thallium	264		250	105	69-117	1	20		6020
Vanadium	966		1000	97	70-112	0	20		6020
Tungsten	95.4		100	95	43-133	2	20		6020
Zinc	986		1000	99	49-156	2	20		6020

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-10615-G-4-C MSD

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	95.7		100	95	44-153	0	20		6020
Arsenic	974		1000	97	82-123	1	20		6020
Barium	1080		1000	99	45-144	0	20		6020
Beryllium	993		1000	99	77-124	0	20		6020
Cadmium	978		1000	98	78-117	0	20		6020
Chromium	987		1000	99	72-110	0	20		6020
Cobalt	982		1000	98	67-114	0	20		6020
Copper	998		1000	100	60-123	0	20		6020
Lead	1070		1000	107	73-115	1	20		6020
Molybdenum	109		100	98	80-110	0	20		6020
Nickel	994		1000	99	72-111	0	20		6020
Selenium	986		1000	99	72-148	0	20		6020
Silver	101		100	101	10-139	1	20		6020
Thallium	263		250	105	69-117	0	20		6020
Vanadium	968		1000	97	70-112	1	20		6020
Tungsten	96.2		100	95	43-133	0	20		6020
Zinc	997		1000	99	49-156	1	20		6020

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-10615-J-4-F MSD

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	1.11		1.00	111	69-134	9	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 240-10615-G-4-F MSD

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.965		1.00	97	69-134	4	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-41805/2-A

Lab Name: TestAmerica Canton Job No.: 240-10598-1

Sample Matrix: Water LCS Source: MTICPMSB_00006

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	95.1		95	80	120		6020
Arsenic	1000	972		97	80	120		6020
Barium	1000	983		98	80	120		6020
Beryllium	1000	993		99	80	120		6020
Cadmium	1000	989		99	80	120		6020
Chromium	1000	976		98	80	120		6020
Cobalt	1000	971		97	80	120		6020
Copper	1000	1020		102	80	120		6020
Lead	1000	1080		108	80	120		6020
Molybdenum	100	94.7		95	80	120		6020
Nickel	1000	998		100	80	120		6020
Selenium	1000	999		100	80	120		6020
Silver	100	102		102	80	120		6020
Thallium	250	264		106	80	120		6020
Vanadium	1000	954		95	80	120		6020
Tungsten	100	92.9		93	80	120		6020
Zinc	1000	1030		103	80	120		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-41803/2-A

Lab Name: TestAmerica Canton Job No.: 240-10598-1

Sample Matrix: Water LCS Source: MTICPMSB_00006

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	92.6		93	80	120		6020
Arsenic	1000	940		94	80	120		6020
Barium	1000	946		95	80	120		6020
Beryllium	1000	991		99	80	120		6020
Cadmium	1000	955		95	80	120		6020
Chromium	1000	952		95	80	120		6020
Cobalt	1000	956		96	80	120		6020
Copper	1000	987		99	80	120		6020
Lead	1000	1070		107	80	120		6020
Molybdenum	100	91.9		92	80	120		6020
Nickel	1000	972		97	80	120		6020
Selenium	1000	970		97	80	120		6020
Silver	100	99.4		99	80	120		6020
Thallium	250	258		103	80	120		6020
Vanadium	1000	929		93	80	120		6020
Tungsten	100	90.5		91	80	120		6020
Zinc	1000	992		99	80	120		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-41755/2-A

Lab Name: TestAmerica Canton Job No.: 240-10598-1

Sample Matrix: Water LCS Source: MTHGICVW_00283

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.18		104	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-41812/2-A

Lab Name: TestAmerica Canton Job No.: 240-10598-1

Sample Matrix: Water LCS Source: MTHGICVW_00284

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.93		99	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-10621-AL-1-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-10598-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.16	J	10	U	NC		6020
Arsenic	12		12.2	J	NC		6020
Barium	100		102		NC		6020
Beryllium	1.0	U	5.0	U	NC		6020
Cadmium	1.0	U	5.0	U	NC		6020
Chromium	2.0	U	10	U	NC		6020
Cobalt	2.2		2.11	J	NC		6020
Copper	2.0	U	10	U	NC		6020
Lead	1.0	U	5.0	U	NC		6020
Molybdenum	5.1	J	5.00	J	NC		6020
Nickel	2.7		2.63	J	NC		6020
Selenium	5.0	U	25	U	NC		6020
Silver	1.0	U	5.0	U	NC		6020
Thallium	0.77	J	1.42	J	NC		6020
Vanadium	0.46	J	100	U	NC		6020
Tungsten	0.56	J	50	U	NC		6020
Zinc	20	U	100	U	NC		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-10615-J-4-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-10598-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.71	J	0.840	J	NC		6020
Arsenic	0.75	J	25	U	NC		6020
Barium	92		91.8		NC		6020
Beryllium	1.0	U	5.0	U	NC		6020
Cadmium	1.0	U	5.0	U	NC		6020
Chromium	2.0	U	10	U	NC		6020
Cobalt	0.13	J	0.475	J	NC		6020
Copper	4.3		5.17	J	NC		6020
Lead	1.0	U	5.0	U	NC		6020
Molybdenum	11		11.4	J	NC		6020
Nickel	0.62	J	1.10	J	NC		6020
Selenium	5.0	U	25	U	NC		6020
Silver	1.0	U	5.0	U	NC		6020
Thallium	0.80	J	1.58	J	NC		6020
Vanadium	20	U	100	U	NC		6020
Tungsten	0.62	J	50	U	NC		6020
Zinc	20	U	100	U	NC		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 XMDL Date: 02/09/2010 15:53

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 XMDL Date: 02/09/2010 15:53

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10598-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-10598-1

SDG No.:

Instrument ID: I8 Date: 07/05/2011 09:44

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		1000	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		10000	6020
Cadmium		10000	6020
Chromium		10000	6020
Cobalt		10000	6020
Copper		10000	6020
Lead		10000	6020
Molybdenum		2000	6020
Nickel		10000	6020
Selenium		10000	6020
Silver		1000	6020
Thallium		10000	6020
Vanadium		10000	6020
Tungsten		2000	6020
Zinc		10000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-10598-1

SDG No.:

Instrument ID: H4 Date: 04/01/2011 10:50

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-41803/1-A	04/26/2012 16:50	41803		50	50
LCS 240-41803/2-A	04/26/2012 16:50	41803		50	50
240-10621-AL-1-B MS	04/26/2012 16:50	41803		50	50
240-10621-AL-1-C MSD	04/26/2012 16:50	41803		50	50
240-10598-2	04/26/2012 16:50	41803		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-41805/1-A	04/26/2012 17:01	41805		50	50
LCS 240-41805/2-A	04/26/2012 17:01	41805		50	50
240-10615-J-4-B MS	04/26/2012 17:01	41805		50	50
240-10615-J-4-C MSD	04/26/2012 17:01	41805		50	50
240-10615-G-4-B MS	04/26/2012 17:01	41805		50	50
240-10615-G-4-C MSD	04/26/2012 17:01	41805		50	50
240-10598-2	04/26/2012 17:01	41805		50	50
240-10598-3	04/26/2012 17:01	41805		50	50
240-10598-3	04/26/2012 17:01	41805		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-41755/1-A	04/26/2012 15:50	41755		100	100
LCS 240-41755/2-A	04/26/2012 15:50	41755		100	100
240-10570-D-11-C MS	04/26/2012 15:50	41755		100	100
240-10570-D-11-D MSD	04/26/2012 15:50	41755		100	100
240-10598-2	04/26/2012 15:50	41755		100	100
240-10598-2	04/26/2012 15:50	41755		100	100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-41812/1-A	04/27/2012 12:40	41812		100	100
LCS 240-41812/2-A	04/27/2012 12:40	41812		100	100
240-10615-J-4-E MS	04/27/2012 12:40	41812		100	100
240-10615-J-4-F MSD	04/27/2012 12:40	41812		100	100
240-10615-G-4-E MS	04/27/2012 12:40	41812		100	100
240-10615-G-4-F MSD	04/27/2012 12:40	41812		100	100
240-10598-3	04/27/2012 12:40	41812		100	100
240-10598-3	04/27/2012 12:40	41812		100	100

ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ICIS 240-42093/1			08:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD2 240-42093/2 IC	1		08:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD3 240-42093/3 IC	1		08:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD4 240-42093/4 IC	1		08:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICV 240-42093/5	1		08:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB 240-42093/6	1		08:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CRI 240-42093/7	1		08:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CRI 240-42093/8			08:48																				
ICSA 240-42093/9	1		08:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB 240-42093/10	1		08:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-42093/11			09:06																				
CCB 240-42093/12			09:13																				
ZZZZZZ			09:19																				
ZZZZZZ			09:24																				
ZZZZZZ			09:31																				
ZZZZZZ			09:37																				
ZZZZZZ			09:42																				
ZZZZZZ			09:49																				
ZZZZZZ			09:56																				
ZZZZZZ			10:02																				
ZZZZZZ			10:09																				
ZZZZZZ			10:16																				
CCV 240-42093/23			10:21																				
CCB 240-42093/24			10:28																				
ZZZZZZ			10:34																				
ZZZZZZ			10:39																				
ZZZZZZ			10:44																				
ZZZZZZ			10:50																				
ZZZZZZ			10:55																				
ZZZZZZ			11:00																				
ZZZZZZ			11:06																				
ZZZZZZ			11:11																				
CRI 240-42093/33			11:17																				
CCV 240-42093/34			11:22																				
CCB 240-42093/35			11:29																				
ZZZZZZ			11:35																				
ZZZZZZ			11:40																				
ZZZZZZ			11:46																				
ZZZZZZ			11:51																				
ZZZZZZ			11:56																				
ZZZZZZ			12:02																				
ZZZZZZ			12:07																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			12:13																				
ZZZZZZ			12:18																				
ZZZZZZ			12:23																				
CCV 240-42093/46	1		12:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42093/47	1		12:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			12:41																				
ZZZZZZ			12:47																				
ZZZZZZ			12:52																				
MB 240-41805/1-A	1	R	12:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LCS 240-41805/2-A	1	R	13:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			13:10																				
240-10615-J-4-A SD ^5	5	R	13:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10615-J-4-B MS	1	R	13:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10615-J-4-C MSD	1	R	13:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			13:35																				
CCV 240-42093/58	1		13:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42093/59	1		13:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10615-G-4-B MS	1	D	13:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10615-G-4-C MSD	1	D	14:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10598-2	1	D	14:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10598-3	1	R	14:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10598-3	1	D	14:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			14:24																				
ZZZZZZ			14:29																				
ZZZZZZ			14:35																				
ZZZZZZ			14:40																				
ZZZZZZ			14:46																				
CCV 240-42093/70	1		14:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42093/71	1		14:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			15:04																				
ZZZZZZ			15:09																				
ZZZZZZ			15:14																				
ZZZZZZ			15:20																				
ZZZZZZ			15:25																				
ZZZZZZ			15:31																				
ZZZZZZ			15:36																				
ZZZZZZ			15:41																				
ZZZZZZ			15:47																				
ZZZZZZ			15:52																				
CCV 240-42093/82			15:58																				
CCB 240-42093/83			16:05																				
ZZZZZZ			16:10																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			16:16																				
ZZZZZZ			16:23																				
ZZZZZZ			16:28																				
ZZZZZZ			16:34																				
ZZZZZZ			16:41																				
ZZZZZZ			16:48																				
ZZZZZZ			16:54																				
ZZZZZZ			16:59																				
ZZZZZZ			17:04																				
CCV 240-42093/94			17:10																				
CCB 240-42093/95			17:17																				
ZZZZZZ			17:22																				
ZZZZZZ			17:28																				
ZZZZZZ			17:33																				
ZZZZZZ			17:39																				
ZZZZZZ			17:44																				
ZZZZZZ			17:49																				
ZZZZZZ			17:55																				
ZZZZZZ			18:00																				
ZZZZZZ			18:06																				
ZZZZZZ			18:11																				
CCV 240-42093/106			18:17																				
CCB 240-42093/107			18:24																				
ZZZZZZ			18:29																				
ZZZZZZ			18:35																				
ZZZZZZ			18:42																				
ZZZZZZ			18:47																				
ZZZZZZ			18:53																				
ZZZZZZ			18:58																				
ZZZZZZ			19:05																				
ZZZZZZ			19:12																				
ZZZZZZ			19:18																				
ZZZZZZ			19:23																				
CCV 240-42093/118			19:29																				
CCB 240-42093/119			19:36																				
ICSA 240-42093/120	1		19:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ICSAB 240-42093/121	1		19:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV 240-42093/122			19:54																				
CCB 240-42093/123			20:01																				
ZZZZZZ			20:07																				
ZZZZZZ			20:12																				
ZZZZZZ			20:18																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			20:23																				
ZZZZZZ			20:28																				
ZZZZZZ			20:34																				
ZZZZZZ			20:39																				
ZZZZZZ			20:45																				
ZZZZZZ			20:50																				
ZZZZZZ			20:56																				
CCV 240-42093/134	1		21:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42093/135	1		21:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			21:14																				
ZZZZZZ			21:19																				
ZZZZZZ			21:25																				
ZZZZZZ			21:30																				
MB 240-41803/1-A	1	R	21:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LCS 240-41803/2-A	1	R	21:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			21:48																				
240-10621-AL-1-A SD ^5	5	R	21:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10621-AL-1-B MS	1	R	21:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10621-AL-1-C MSD	1	R	22:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-42093/146	1		22:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42093/147	1		22:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			22:26																				
ZZZZZZ			22:32																				
ZZZZZZ			22:37																				
ZZZZZZ			22:43																				
240-10598-2	1	R	22:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			22:53																				
ZZZZZZ			22:59																				
ZZZZZZ			23:04																				
ZZZZZZ			23:10																				
ZZZZZZ			23:15																				
CCV 240-42093/158	1		23:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42093/159	1		23:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			23:34																				
ZZZZZZ			23:39																				
ZZZZZZ			23:44																				
ZZZZZZ			23:50																				
ZZZZZZ			23:55																				
ZZZZZZ			00:01																				
ZZZZZZ			00:06																				
ZZZZZZ			00:12																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			00:17																				
ZZZZZZ			00:23																				
CCV 240-42093/170			00:28																				
CCB 240-42093/171			00:35																				
ZZZZZZ			00:40																				
ZZZZZZ			00:48																				
ZZZZZZ			00:53																				
ZZZZZZ			01:00																				
ZZZZZZ			01:07																				
ZZZZZZ			01:13																				
ZZZZZZ			01:18																				
ZZZZZZ			01:24																				
ZZZZZZ			01:29																				
ZZZZZZ			01:35																				
CCV 240-42093/182			01:40																				
CCB 240-42093/183			01:47																				
ZZZZZZ			01:53																				
ZZZZZZ			01:58																				
ZZZZZZ			02:03																				
ZZZZZZ			02:09																				
ZZZZZZ			02:14																				
ZZZZZZ			02:20																				
ZZZZZZ			02:25																				
ZZZZZZ			02:31																				
ZZZZZZ			02:36																				
ZZZZZZ			02:42																				
CCV 240-42093/194			02:47																				
CCB 240-42093/195			02:54																				
ZZZZZZ			02:59																				
ZZZZZZ			03:04																				
ZZZZZZ			03:10																				
CCV 240-42093/199			03:15																				
CCB 240-42093/200			03:22																				

Prep Types
D = Dissolved
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/27/2012 17:42 End Date: 04/27/2012 22:52

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-41879/1-A			17:42	X																				
IC 240-41879/2-A			17:44	X																				
IC 240-41879/3-A			17:46	X																				
IC 240-41879/4-A			17:48	X																				
IC 240-41879/5-A			17:50	X																				
IC 240-41879/6-A			17:52	X																				
ICV 240-41879/7-A	1		17:54	X																				
ICB 240-41879/8-A	1		17:55	X																				
CRA 240-41879/9-A	1		17:58	X																				
CCVL 240-41879/10-A	1		18:00	X																				
CCB 240-41879/11-A			18:02																					
ZZZZZZ			18:04																					
ZZZZZZ			18:06																					
ZZZZZZ			18:08																					
ZZZZZZ			18:10																					
ZZZZZZ			18:12																					
ZZZZZZ			18:14																					
ZZZZZZ			18:16																					
ZZZZZZ			18:18																					
ZZZZZZ			18:20																					
ZZZZZZ			18:23																					
CCV 240-41879/12-A			18:25																					
CCB 240-41879/11-A			18:27																					
ZZZZZZ			18:29																					
ZZZZZZ			18:31																					
ZZZZZZ			18:33																					
ZZZZZZ			18:36																					
ZZZZZZ			18:38																					
ZZZZZZ			18:41																					
ZZZZZZ			18:43																					
ZZZZZZ			18:45																					
ZZZZZZ			18:47																					
ZZZZZZ			18:49																					
CCV 240-41879/12-A			18:51																					
CCB 240-41879/11-A			18:53																					
ZZZZZZ			18:55																					
ZZZZZZ			18:57																					
ZZZZZZ			19:00																					
ZZZZZZ			19:01																					
ZZZZZZ			19:03																					
ZZZZZZ			19:05																					
ZZZZZZ			19:07																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/27/2012 17:42 End Date: 04/27/2012 22:52

Lab Sample ID	D / F	Type	Time	Analytes																					
				Hg																					
ZZZZZZ			19:10																						
ZZZZZZ			19:12																						
ZZZZZZ			19:14																						
CCV 240-41879/12-A			19:17																						
CCB 240-41879/11-A			19:18																						
ZZZZZZ			19:20																						
ZZZZZZ			19:22																						
ZZZZZZ			19:24																						
ZZZZZZ			19:26																						
ZZZZZZ			19:28																						
ZZZZZZ			19:30																						
ZZZZZZ			19:32																						
ZZZZZZ			19:34																						
ZZZZZZ			19:36																						
ZZZZZZ			19:37																						
CCV 240-41879/12-A			19:39																						
CCB 240-41879/11-A			19:41																						
ZZZZZZ			19:43																						
ZZZZZZ			19:45																						
ZZZZZZ			19:47																						
ZZZZZZ			19:49																						
ZZZZZZ			19:51																						
ZZZZZZ			19:53																						
ZZZZZZ			19:55																						
ZZZZZZ			19:56																						
ZZZZZZ			19:58																						
ZZZZZZ			20:00																						
CCV 240-41879/12-A			20:02																						
CCB 240-41879/11-A			20:04																						
ZZZZZZ			20:06																						
ZZZZZZ			20:08																						
ZZZZZZ			20:10																						
ZZZZZZ			20:12																						
ZZZZZZ			20:14																						
ZZZZZZ			20:16																						
ZZZZZZ			20:18																						
ZZZZZZ			20:21																						
ZZZZZZ			20:23																						
ZZZZZZ			20:25																						
CCV 240-41879/12-A	1		20:27	X																					
CCB 240-41879/11-A	1		20:29	X																					
ZZZZZZ			20:31																						

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/27/2012 17:42 End Date: 04/27/2012 22:52

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			20:33	
ZZZZZZ			20:36	
ZZZZZZ			20:38	
ZZZZZZ			20:40	
ZZZZZZ			20:42	
ZZZZZZ			20:44	
ZZZZZZ			20:46	
MB 240-41755/1-A	1	T	20:48	X
LCS 240-41755/2-A	1	T	20:50	X
CCV 240-41879/12-A	1		20:52	X
CCB 240-41879/11-A	1		20:54	X
ZZZZZZ			20:56	
240-10570-D-11-C MS	1	D	20:58	X
240-10570-D-11-D MSD	1	D	21:00	X
ZZZZZZ			21:02	
ZZZZZZ			21:04	
ZZZZZZ			21:07	
ZZZZZZ			21:09	
ZZZZZZ			21:11	
ZZZZZZ			21:13	
ZZZZZZ			21:15	
CCV 240-41879/12-A	1		21:17	X
CCB 240-41879/11-A	1		21:19	X
ZZZZZZ			21:21	
ZZZZZZ			21:23	
ZZZZZZ			21:26	
ZZZZZZ			21:28	
ZZZZZZ			21:30	
ZZZZZZ			21:32	
ZZZZZZ			21:34	
ZZZZZZ			21:36	
ZZZZZZ			21:38	
ZZZZZZ			21:40	
CCV 240-41879/12-A	1		21:42	X
CCB 240-41879/11-A	1		21:43	X
240-10598-2	1	T	21:45	X
240-10598-2	1	D	21:47	X
ZZZZZZ			21:49	
ZZZZZZ			21:51	
ZZZZZZ			21:53	
ZZZZZZ			21:55	
ZZZZZZ			21:57	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/27/2012 17:42 End Date: 04/27/2012 22:52

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			22:00																					
ZZZZZZ			22:02																					
ZZZZZZ			22:04																					
CCV 240-41879/12-A	1		22:06	X																				
CCB 240-41879/11-A	1		22:08	X																				
ZZZZZZ			22:10																					
ZZZZZZ			22:12																					
ZZZZZZ			22:14																					
ZZZZZZ			22:16																					
ZZZZZZ			22:18																					
ZZZZZZ			22:20																					
ZZZZZZ			22:22																					
ZZZZZZ			22:24																					
ZZZZZZ			22:25																					
ZZZZZZ			22:28																					
CCV 240-41879/12-A			22:30																					
CCB 240-41879/11-A			22:32																					
ZZZZZZ			22:34																					
ZZZZZZ			22:36																					
ZZZZZZ			22:38																					
ZZZZZZ			22:40																					
ZZZZZZ			22:42																					
ZZZZZZ			22:44																					
ZZZZZZ			22:45																					
ZZZZZZ			22:47																					
CCV 240-41879/12-A			22:50																					
CCB 240-41879/11-A			22:52																					

Prep Types

D = Dissolved

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/28/2012 10:06 End Date: 04/28/2012 15:00

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
IC 240-41879/1-A			10:06	X
IC 240-41879/2-A			10:08	X
IC 240-41879/3-A			10:10	X
IC 240-41879/4-A			10:13	X
IC 240-41879/5-A			10:15	X
IC 240-41879/6-A			10:17	X
ICV 240-41879/7-A	1		10:19	X
ICB 240-41879/8-A	1		10:22	X
CRA 240-41879/9-A	1		10:24	X
CCVL 240-41879/10-A	1		10:26	X
CCB 240-41879/11-A			10:28	
ZZZZZZ			10:30	
ZZZZZZ			10:32	
ZZZZZZ			10:34	
ZZZZZZ			10:36	
ZZZZZZ			10:38	
ZZZZZZ			10:40	
ZZZZZZ			10:42	
ZZZZZZ			10:44	
ZZZZZZ			10:46	
ZZZZZZ			10:49	
CCV 240-41879/12-A			10:52	
CCB 240-41879/11-A			10:55	
ZZZZZZ			10:57	
ZZZZZZ			10:59	
ZZZZZZ			11:01	
ZZZZZZ			11:03	
ZZZZZZ			11:05	
ZZZZZZ			11:07	
ZZZZZZ			11:08	
ZZZZZZ			11:11	
ZZZZZZ			11:13	
ZZZZZZ			11:15	
CCV 240-41879/12-A			11:17	
CCB 240-41879/11-A			11:19	
ZZZZZZ			11:22	
ZZZZZZ			11:24	
ZZZZZZ			11:26	
ZZZZZZ			11:28	
CCV 240-41879/12-A	1		11:31	X
CCB 240-41879/11-A	1		11:33	X
ZZZZZZ			11:35	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/28/2012 10:06 End Date: 04/28/2012 15:00

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			11:37	
ZZZZZZ			11:38	
ZZZZZZ			11:40	
ZZZZZZ			11:44	
ZZZZZZ			11:45	
ZZZZZZ			11:48	
ZZZZZZ			11:49	
MB 240-41812/1-A	1	T	11:51	X
LCS 240-41812/2-A	1	T	11:53	X
CCV 240-41879/12-A	1		11:55	X
CCB 240-41879/11-A	1		11:59	X
ZZZZZZ			12:01	
240-10615-J-4-E MS	1	T	12:03	X
240-10615-J-4-F MSD	1	T	12:05	X
ZZZZZZ			12:06	
240-10615-G-4-E MS	1	D	12:08	X
240-10615-G-4-F MSD	1	D	12:11	X
240-10598-3	1	T	12:13	X
240-10598-3	1	D	12:15	X
ZZZZZZ			12:16	
ZZZZZZ			12:18	
CCV 240-41879/12-A	1		12:20	X
CCB 240-41879/11-A	1		12:22	X
ZZZZZZ			12:24	
ZZZZZZ			12:26	
ZZZZZZ			12:28	
ZZZZZZ			12:30	
ZZZZZZ			12:32	
ZZZZZZ			12:34	
ZZZZZZ			12:36	
ZZZZZZ			12:37	
ZZZZZZ			12:39	
ZZZZZZ			12:41	
CCV 240-41879/12-A			12:43	
CCB 240-41879/11-A			12:45	
ZZZZZZ			12:47	
ZZZZZZ			12:50	
ZZZZZZ			12:52	
ZZZZZZ			12:54	
ZZZZZZ			12:56	
ZZZZZZ			12:58	
ZZZZZZ			13:00	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/28/2012 10:06 End Date: 04/28/2012 15:00

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			13:03																					
ZZZZZZ			13:05																					
ZZZZZZ			13:07																					
CCV 240-41879/12-A			13:09																					
CCB 240-41879/11-A			13:11																					
ZZZZZZ			13:13																					
ZZZZZZ			13:15																					
ZZZZZZ			13:17																					
ZZZZZZ			13:19																					
ZZZZZZ			13:21																					
ZZZZZZ			13:23																					
ZZZZZZ			13:25																					
ZZZZZZ			13:27																					
ZZZZZZ			13:29																					
ZZZZZZ			13:31																					
CCV 240-41879/12-A			13:33																					
CCB 240-41879/11-A			13:35																					
ZZZZZZ			13:37																					
ZZZZZZ			13:39																					
ZZZZZZ			13:41																					
ZZZZZZ			13:42																					
ZZZZZZ			13:44																					
ZZZZZZ			13:47																					
ZZZZZZ			13:49																					
ZZZZZZ			13:51																					
ZZZZZZ			13:53																					
ZZZZZZ			13:55																					
CCV 240-41879/12-A			13:57																					
CCB 240-41879/11-A			13:59																					
ZZZZZZ			14:00																					
ZZZZZZ			14:03																					
ZZZZZZ			14:05																					
ZZZZZZ			14:07																					
ZZZZZZ			14:09																					
ZZZZZZ			14:11																					
ZZZZZZ			14:13																					
ZZZZZZ			14:15																					
ZZZZZZ			14:17																					
ZZZZZZ			14:19																					
CCV 240-41879/12-A			14:22																					
CCB 240-41879/11-A			14:24																					
ZZZZZZ			14:26																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/28/2012 10:06 End Date: 04/28/2012 15:00

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			14:28																					
ZZZZZZ			14:29																					
ZZZZZZ			14:32																					
ZZZZZZ			14:34																					
ZZZZZZ			14:36																					
ZZZZZZ			14:38																					
ZZZZZZ			14:40																					
ZZZZZZ			14:42																					
ZZZZZZ			14:44																					
CCV 240-41879/12-A			14:46																					
CCB 240-41879/11-A			14:48																					
ZZZZZZ			14:50																					
ZZZZZZ			14:52																					
ZZZZZZ			14:54																					
ZZZZZZ			14:56																					
CCV 240-41879/12-A			14:58																					
CCB 240-41879/11-A			15:00																					

Prep Types

D = Dissolved

T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 04/28/2012 End Date: 04/28/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
STD2 240-42093/2 IC	08:11	78		88		93		91		93	
STD3 240-42093/3 IC	08:18	72		82		86		83		87	
STD4 240-42093/4 IC	08:25	92		99		99		99		98	
ICV 240-42093/5	08:30	79		89		92		90		92	
ICB 240-42093/6	08:37	93		98		99		98		98	
CRI 240-42093/7	08:43	90		97		98		97		97	
ICSA 240-42093/9	08:53	66		78		79		80		84	
ICSAB 240-42093/10	08:59	57		69		74		76		81	
CCV 240-42093/46	12:29	69		75		79		77		80	
CCB 240-42093/47	12:36	91		87		87		87		87	
MB 240-41805/1-A	12:58	82		82		87		86		86	
LCS 240-41805/2-A	13:03	78		80		85		84		87	
240-10615-J-4-A SD	13:16	83		79		82		82		83	
240-10615-J-4-B MS	13:21	73		75		80		79		82	
240-10615-J-4-C MSD	13:28	78		76		79		79		81	
CCV 240-42093/58	13:41	71		72		78		76		78	
CCB 240-42093/59	13:48	92		82		85		84		84	
240-10615-G-4-B MS	13:53	77		76		79		79		81	
240-10615-G-4-C MSD	14:00	80		76		79		77		80	
240-10598-2	14:07	90		79		80		80		81	
240-10598-3	14:13	76		72		75		74		75	
240-10598-3	14:18	75		72		75		74		75	
CCV 240-42093/70	14:51	67		68		73		71		74	
CCB 240-42093/71	14:58	91		80		80		80		80	
ICSA 240-42093/120	19:41	65		66		67		66		69	
ICSAB 240-42093/121	19:47	57		61		65		64		68	
CCV 240-42093/134	21:01	61		67		70		68		70	
CCB 240-42093/135	21:08	80		73		74		74		73	
MB 240-41803/1-A	21:36	73		68		73		72		73	
LCS 240-41803/2-A	21:41	70		68		73		72		73	
240-10621-AL-1-A SD	21:54	72		68		72		71		71	
240-10621-AL-1-B MS	21:59	59		63		65		63		67	
240-10621-AL-1-C	22:06	61		62		65		64		67	
CCV 240-42093/146	22:14	67		65		68		66		68	
CCB 240-42093/147	22:21	81		71		74		73		73	
240-10598-2	22:48	71		68		71		71		71	
CCV 240-42093/158	23:21	59		63		68		66		67	
CCB 240-42093/159	23:28	77		70		73		72		72	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 04/28/2012 End Date: 04/28/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD2 240-42093/2 IC	08:11			96							
STD3 240-42093/3 IC	08:18			91							
STD4 240-42093/4 IC	08:25			99							
ICV 240-42093/5	08:30			95							
ICB 240-42093/6	08:37			98							
CRI 240-42093/7	08:43			97							
ICSA 240-42093/9	08:53			86							
ICSAB 240-42093/10	08:59			85							
CCV 240-42093/46	12:29			84							
CCB 240-42093/47	12:36			89							
MB 240-41805/1-A	12:58			88							
LCS 240-41805/2-A	13:03			89							
240-10615-J-4-A SD	13:16			85							
240-10615-J-4-B MS	13:21			85							
240-10615-J-4-C MSD	13:28			85							
CCV 240-42093/58	13:41			82							
CCB 240-42093/59	13:48			84							
240-10615-G-4-B MS	13:53			83							
240-10615-G-4-C MSD	14:00			83							
240-10598-2	14:07			83							
240-10598-3	14:13			82							
240-10598-3	14:18			81							
CCV 240-42093/70	14:51			78							
CCB 240-42093/71	14:58			82							
ICSA 240-42093/120	19:41			71							
ICSAB 240-42093/121	19:47			71							
CCV 240-42093/134	21:01			73							
CCB 240-42093/135	21:08			75							
MB 240-41803/1-A	21:36			74							
LCS 240-41803/2-A	21:41			76							
240-10621-AL-1-A SD	21:54			74							
240-10621-AL-1-B MS	21:59			70							
240-10621-AL-1-C	22:06			70							
CCV 240-42093/146	22:14			72							
CCB 240-42093/147	22:21			75							
240-10598-2	22:48			74							
CCV 240-42093/158	23:21			72							
CCB 240-42093/159	23:28			74							

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Batch Number: 41803 Batch Start Date: 04/27/12 08:00 Batch Analyst: Nicholas, Courtney

Batch Method: 3005A Batch End Date: 04/27/12 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTHCL 00028	MTHNO3 00024	MTICPMS2 00007	MTICPMSA 00006
MB 240-41803/1		3005A, 6020		50 mL	50 mL	2.5 mL	1 mL		
LCS 240-41803/2		3005A, 6020		50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-10621-AL-1 MS		3005A, 6020	R	50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-10621-AL-1 MSD		3005A, 6020	R	50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-10598-G-2	MT-MW04S	3005A, 6020	R	50 mL	50 mL	2.5 mL	1 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSB 00006					
MB 240-41803/1		3005A, 6020							
LCS 240-41803/2		3005A, 6020		0.5 mL					
240-10621-AL-1 MS		3005A, 6020	R	0.5 mL					
240-10621-AL-1 MSD		3005A, 6020	R	0.5 mL					
240-10598-G-2	MT-MW04S	3005A, 6020	R						

Batch Notes	
Filter Paper Lot Number	4645986
Pipette ID	383363
Digestion Tube/Cup Lot #	1111173

Basis	Basis Description
R	Total Recoverable

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Batch Number: 41805 Batch Start Date: 04/27/12 12:00 Batch Analyst: Nicholas, Courtney

Batch Method: 3005A Batch End Date: 04/27/12 19:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTHCL 00028	MTHNO3 00024	MTICPMS2 00007	MTICPMSA 00006
MB 240-41805/1		3005A, 6020		50 mL	50 mL	2.5 mL	1 mL		
LCS 240-41805/2		3005A, 6020		50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-10615-J-4 MS		3005A, 6020	R	50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-10615-J-4 MSD		3005A, 6020	R	50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-10615-G-4 MS		3005A, 6020	D	50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-10615-G-4 MSD		3005A, 6020	D	50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-10598-H-2	MT-MW04S	3005A, 6020	D	50 mL	50 mL	2.5 mL	1 mL		
240-10598-G-3	MT-MW06S	3005A, 6020	R	50 mL	50 mL	2.5 mL	1 mL		
240-10598-H-3	MT-MW06S	3005A, 6020	D	50 mL	50 mL	2.5 mL	1 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSB 00006
MB 240-41805/1		3005A, 6020		
LCS 240-41805/2		3005A, 6020		0.5 mL
240-10615-J-4 MS		3005A, 6020	R	0.5 mL
240-10615-J-4 MSD		3005A, 6020	R	0.5 mL
240-10615-G-4 MS		3005A, 6020	D	0.5 mL
240-10615-G-4 MSD		3005A, 6020	D	0.5 mL
240-10598-H-2	MT-MW04S	3005A, 6020	D	
240-10598-G-3	MT-MW06S	3005A, 6020	R	
240-10598-H-3	MT-MW06S	3005A, 6020	D	

Batch Notes	
Filter Paper Lot Number	4645986
Pipette ID	383363
Digestion Tube/Cup Lot #	1111173

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Batch Number: 41805 Batch Start Date: 04/27/12 12:00 Batch Analyst: Nicholas, Courtney

Batch Method: 3005A Batch End Date: 04/27/12 19:15

Basis	Basis Description
R	Total Recoverable
D	Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Batch Number: 41755 Batch Start Date: 04/26/12 15:50 Batch Analyst: Nicholas, Courtney

Batch Method: 7470A Batch End Date: 04/26/12 17:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTH2S04 00007	MTHGICVW 00283	MTHNO3 00024	MTK2S208RGNT 00017
MB 240-41755/1		7470A, 7470A		100 mL	100 mL	5 mL		2.5 mL	8 mL
LCS 240-41755/2		7470A, 7470A		100 mL	100 mL	5 mL	1 mL	2.5 mL	8 mL
240-10570-D-11 MS		7470A, 7470A	D	100 mL	100 mL	5 mL	0.2 mL	2.5 mL	8 mL
240-10570-D-11 MSD		7470A, 7470A	D	100 mL	100 mL	5 mL	0.2 mL	2.5 mL	8 mL
240-10598-G-2	MT-MW04S	7470A, 7470A	T	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-10598-H-2	MT-MW04S	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00020					
MB 240-41755/1		7470A, 7470A		15 mL					
LCS 240-41755/2		7470A, 7470A		15 mL					
240-10570-D-11 MS		7470A, 7470A	D	15 mL					
240-10570-D-11 MSD		7470A, 7470A	D	15 mL					
240-10598-G-2	MT-MW04S	7470A, 7470A	T	15 mL					
240-10598-H-2	MT-MW04S	7470A, 7470A	D	15 mL					

Batch Notes	
Pipette ID	432085 383364

Basis	Basis Description
T	Total/NA
D	Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Batch Number: 41812 Batch Start Date: 04/27/12 12:40 Batch Analyst: Nicholas, Courtney

Batch Method: 7470A Batch End Date: 04/27/12 14:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTH2S04 00007	MTHGICVW 00284	MTHNO3 00024	MTK2S208RGNT 00017
MB 240-41812/1		7470A, 7470A		100 mL	100 mL	5 mL		2.5 mL	8 mL
LCS 240-41812/2		7470A, 7470A		100 mL	100 mL	5 mL	1 mL	2.5 mL	8 mL
240-10615-J-4 MS		7470A, 7470A	T	100 mL	100 mL	5 mL	0.2 mL	2.5 mL	8 mL
240-10615-J-4 MSD		7470A, 7470A	T	100 mL	100 mL	5 mL	0.2 mL	2.5 mL	8 mL
240-10615-G-4 MS		7470A, 7470A	D	100 mL	100 mL	5 mL	0.2 mL	2.5 mL	8 mL
240-10615-G-4 MSD		7470A, 7470A	D	100 mL	100 mL	5 mL	0.2 mL	2.5 mL	8 mL
240-10598-G-3	MT-MW06S	7470A, 7470A	T	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-10598-H-3	MT-MW06S	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00020					
MB 240-41812/1		7470A, 7470A		15 mL					
LCS 240-41812/2		7470A, 7470A		15 mL					
240-10615-J-4 MS		7470A, 7470A	T	15 mL					
240-10615-J-4 MSD		7470A, 7470A	T	15 mL					
240-10615-G-4 MS		7470A, 7470A	D	15 mL					
240-10615-G-4 MSD		7470A, 7470A	D	15 mL					
240-10598-G-3	MT-MW06S	7470A, 7470A	T	15 mL					
240-10598-H-3	MT-MW06S	7470A, 7470A	D	15 mL					

Batch Notes	
Pipette ID	432085-383364

Basis	Basis Description
T	Total/NA
D	Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-10598-1

SDG No.:

Batch Number: 41879 Batch Start Date: 04/27/12 08:45 Batch Analyst: Sutherland, Aaron

Batch Method: 7470A Batch End Date: 04/27/12 10:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTH2S04 00007	MTHGCALW 00185	MTHGICVW 00284	MTHNO3 00024
ICV 240-41879/7		7470A, 7470A		100 mL	100 mL	5 mL		0.5 mL	2.5 mL
ICB 240-41879/8		7470A, 7470A		100 mL	100 mL	5 mL			2.5 mL
CRA 240-41879/9		7470A, 7470A		100 mL	100 mL	5 mL	0.2 mL		2.5 mL
CCVL 240-41879/10		7470A, 7470A		100 mL	100 mL	5 mL	5 mL		2.5 mL
CCB 240-41879/11		7470A, 7470A		100 mL	100 mL	5 mL			2.5 mL
CCV 240-41879/12		7470A, 7470A		100 mL	100 mL	5 mL	5 mL		2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTK2S208RGNT 00017	MTKMN04W 00020				
ICV 240-41879/7		7470A, 7470A		8 mL	15 mL				
ICB 240-41879/8		7470A, 7470A		8 mL	15 mL				
CRA 240-41879/9		7470A, 7470A		8 mL	15 mL				
CCVL 240-41879/10		7470A, 7470A		8 mL	15 mL				
CCB 240-41879/11		7470A, 7470A		8 mL	15 mL				
CCV 240-41879/12		7470A, 7470A		8 mL	15 mL				

Batch Notes	
Pipette ID	432085-383364-383363-383366

Basis	Basis Description

MT-MW065
Total

240-10598-g-3-a, 4/28/2012 14:13:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B
		ppb	ppb	ppb
x		76.158%	81.230	32.680
%RSD		5.071	2.103	2.333
Run	**Time**	**23Na**	**25Mg**	**27Al**
		ppb	ppb	ppb
x		T 86510.000	18960.000	M 1195.000
%RSD		T 0.828	0.521	M 0.832
Run	**Time**	**35Cl**	**39K**	**43Ca**
		ppb	ppb	ppb
x		T 0.000	T 6808.000	13420.000
%RSD		T 0.000	T 0.861	0.413
Run	**Time**	**45Sc**	**45Sc**	**47Ti**
		ppb	ppb	ppb
x		T 72.077%	74.886%	0.663
%RSD		T 0.553	0.771	41.100
Run	**Time**	**51V**	**52Cr**	**53Cr**
		ppb	ppb	ppb
x		0.147	0.114	0.560
%RSD		156.900	58.330	74.370
Run	**Time**	**55Mn**	**56Fe**	**59Co**
		ppb	ppb	ppb
x		TM 8610.000	12.100	M 542.700
%RSD		TM 0.651	10.810	M 0.651
Run	**Time**	**60Ni**	**65Cu**	**66Zn**
		ppb	ppb	ppb
x		M 1182.000	46.330	M 1902.000
%RSD		M 0.928	2.040	M 0.218
Run	**Time**	**72Ge**	**75As**	**77Ar CI**
		ppb	ppb	ppb
x		74.115%	1.481	0.271
%RSD		0.244	3.459	10.890
Run	**Time**	**78Se**	**88Sr**	**95Mo**
		ppb	ppb	ppb
x		1.205	103.000	0.150
%RSD		29.180	0.577	23.320
Run	**Time**	**105Pd**	**107Ag**	**109Ag O**
		ppb	ppb	ppb
x		0.000	0.020	-4.812
%RSD		0.000	20.090	19.850
Run	**Time**	**111Cd**	**115In**	**118Sn**
		ppb	ppb	ppb
x		2.032	75.183%	0.060
%RSD		1.717	0.241	43.470
Run	**Time**	**121Sb**	**137Ba**	**159Tb**
		ppb	ppb	ppb
x		0.087	96.100	0.000
%RSD		13.340	0.269	0.000
Run	**Time**	**165Ho**	**182W**	**205Tl**
		ppb	ppb	ppb
x		81.805%	0.202	0.771
%RSD		0.946	0.157	2.738
Run	**Time**	**208Pb**	**209Bi**	
		ppb	ppb	
x		2.292	0.000	
%RSD		0.784	0.000	

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**JULY 2, 2012**
FROM:	**J. KALINYAK**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION - VOC / 1,4-DIOXANE / GRO / DRO / PERCHLORATE**
LOCKHEED - MSA
SAMPLE DELIVERY GROUP (SDG) 240-10670-1

SAMPLES: 4 / Aqueous / VOC

MT-MW01S-042512	MT-MW03S-042512	MT-MW05S-042512
TB-042512		

3 / Aqueous / 1,4-Dioxane / GRO / DRO / Perchlorate

MT-MW01S-042512	MT-MW03S-042512	MT-MW05S-042512

Overview

The sample set for Lockheed - MSA, SDG 240-10670-1, consisted of four (4) aqueous samples including one (1) aqueous trip blank sample. All aqueous samples were analyzed for volatile organic compounds (VOC). Three (3) aqueous samples were analyzed for 1,4-dioxane, gasoline range organics (GRO), and diesel range organics (DRO) as listed above. No field duplicate sample pairs were included in the sample delivery group (SDG).

The samples were collected by Tetra Tech on April 26, 2012 and analyzed by TestAmerica Laboratories, Inc., Canton for all analyses with the exception of the perchlorate analyses which were subcontracted to TestAmerica Laboratories Inc, West Sacramento. All analyses were conducted in accordance with EPA SW-846 Methods 8260C for VOCs, 8270C for 1,4-dioxane, 8015B for GRO, 8015B for DRO, and 6850 for perchlorates, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The VOC initial calibration average relative response factor (RRF) was less than the 0.05 criteria for tert-butyl alcohol on instrument A3UX16 on 04/29/12. The continuing calibration verification (CCV) RRFs for tert-butyl alcohol and vinyl acetate were also less than the 0.05 criteria for instrument A3UX16 on 04/30/12 @ 11:50.
  Affected Samples: All samples
  Action: The sample non-detected results for tert-butyl alcohol and vinyl acetate were qualified rejected, (UR).

- Fluorotrimethyl-silane and trimethyl-silanol were detected as tentatively identified compounds (TICs) by the laboratory for samples MT-MW03S-042512 and TB-042512, respectively.
  Action: Fluorotrimethyl-silane and trimethyl-silanol are considered present due to column bleed on the laboratory instrument. The sample positive TIC results for fluorotrimethyl-silane and trimethyl-silanol for these samples were qualified rejected, (R).

Minor Problems

- The total petroleum hydrocarbon (TPH) C6-C10 (GRO) was detected in the method blank at the following maximum concentration affecting all samples.

Analytes	Maximum Conc. µg/L	Action Level µg/L
TPH C6-C10 (1)	32.9	164.5

(1) Method blank MB 240-42055/7 affecting all samples.

An action level of five times the maximum level for TPH C6-C10 has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Sample GRO results if less than the action level were qualified (B), for method blank contamination.

- The TPH C10-C32 (DRO) was detected in the method blank at the following maximum concentration affecting all samples.

Analytes	Maximum Conc. µg/L	Action Level µg/L
TPH C10-C32 (1)	422	2110

(1) Method blank MB 240-42055/7 affecting all samples.

An action level of five times the maximum level for TPH C10-C32 has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Sample DRO results if less than the action level were qualified (B), for method blank contamination.

- Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

- The following VOC tentatively identified compounds (TIC) were associated with the samples as listed below. The instrument was not calibrated for these TICs and therefore they were qualified estimated, (NJ), and assumed to be presumptively present.

Sample	TICs
MT-MW01S-042512	butane
MT-MW05S-042512	2-methyl butane

Notes

The laboratory VOC contaminant was detected in the method blank at the following maximum concentration affecting all samples.

Analytes	Maximum Conc. µg/l	Action Level µg/l
1,2,3-Trichlorobenzene [1]	0.288	1.440

[1] Method blank MB 240-42171/5 affecting all samples.

An action level of five times the maximum level for 1,2,3-trichlorobenzene has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No samples were qualified for 1,2,3-trichlorobenzene method blank contamination.

The VOC MS and the MSD for a spiked sample from another SDG (240-10350-A) had %Rs for 2-chloroethyl vinyl ether less than the quality control limit (0%). No validation action was necessary as the sample was not from this SDG.

The sample MT-MW05S-042512 1,4-dioxane analysis surrogates 2-fluorophenol, phenol-d5, and 2,4,6-tribromophenol %Rs were less than the quality control limit (and less than 10% for two of the surrogates) affecting the acid fraction SVOC analytes. As 1,4-dioxane is associated with base/neutral surrogates, no validation action was necessary for the sample 1,4-dioxane result.

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC non-detected tert-butyl alcohol and vinyl acetate sample results were rejected due to calibration and CCV RRF criteria non-compliances. Sample DRO and GRO results were qualified for method blank contamination.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J). Some VOC TICs were qualified estimated as the instrument was not calibrated for these analytes. Sample positive silane and silanol TICs were rejected as these analytes were due to instrument column bleed.

The data for these analyses were reviewed with reference to EPA SW-846 Methods 8260C, 8270C, 8015B, and 6850, and the Region III EPA Functional Guidelines for Organic Data Validation (9/94).

Tetra Tech
Joseph Kalinyak
Data Validator/Environmental Scientist

TetraTech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512			TB-042512		
SDG: 240-10670-1	LAB_ID	240-10670-3			240-10670-4			240-10670-2			240-10670-1		
FRACTION: OV	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE	0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE	0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE	0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE	0.57	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE	0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE	0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE	0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE	0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE	0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE	1.1	U		1.1	U		1.1	U		1.1	U	
BENZENE	0.13	J	P	0.13	U		0.13	U		0.13	U	
BROMOBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM	0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE	0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512			TB-042512		
SDG: 240-10670-1	LAB_ID	240-10670-3			240-10670-4			240-10670-2			240-10670-1		
FRACTION: OV	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BUTANE	1.4	NJ	Z1									
BUTANE, 2-METHYL-							2.5	NJ	Z1			
CARBON DISULFIDE	0.13	U		0.51	J	P	0.13	U		0.13	U	
CARBON TETRACHLORIDE	0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM	0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE	0.3	U		0.3	U		0.35	J	P	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U		0.17	U		0.17	U		0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER	1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE	0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES	0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE	0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE	0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE	0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
SILANE, FLUOROTRIMETHYL-				2.8	R	Z2						
SILANOL, TRIMETHYL-										2.5	R	Z2
STYRENE	0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER	0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE	0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE	0.29	J	P	0.13	U		0.13	U		0.13	U	
TOTAL XYLENES	0.28	U		0.28	U		0.28	U		0.28	U	

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512			TB-042512		
SDG: 240-10670-1	LAB_ID	240-10670-3			240-10670-4			240-10670-2			240-10670-1		
FRACTION: OV	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.17	U		0.17	U		0.35	J	P	0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512		
SDG: 240-10670-1	LAB_ID	240-10670-3			240-10670-4			240-10670-2		
FRACTION: OS	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		0.49	U		0.51	U		0.51	U	

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512		
SDG: 240-10670-1	LAB_ID	240-10670-3			240-10670-4			240-10670-2		
FRACTION: PET	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		64	B	A	49	B	A	52	B	A
TPH (C10-C32)		540	B	A	290	B	A	430	B	A

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512		
SDG: 240-10670-1	LAB_ID	240-10670-3			240-10670-4			240-10670-2		
FRACTION: MISC	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
PERCHLORATE		0.082	U		0.082	U		0.082	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW01S-042512 | Lab Sample ID: 240-10670-3

Matrix: Water | Lab File ID: UXM5282.D

Analysis Method: 8260C | Date Collected: 04/25/2012 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 16:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	0.13	J	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW01S-042512 | Lab Sample ID: 240-10670-3

Matrix: Water | Lab File ID: UXM5282.D

Analysis Method: 8260C | Date Collected: 04/25/2012 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 16:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.29	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW01S-042512 | Lab Sample ID: 240-10670-3

Matrix: Water | Lab File ID: UXM5282.D

Analysis Method: 8260C | Date Collected: 04/25/2012 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 16:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	90		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	81		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW01S-042512 | Lab Sample ID: 240-10670-3

Matrix: Water | Lab File ID: UXM5282.D

Analysis Method: 8260C | Date Collected: 04/25/2012 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 16:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1.4

CAS NO.	COMPOUND NAME	RT	RESULT	Q
106-97-8	Butane	1.95	1.4	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW03S-042512 | Lab Sample ID: 240-10670-4

Matrix: Water | Lab File ID: UXM5283.D

Analysis Method: 8260C | Date Collected: 04/25/2012 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 17:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.51	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW03S-042512 | Lab Sample ID: 240-10670-4

Matrix: Water | Lab File ID: UXM5283.D

Analysis Method: 8260C | Date Collected: 04/25/2012 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 17:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW03S-042512 | Lab Sample ID: 240-10670-4

Matrix: Water | Lab File ID: UXM5283.D

Analysis Method: 8260C | Date Collected: 04/25/2012 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 17:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	93		66-117
2037-26-5	Toluene-d8 (Surr)	91		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW03S-042512 Lab Sample ID: 240-10670-4

Matrix: Water Lab File ID: UXM5283.D

Analysis Method: 8260C Date Collected: 04/25/2012 14:50

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 17:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

Number TICs Found: 1 TIC Result Total: 2.8

CAS NO.	COMPOUND NAME	RT	RESULT	Q
420-56-4	Silane, fluorotrimethyl-	2.12	2.8	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW05S-042512 | Lab Sample ID: 240-10670-2

Matrix: Water | Lab File ID: UXM5281.D

Analysis Method: 8260C | Date Collected: 04/25/2012 10:51

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 16:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW05S-042512 | Lab Sample ID: 240-10670-2

Matrix: Water | Lab File ID: UXM5281.D

Analysis Method: 8260C | Date Collected: 04/25/2012 10:51

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 16:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	0.35	J	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	0.35	J	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW05S-042512 Lab Sample ID: 240-10670-2

Matrix: Water Lab File ID: UXM5281.D

Analysis Method: 8260C Date Collected: 04/25/2012 10:51

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 16:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	80		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW05S-042512 | Lab Sample ID: 240-10670-2

Matrix: Water | Lab File ID: UXM5281.D

Analysis Method: 8260C | Date Collected: 04/25/2012 10:51

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 16:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 2.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
78-78-4	Butane, 2-methyl-	2.49	2.5	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: TB-042512 | Lab Sample ID: 240-10670-1

Matrix: Water | Lab File ID: UXM5280.D

Analysis Method: 8260C | Date Collected: 04/25/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 15:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Client Sample ID: TB-042512 Lab Sample ID: 240-10670-1

Matrix: Water Lab File ID: UXM5280.D

Analysis Method: 8260C Date Collected: 04/25/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Client Sample ID: TB-042512 Lab Sample ID: 240-10670-1

Matrix: Water Lab File ID: UXM5280.D

Analysis Method: 8260C Date Collected: 04/25/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
2037-26-5	Toluene-d8 (Surr)	85		74-115
1868-53-7	Dibromofluoromethane (Surr)	82		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: TB-042512 | Lab Sample ID: 240-10670-1

Matrix: Water | Lab File ID: UXM5280.D

Analysis Method: 8260C | Date Collected: 04/25/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 15:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 2.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.60	2.5	T J N

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW01S-042512 | Lab Sample ID: 240-10670-3

Matrix: Water | Lab File ID: 20504027.D

Analysis Method: 8270C | Date Collected: 04/25/2012 13:35

Extract. Method: 3520C | Date Extracted: 05/01/2012 10:12

Sample wt/vol: 1000(mL) | Date Analyzed: 05/04/2012 17:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42787 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	51		28-110
367-12-4	2-Fluorophenol (Surr)	61		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	83		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	56		27-111
4165-62-2	Phenol-d5 (Surr)	58		10-110
1718-51-0	Terphenyl-d14 (Surr)	64		37-119

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW03S-042512 | Lab Sample ID: 240-10670-4

Matrix: Water | Lab File ID: 20504028.D

Analysis Method: 8270C | Date Collected: 04/25/2012 14:50

Extract. Method: 3520C | Date Extracted: 05/01/2012 10:12

Sample wt/vol: 960(mL) | Date Analyzed: 05/04/2012 17:48

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42787 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	53		28-110
367-12-4	2-Fluorophenol (Surr)	61		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	81		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	53		27-111
4165-62-2	Phenol-d5 (Surr)	59		10-110
1718-51-0	Terphenyl-d14 (Surr)	40		37-119

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW05S-042512 | Lab Sample ID: 240-10670-2

Matrix: Water | Lab File ID: 20504026.D

Analysis Method: 8270C | Date Collected: 04/25/2012 10:51

Extract. Method: 3520C | Date Extracted: 05/01/2012 10:12

Sample wt/vol: 960(mL) | Date Analyzed: 05/04/2012 17:10

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42787 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	40		28-110
367-12-4	2-Fluorophenol (Surr)	6	X	10-110
118-79-6	2,4,6-Tribromophenol (Surr)	15	X	22-120
4165-60-0	Nitrobenzene-d5 (Surr)	39		27-111
4165-62-2	Phenol-d5 (Surr)	6	X	10-110
1718-51-0	Terphenyl-d14 (Surr)	71		37-119

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW01S-042512 | Lab Sample ID: 240-10670-3

Matrix: Water | Lab File ID: YF042814.D

Analysis Method: 8015B | Date Collected: 04/25/2012 13:35

Sample wt/vol: 5(mL) | Date Analyzed: 04/28/2012 21:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10) GRO	64	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	63		10-150

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW03S-042512 | Lab Sample ID: 240-10670-4

Matrix: Water | Lab File ID: YF042815.D

Analysis Method: 8015B | Date Collected: 04/25/2012 14:50

Sample wt/vol: 5(mL) | Date Analyzed: 04/28/2012 22:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10) GRO	49	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	65		10-150

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW05S-042512 Lab Sample ID: 240-10670-2

Matrix: Water Lab File ID: YF042813.D

Analysis Method: 8015B Date Collected: 04/25/2012 10:51

Sample wt/vol: 5(mL) Date Analyzed: 04/28/2012 20:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42055 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10) GRO	52	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	66		10-150

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW05S-042512 | Lab Sample ID: 240-10670-2

Matrix: Water | Lab File ID: P6F04305.D

Analysis Method: 8015B | Date Collected: 04/25/2012 10:51

Extraction Method: 3520C | Date Extracted: 04/27/2012 10:39

Sample wt/vol: 1050(mL) | Date Analyzed: 04/30/2012 11:56

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42140 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32) DRO	430	J B	480	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	47		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW03S-042512 | Lab Sample ID: 240-10670-4

Matrix: Water | Lab File ID: P6F04307.D

Analysis Method: 8015B | Date Collected: 04/25/2012 14:50

Extraction Method: 3520C | Date Extracted: 04/27/2012 10:39

Sample wt/vol: 1030(mL) | Date Analyzed: 04/30/2012 12:58

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42140 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32) DRO	290	J B	490	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	45		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: MT-MW01S-042512 | Lab Sample ID: 240-10670-3

Matrix: Water | Lab File ID: P6F04306.D

Analysis Method: 8015B | Date Collected: 04/25/2012 13:35

Extraction Method: 3520C | Date Extracted: 04/27/2012 10:39

Sample wt/vol: 960(mL) | Date Analyzed: 04/30/2012 12:27

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42140 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32) DRO	540	B	520	250

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	22		10-110

TestAmerica Canton

Client Sample ID: MT-MW01S-042512

Dissolved HPLC - Mass. Spec.

Lot-Sample #...: G2E010442-002	**Work Order #...:** MTAK21AA		**Matrix.....:** WATER	
Date Sampled...: 04/25/12	**Date Received..:** 04/28/12			
Prep Date.....: 05/07/12	**Analysis Date..:** 05/15/12			
Prep Batch #...: 2128058				
Dilution Factor: 1	**Method.....:** SW846 6850			

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	1.0	ug/L	0.082

TestAmerica Canton

Client Sample ID: MT-MW03S-042512

Dissolved HPLC - Mass. Spec.

Lot-Sample #...:	G2E010442-003	**Work Order #...:**	MTAK31AA	**Matrix.....:**	WATER
Date Sampled...:	04/25/12	**Date Received..:**	04/28/12		
Prep Date.....:	05/07/12	**Analysis Date..:**	05/15/12		
Prep Batch #...:	2128058				
Dilution Factor:	1	**Method.....:**	SW846 6850		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	1.0	ug/L	0.082

TestAmerica Canton

Client Sample ID: MT-MW05S-042512

Dissolved HPLC - Mass. Spec.

Lot-Sample #...:	G2E010442-001	**Work Order #...:**	MTAK11AA	**Matrix.....:**	WATER
Date Sampled...:	04/25/12	**Date Received..:**	04/28/12		
Prep Date.....:	05/07/12	**Analysis Date..:**	05/15/12		
Prep Batch #...:	2128058				
Dilution Factor:	1	**Method.....:**	SW846 6850		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	1.0	ug/L	0.082

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-10670-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HG	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HG	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
M	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
M	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
M	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HGF	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HGF	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HGF	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
MF	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
MF	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
MF	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
PCL	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	5/7/2012	5/15/2012	12	8	20
PCL	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	5/7/2012	5/15/2012	12	8	20
PCL	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	5/7/2012	5/15/2012	12	8	20

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	5/1/2012	5/4/2012	6	3	9
OS	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	5/1/2012	5/4/2012	6	3	9
OS	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	5/1/2012	5/4/2012	6	3	9
OV	UG/L	TB-042512	240-10670-1	NM	4/25/2012	4/30/2012	4/30/2012	5	0	5
OV	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/30/2012	4/30/2012	5	0	5
OV	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/30/2012	4/30/2012	5	0	5
OV	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/30/2012	4/30/2012	5	0	5
OV	UG/L	TB-042512	240-10670-1	TB	4/25/2012	4/30/2012	4/30/2012	5	0	5
DRO	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/30/2012	2	3	5
DRO	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/30/2012	2	3	5
DRO	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/30/2012	2	3	5
GRO	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/28/2012	4/28/2012	3	0	3
GRO	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/28/2012	4/28/2012	3	0	3
GRO	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/28/2012	4/28/2012	3	0	3

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech INC.	Client Project Manager: Tony Aparavasse	Site Contact: Walt Payn	Lab Contact: Pat O'meara	COC No:
Address: 20251 Century Blvd.	Telephone: 301 528-3021	Telephone: 301 991-3914	Telephone: 330 497-9396	1 of 1 COCs
City/State/Zip: Germantown MD 20874	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 301 528-3021		TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client: ☐ Lab pickup: ☐ Lab sampling: ☐ Job/SDG No.:
Project Name: MSB-Ground Water Sampling	Method of Shipment/Carrier: Fed EX			
Project Number: 112JC04021-02	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C / Grab G	VOCs	Total PPM	Diss PPM	1,4 Dioxane	DRO	GRO	Perchlorate	Sample Specific Notes / Special Instructions:
TB-042512	4-25-12	—		X						2					N	G	X							
MT-MW05s-042512		1051		X					2	5			5				X	X	X	X	X	X	X	
MT-MW01s-042512		1335		X					2	5			5				X	X	X	X	X	X	X	
MT-MW03s-042512		1450		X					2	5			5				X	X	X	X	X	X	X	

Loc: 240
10670
US

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	Tt INC.	4-25-12 / 1520		TestAmerica	4/25/12 / 1520
	TestAmerica	4/25/12 / 1725			
				TANC	4/26/12 9:15

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TAL-0018 (1008)

TestAmerica North Canton Sample Receipt Form/Narrative Login # : 10440

Client Tetra Tech Site Name _____ By: _____ (Signature)

Cooler Received on 4/26/12 Opened on 4/26/12

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF -2°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 4G	(CF -1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	~~Multiple~~ on Back
(IR GUN# ~~5G~~)	(CF -1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 6Y	(CF -2°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? (Yes) No NA
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
MW05S	<2<2	4/26/12	[illegible]
MW01S	<2<2		
MW03S	<2<2		

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
Client Cooler	1.4	0.4	SG	ICE
	1.5	0.5		

Login Sample Receipt Checklist

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10670-1

Login Number: 10670
List Number: 1
Creator: Sutek, Nick

List Source: TestAmerica Canton

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CASE NARRATIVE

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Project: MSA Groundwater Sampling

Report Number: 240-10670-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The Perchlorate analysis was performed at the TestAmerica West Sacramento Laboratory.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 04/26/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 and 0.5 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples TB-042512 (240-10670-1), MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 04/30/2012.

1,2,3-Trichlorobenzene was detected in method blank MB 240-42171/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS/MSD of sample 240-10350-5 in batch 240-42171. tert-Butyl alcohol exceeded the rpd limit.

Refer to the QC report for details.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 05/01/2012 and analyzed on 05/04/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

2,4,6-Tribromophenol (Surr), 2-Fluorophenol (Surr) and Phenol-d5 (Surr) failed the surrogate recovery criteria low for MT-MW05S-042512 (240-10670-2). Refer to the QC report for details.

Acid surrogates were out of control limits in sample MT-MW05S-042512 (240-10670-2). Since only Base Neutral compounds were requested no corrective action was necessary.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)
Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 04/28/2012.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-42055/7 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the GRO analyses. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 04/27/2012 and analyzed on 04/30/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

Total Petroleum Hydrocarbons (C10-C32) was detected in method blank MB 240-41890/15-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the DRO analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)
Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/27/2012 and analyzed on 04/28/2012.

No difficulties were encountered during the metals analyses. All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)
Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/27/2012 and analyzed on 04/28/2012.

Several analytes were detected in method blank MB 240-41956/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY
Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/27/2012 and analyzed on 04/28/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

TOTAL MERCURY
Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/27/2012 and analyzed on 04/28/2012.

Mercury was detected in method blank MB 240-41887/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the mercury analyses. All other quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10670-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-10670-1TB	TB-042512	Water	04/25/2012 0000	04/26/2012 0915
240-10670-2	MT-MW05S-042512	Water	04/25/2012 1051	04/26/2012 0915
240-10670-3	MT-MW01S-042512	Water	04/25/2012 1335	04/26/2012 0915
240-10670-4	MT-MW03S-042512	Water	04/25/2012 1450	04/26/2012 0915

METHOD SUMMARY

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10670-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Volatile Organic Compounds by GC/MS	TAL NC	SW846 8260C	
Purge and Trap	TAL NC		SW846 5030C
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270C	
Liquid-Liquid Extraction (Continuous)	TAL NC		SW846 3520C
Gasoline Range Organics - (GC)	TAL NC	SW846 8015B	
Purge and Trap	TAL NC		SW846 5030B
Diesel Range Organics (DRO) (GC)	TAL NC	SW846 8015B	
Liquid-Liquid Extraction (Continuous)	TAL NC		SW846 3520C
Metals (ICP/MS)	TAL NC	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL NC		SW846 3005A
Metals (ICP/MS)	TAL NC	SW846 6020	
Preparation, Total Recoverable or Dissolved Metals	TAL NC		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL NC	SW846 7470A	
Preparation, Mercury	TAL NC		SW846 7470A
Mercury (CVAA)	TAL NC	SW846 7470A	
Preparation, Mercury	TAL NC		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD
General Sub Contract Method	TAL WSC	Subcontract	

Lab References:

TAL NC = TestAmerica Canton

TAL WSC = TestAmerica West Sacramento

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10670-1

Lab Section	Qualifier	Description
GC/MS VOA		
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	F	RPD of the MS and MSD exceeds the control limits
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	X	Surrogate is outside control limits
GC VOA		
	B	Compound was found in the blank and sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10670-1

Lab Section	Qualifier	Description
Metals		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab File ID: BFB2914.D BFB Injection Date: 04/29/2012

Instrument ID: A3UX16 BFB Injection Time: 15:11

Analysis Batch No.: 42092

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.4	
75	30.0 - 60.0 % of mass 95	55.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.3	(0.4)1
174	50.0 - 120.00 % of mass 95	67.2	
175	5.0 - 9.0 % of mass 174	4.9	(7.4)1
176	95.0 - 101.0 % of mass 174	65.5	(97.4)1
177	5.0 - 9.0 % of mass 176	4.1	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-42092/2	UXM5239.D	04/29/2012	15:41
	STD8260 240-42092/3	UXM5240.D	04/29/2012	16:03
	STD8260 240-42092/4	UXM5241.D	04/29/2012	16:26
	STD8260 240-42092/5	UXM5242.D	04/29/2012	16:49
	STD8260 240-42092/6	UXM5243.D	04/29/2012	17:12
	STD8260 240-42092/7	UXM5244.D	04/29/2012	17:34
	STD1 240-42092/8	UXM5245.D	04/29/2012	17:57
	STD2 240-42092/9	UXM5246.D	04/29/2012	18:20
	STD3 240-42092/10	UXM5247.D	04/29/2012	18:42
	STD4 240-42092/11	UXM5248.D	04/29/2012	19:05
	STD5 240-42092/12	UXM5249.D	04/29/2012	19:28
	STD6 240-42092/13	UXM5250.D	04/29/2012	19:50
	ICV 240-42092/14	UXM5251.D	04/29/2012	20:13

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-42092/7	UXM5244.D
Level 2	STD8260 240-42092/6	UXM5243.D
Level 3	STD8260 240-42092/5	UXM5242.D
Level 4	STD8260 240-42092/4	UXM5241.D
Level 5	STD8260 240-42092/3	UXM5240.D
Level 6	STD8260 240-42092/2	UXM5239.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2475 0.3038	0.2649	0.2905	0.2889	0.3016	Ave		0.2829			0.1000	7.8		15.0			
Chloromethane	0.4695 0.4320	0.4893	0.4830	0.4487	0.4452	Ave		0.4613			0.1000	4.9		15.0			
Vinyl chloride	0.4202 0.4041	0.4409	0.4365	0.4256	0.4202	Ave		0.4246			0.1000	3.1		15.0			
Bromomethane	0.1730 0.1493	0.1760	0.1733	0.1676	0.1710	Ave		0.1684			0.0500	5.8		15.0			
Chloroethane	0.2470 0.2229	0.2473	0.2344	0.2374	0.2336	Ave		0.2371				3.9		15.0			
Trichlorofluoromethane	0.2704 0.3132	0.3068	0.3031	0.3070	0.3204	Ave		0.3035			0.1000	5.7		15.0			
~~Acrolein~~	0.0469 0.0473	0.0483	0.0502	0.0508	0.0498	Ave		0.~~0489~~				3.3		15.0			
1,1-Dichloroethene	0.2340 0.2501	0.2402	0.2424	0.2499	0.2511	Ave		0.2446			0.1000	2.8		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1512 0.1622	0.1553	0.1500	0.1479	0.1608	Ave		0.1546			0.0500	3.8		15.0			
Acetone	0.2162 0.0864	0.1595	0.1181	0.1099	0.0970	Lin1	0.2842	0.0868			0.0500				0.9960		0.9950
Iodomethane	0.3345 0.3288	0.3415	0.3505	0.3469	0.3574	Ave		0.3433				3.1		15.0			
Carbon disulfide	0.6238 0.8183	0.6509	0.6976	0.7556	0.8104	Ave		0.7261			0.1000	11.0		15.0			
~~Acetonitrile~~	0.0391 0.0299	0.0368	0.0353	0.0335	0.0333	Ave		~~0.0346~~				9.2		15.0			
Methyl acetate	0.2451 0.2094	0.2377	0.2404	0.2374	0.2264	Ave		0.2327			0.1000	5.6		15.0			
Methylene Chloride	0.4532 0.2926	0.3791	0.3449	0.3188	0.3120	Lin1	0.1763	0.2950			0.1000				0.9990		0.9950

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0187 0.0171	0.0206	0.0189	0.0189	0.0192	Ave		0.0189				6.0		15.0			
Acrylonitrile	0.1145 0.1022	0.1105	0.1139	0.1170	0.1105	Ave		0.1114				4.6		15.0			
trans-1,2-Dichloroethene	0.2839 0.2770	0.2945	0.2944	0.2851	0.2889	Ave		0.2873			0.1000	2.4		15.0			
Methyl tert-butyl ether	0.8507 0.8216	0.8205	0.8460	0.8461	0.8566	Ave		0.8402			0.1000	1.8		15.0			
Hexane	0.0529 0.0560	0.0521	0.0488	0.0501	0.0574	Ave		0.0529				6.3		15.0			
1,1-Dichloroethane	0.5478 0.5504	0.5906	0.5789	0.5698	0.5773	Ave		0.5691			0.1000	3.0		15.0			
Vinyl acetate	0.0438 0.0547	0.0420	0.0492	0.0562	0.0568	Ave		0.0505				13.0		15.0			
2-Butanone	0.1431 0.1214	0.1392	0.1413	0.1375	0.1314	Ave		0.1356			0.0500	5.9		15.0			
cis-1,2-Dichloroethene	0.3153 0.3006	0.3006	0.3107	0.3096	0.3157	Ave		0.3087			0.1000	2.2		15.0			
2,2-Dichloropropane	0.2459 0.3076	0.2799	0.2938	0.3057	0.3261	Ave		0.2932				9.5		15.0			
Bromochloromethane	0.1255 0.1262	0.1225	0.1298	0.1329	0.1330	Ave		0.1283				3.3		15.0			
Tetrahydrofuran	0.0875 0.0744	0.0826	0.0830	0.0854	0.0842	Ave		0.0828				5.4		15.0			
Chloroform	0.5169 0.5153	0.5299	0.5388	0.5290	0.5477	Ave		0.5296				2.4		15.0			
1,1,1-Trichloroethane	0.3234 0.3831	0.3500	0.3674	0.3840	0.3986	Ave		0.3678			0.1000	7.4		15.0			
Cyclohexane	0.4217 0.4832	0.4863	0.4431	0.4476	0.4809	Ave		0.4605			0.1000	5.8		15.0			
1,1-Dichloropropene	0.4359 0.4194	0.4199	0.4223	0.4252	0.4356	Ave		0.4264				1.8		15.0			
Carbon tetrachloride	0.2456 0.3072	0.2543	0.2617	0.2867	0.3066	Ave		0.2770			0.1000	9.7		15.0			
1,2-Dichloroethane	0.4838 0.4518	0.4761	0.4673	0.4667	0.4711	Ave		0.4694			0.1000	2.3		15.0			
Benzene	1.2256 1.2453	1.2535	1.2750	1.2420	1.2666	Ave		1.2513			0.5000	1.4		15.0			
Trichloroethene	0.2714 0.2655	0.2671	0.2733	0.2695	0.2719	Ave		0.2698			0.2000	1.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.3056 0.3781	0.3553	0.3486	0.3331	0.3656	Ave		0.3477			0.1000	7.4		15.0			
1,2-Dichloropropane	0.2994 0.3048	0.3058	0.3148	0.3132	0.3116	Ave		0.3083			0.1000	1.9		15.0			
Dibromomethane	0.1675 0.1555	0.1521	0.1644	0.1597	0.1644	Ave		0.1606				3.7		15.0			
~~1,4-Dioxane~~	0.0023 0.0020	0.0024	0.0025	0.0025	0.0025	Ave		~~0.0024~~				8.2		15.0			
Bromodichloromethane	0.2586 0.3533	0.2732	0.3036	0.3210	0.3455	Ave		0.3092			0.1000	12.0		15.0			
2-Chloroethyl vinyl ether	0.1532 0.1582	0.1459	0.1670	0.1699	0.1653	Ave		0.1599				5.8		15.0			
cis-1,3-Dichloropropene	0.3061 0.4576	0.3249	0.3845	0.4238	0.4469	Lin1	-0.212	0.4568			0.1500				0.9990		0.9950
4-Methyl-2-pentanone	0.2451 0.2575	0.2540	0.2759	0.2780	0.2752	Ave		0.2643			0.0500	5.3		15.0			
Toluene	1.7728 1.9294	1.8880	1.8619	1.8474	1.9604	Ave		1.8766			0.4000	3.5		15.0			
trans-1,3-Dichloropropene	0.3835 0.6056	0.4211	0.4964	0.5287	0.6010	Lin1	-0.314	0.6041			0.1000				0.9980		0.9950
Ethyl methacrylate	0.4455 0.5778	0.5229	0.5765	0.5788	0.6242	Ave		0.5543				11.0		15.0			
1,1,2-Trichloroethane	0.3279 0.3212	0.3141	0.3421	0.3341	0.3447	Ave		0.3307			0.1000	3.6		15.0			
1,3-Dichloropropane	0.6891 0.6635	0.6944	0.7152	0.6928	0.7223	Ave		0.6962				3.0		15.0			
Tetrachloroethene	0.2452 0.2600	0.2630	0.2668	0.2612	0.2738	Ave		0.2617			0.2000	3.6		15.0			
2-Hexanone	0.2323 0.2576	0.2818	0.2796	0.2822	0.2852	Ave		0.2698			0.0500	7.8		15.0			
Dibromochloromethane	0.1872 0.3114	0.2160	0.2464	0.2709	0.3057	Lin1	-0.171	0.3097							0.9980		0.9950
1,2-Dibromoethane	0.2962 0.3220	0.3089	0.3344	0.3261	0.3462	Ave		0.3223				5.5		15.0			
Chlorobenzene	1.0759 1.0855	1.1279	1.1114	1.0941	1.1299	Ave		1.1041			0.3000	2.0		15.0			
1,1,1,2-Tetrachloroethane	0.2665 0.3469	0.2706	0.3066	0.3249	0.3538	Ave		0.3116				12.0		15.0			
Ethylbenzene	0.5227 0.5869	0.5825	0.6026	0.5858	0.6163	Ave		0.5828				5.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6757 0.7551	0.7220	0.7191	0.7176	0.7638	Ave		0.7256				4.3		15.0			
o-Xylene	0.6806 0.7276	0.7176	0.7304	0.7130	0.7551	Ave		0.7207				3.4		15.0			
Styrene	1.0565 1.2902	1.1310	1.1966	1.1904	1.2870	Ave		1.1920			0.3000	7.6		15.0			
Bromoform	0.0815 0.1487	0.0938	0.1133	0.1171	0.1413	Lin1	-0.094	0.1455			0.1000				0.9950		0.9950
Isopropylbenzene	1.5492 1.8304	1.6861	1.6648	1.6944	1.8507	Ave		1.7126			0.1000	6.6		15.0			
1,1,2,2-Tetrachloroethane	0.8553 0.8338	0.9184	0.9469	0.9293	0.9310	Ave		0.9025			0.3000	5.1		15.0			
Bromobenzene	0.8074 0.7779	0.8287	0.8325	0.8084	0.8409	Ave		0.8159				2.8		15.0			
1,2,3-Trichloropropane	0.2880 0.2558	0.2803	0.2925	0.2919	0.2938	Ave		0.2837				5.1		15.0			
trans-1,4-Dichloro-2-butene	0.2181 0.2689	0.2471	0.2346	0.2535	0.2845	Ave		0.2511				9.5		15.0			
n-Propylbenzene	0.7292 0.8665	0.8823	0.8741	0.8947	0.9118	Ave		0.8598				7.7		15.0			
2-Chlorotoluene	0.8583 0.7918	0.8579	0.8258	0.8361	0.8474	Ave		0.8362				3.0		15.0			
1,3,5-Trimethylbenzene	2.5787 2.8481	2.7830	2.7962	2.7951	2.9477	Ave		2.7914				4.3		15.0			
4-Chlorotoluene	0.8421 0.8602	0.8907	0.8940	0.8564	0.9136	Ave		0.8762				3.1		15.0			
tert-Butylbenzene	2.2870 2.5025	2.5077	2.4568	2.4969	2.5752	Ave		2.4710				4.0		15.0			
1,2,4-Trimethylbenzene	2.7586 2.9544	2.8331	2.8754	2.9504	3.0668	Ave		2.9065				3.7		15.0			
sec-Butylbenzene	2.8024 3.1977	3.0238	2.9596	3.0216	3.2137	Ave		3.0365				5.1		15.0			
1,3-Dichlorobenzene	1.5037 1.4698	1.4901	1.5135	1.5069	1.5495	Ave		1.5056			0.6000	1.8		15.0			
p-Isopropyltoluene	2.2069 2.6255	2.4647	2.4703	2.4761	2.6715	Ave		2.4858				6.6		15.0			
1,4-Dichlorobenzene	1.6073 1.5308	1.6512	1.5577	1.5557	1.6211	Ave		1.5873			0.5000	2.9		15.0			
n-Butylbenzene	2.0896 2.4436	2.2004	2.2368	2.2659	2.4792	Ave		2.2859				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4966 1.3945	1.5126	1.5119	1.4682	1.5239	Ave		1.4846			0.4000	3.2		15.0			
1,2-Dibromo-3-Chloropropane	0.0886 0.0950	0.0916	0.0904	0.0972	0.1086	Ave		0.0952			0.0500	7.6		15.0			
1,3,5-Trichlorobenzene	0.7904 0.7093	0.7633	0.7631	0.7837	0.8038	Ave		0.7690				4.3		15.0			
1,2,4-Trichlorobenzene	0.6476 0.5852	0.7228	0.7185	0.6951	0.7215	Ave		0.6818			0.2000	8.1		15.0			
Hexachlorobutadiene	0.2814 0.2092	0.2884	0.2495	0.2645	0.2531	Ave		0.2577				11.0		15.0			
Naphthalene	1.9527 1.6802	2.0647	2.2163	2.2497	2.2115	Ave		2.0625				11.0		15.0			
1,2,3-Trichlorobenzene	0.6221 0.4278	0.6296	0.6285	0.6505	0.5938	Ave		0.5920				14.0		15.0			
Dibromofluoromethane (Surr)	0.2331 0.2366	0.2278	0.2460	0.2403	0.2499	Ave		0.2389				3.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4238 0.3659	0.3675	0.3946	0.3884	0.3801	Ave		0.3867				5.5		15.0			
Toluene-d8 (Surr)	1.5539 1.5702	1.4814	1.5599	1.5466	1.5977	Ave		1.5516				2.5		15.0			
4-Bromofluorobenzene (Surr)	0.5499 0.5492	0.5504	0.5556	0.5412	0.5764	Ave		0.5538				2.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD6 240-42092/13	UXM5250.D
Level 2	STD5 240-42092/12	UXM5249.D
Level 3	STD4 240-42092/11	UXM5248.D
Level 4	STD3 240-42092/10	UXM5247.D
Level 5	STD2 240-42092/9	UXM5246.D
Level 6	STD1 240-42092/8	UXM5245.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4944 0.5457	0.5179	0.5366	0.5411	0.5388	Ave		0.5291				3.7		15.0			
Ethyl ether	0.2959 0.3118	0.3149	0.3299	0.3322	0.3247	Ave		0.3182				4.3		15.0			
3-Chloro-1-propene	0.1138 0.1626	0.1307	0.1332	0.1472	0.1572	Ave		0.1408				13.0		15.0			
Diisopropyl ether	0.2325 0.3039	0.2698	0.2820	0.2880	0.2888	Ave		0.2775				8.9		15.0			
2-Chloro-1,3-butadiene	0.4443 0.5618	0.4913	0.5190	0.5386	0.5385	Ave		0.5156				8.2		15.0			
Ethyl-t-butyl ether (ETBE)	0.7557 0.9819	0.8293	0.9029	0.9314	0.9383	Ave		0.8899				9.3		15.0			
~~Propionitrile~~	0.0349 0.0408	0.0346	0.0382	0.0420	0.0412	Ave		~~0.0386~~				8.5		15.0			
Ethyl acetate	0.2532 0.2900	0.2546	0.2741	0.2771	0.2824	Ave		0.2719				5.5		15.0			
Methacrylonitrile	0.1606 0.2023	0.1897	0.1949	0.2046	0.2003	Ave		0.1921				8.5		15.0			
~~Isobutyl alcohol~~	0.0077 0.0091	0.0077	0.0086	0.0094	0.0092	Ave		~~0.0086~~				8.8		15.0			
Tert-amyl-methyl ether (TAME)	0.5871 0.7972	0.6671	0.7241	0.7535	0.7651	Ave		0.7157				11.0		15.0			
~~n-Heptane~~	0.0338 0.0458	0.0359	0.0418	0.0425	0.0440	Ave		~~0.0406~~				12.0		15.0			
~~n-Butanol~~	0.0041 0.0069	0.0052	0.0059	0.0064	0.0070	Lin1	-0.068	~~0.0070~~							0.9990		0.9950
~~2-Nitropropane~~	0.0349 0.0534	0.0349	0.0424	0.0409	0.0453	Qua	0	~~0.0378~~	0.0002						1.0000		0.9900
Cyclohexanone	0.0676 0.1071	0.0696	0.0924	0.0940	0.1083	Lin1	-0.573	0.1077							0.9980		0.9950

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trimethylbenzene	2.3062 3.3384	2.8522	3.0020	3.1126	3.2823	Ave		2.9823				13.0		15.0			
2-Methylnaphthalene	0.5487 0.8482	0.7229	0.8158	0.9225	1.0313	Qua	-2.422	1.2182	-0.004						0.9970		0.9900

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-42092/7	UXM5244.D
Level 2	STD8260 240-42092/6	UXM5243.D
Level 3	STD8260 240-42092/5	UXM5242.D
Level 4	STD8260 240-42092/4	UXM5241.D
Level 5	STD8260 240-42092/3	UXM5240.D
Level 6	STD8260 240-42092/2	UXM5239.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	35885 1980706	77645	213757	441965	926938	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	68054 2816599	143417	355421	686521	1368025	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	60917 2635065	129233	321221	651141	1291232	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	25083 973652	51574	127563	256449	525557	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	35804 1453341	72482	172479	363159	717903	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	39202 2042282	89918	223037	469710	984559	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	68008 3085342	141530	369770	777854	1531686	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	33918 1630889	70410	178421	382278	771598	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	21921 1057686	45508	110360	226331	494002	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Lin1	62683 1127237	93486	173839	336387	595897	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	48493 2144017	100103	257965	530730	1098294	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	90427 5335771	190797	513352	1156089	2490300	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Ave	56749 1947368	107775	259776	513045	1022838	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	71069 2730691	139317	353813	726384	1391336	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	65695 1907926	111106	253801	487762	958858	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	54296 2230486	121019	278401	577732	1181799	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	33199 1332502	64764	167664	357877	679313	2.00 80.0	4.00	10.0	20.0	40.0
trans-1,2-Dichloroethene	FB	Ave	41156 1805850	86315	216661	436186	887809	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	123316 5356990	240492	622584	1294546	2632357	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	7664 364870	15284	35939	76608	176542	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	79407 3589145	173107	426021	871835	1773954	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	6355 356768	12300	36192	86048	174699	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	41482 1583175	81587	207910	420664	807827	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	45701 1960017	88112	228624	473715	970100	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	35648 2005803	82038	216190	467681	1002264	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	18189 822935	35913	95509	203401	408648	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	12689 485231	24197	61085	130645	258628	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	74928 3359863	155328	396473	809345	1683052	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	46880 2498258	102599	270389	587525	1225053	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	61130 3150583	142538	326094	684755	1477804	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	63188 2734618	123064	310759	650531	1338590	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	35596 2003224	74531	192609	438606	942348	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	70126 2945634	139538	343914	713992	1447593	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	177668 8119748	367399	938261	1900238	3892190	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	39339 1731358	78290	201140	412335	835509	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	44297 2465241	104143	256548	509583	1123367	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	43403 1987718	89635	231666	479240	957503	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	24282 1014093	44570	121000	244410	505175	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	16576 659305	35560	90656	190747	391761	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	37481 2303873	80071	223410	491180	1061629	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	44406 2063070	85505	245756	519803	1016253	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Lin1	44366 2983706	95217	282978	648461	1373441	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	71052 3358613	148911	406020	850832	1691407	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	173321 8413844	364692	910325	1915731	3926815	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Lin1	37498 2640993	81347	242683	548215	1203917	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	43557 2519754	100996	281867	600178	1250367	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	32062 1400847	60672	167279	346503	690523	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	67375 2893528	134135	349671	718457	1446895	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	23974 1134016	50793	130464	270912	548439	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	45416 2246833	108870	273438	585245	1142606	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Lin1	18304 1357782	41724	120488	280880	612329	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	28960 1404286	59664	163482	338113	693547	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	105191 4733672	217868	543385	1134607	2263366	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	26058 1512891	52279	149910	336962	708703	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	51103 2559405	112518	294632	607431	1234615	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	132121 6585856	278940	703188	1488195	3060062	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	66541 3173134	138606	357130	739399	1512511	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	103288 5626230	218474	585061	1234437	2578106	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Lin1	7969 648344	18118	55408	121431	283016	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	151460 7982152	325696	813952	1757043	3707115	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	39154 1824334	86153	226349	464104	921979	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	36958 1702050	77737	198983	403705	832802	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	13182 559668	26291	69913	145766	291005	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	9983 588408	23177	56072	126610	281722	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	33381 1896081	82760	208940	446839	902975	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	39291 1732447	80476	197398	417562	839275	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	118040 6231859	261059	668378	1395891	2919244	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	38548 1882105	83551	213705	427671	904798	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	104687 5475645	235235	587256	1246967	2550345	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	126276 6464529	265761	687322	1473461	3037207	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	128284 6996931	283652	707440	1509023	3182710	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	68832 3216077	139781	361776	752571	1534518	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	101022 5744842	231206	590475	1236559	2645753	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	73576 3349475	154891	372339	776907	1605428	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	95655 5346731	206411	534670	1131581	2455279	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	68510 3051238	141891	361399	733205	1509157	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	4054 207890	8593	21620	48540	107543	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	36183 1552119	71605	182409	391395	796044	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	29643 1280551	67798	171750	347154	714527	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 15:41 Calibration End Date: 04/29/2012 17:34 Calibration ID: 8426

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	12883 457756	27055	59629	132088	250690	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	89388 3676449	193683	529762	1123493	2190121	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	28475 936111	59064	150229	324862	588048	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	33786 1543057	66758	181044	367622	767961	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	61436 2385669	107729	290422	594253	1168069	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	151916 6847384	286160	762662	1603788	3200285	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	53765 2394878	106312	271656	561195	1154675	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:
Ave = Average ISTD
Linl = Linear 1/conc ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD6 240-42092/13	UXM5250.D
Level 2	STD5 240-42092/12	UXM5249.D
Level 3	STD4 240-42092/11	UXM5248.D
Level 4	STD3 240-42092/10	UXM5247.D
Level 5	STD2 240-42092/9	UXM5246.D
Level 6	STD1 240-42092/8	UXM5245.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	74598 3240218	146412	376630	789014	1566079	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	44644 1851341	89012	231543	484302	943782	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	17177 965704	36949	93484	214615	456905	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	175389 9021702	381358	989616	2099629	4197719	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	67037 3335483	138884	364302	785295	1565439	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	114038 5829697	234431	633692	1358093	2727406	1.00 40.0	2.00	5.00	10.0	20.0
Propionitrile	FB	Ave	10519 484864	19537	53643	122521	239365	2.00 80.0	4.00	10.0	20.0	40.0
Ethyl acetate	FB	Ave	76413 3443932	143929	384742	808060	1641769	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	24236 1201419	53633	136829	298324	582158	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	23378 1085228	43306	121353	274103	534944	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	88590 4733198	188598	508209	1098573	2224035	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	5104 272147	10152	29307	62019	127766	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	FB	Lin1	12500 823386	29417	83258	186498	409174	20.0 800	40.0	100	200	400
2-Nitropropane	FB	Qua	10528 633675	19709	59496	119215	263103	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Lin1	32243 1979275	60655	200382	427297	962192	10.0 400	20.0	50.0	100	200
1,2,3-Trimethylbenzene	DCB	Ave	110047 6167616	248432	651353	1415601	2917084	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
2-Methylnaphthalene	DCB	Qua	52371 3134049	125934	353992	839119	1833171	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-42092/14 Calibration Date: 04/29/2012 20:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2829	0.2340	0.1000	8.27	10.0	-17.3	20.0
Chloromethane	Ave	0.4613	0.4720	0.1000	10.2	10.0	2.3	20.0
Vinyl chloride	Ave	0.4246	0.4443	0.1000	10.5	10.0	4.6	20.0
Bromomethane	Ave	0.1684	0.1539	0.0500	9.14	10.0	-8.6	20.0
Chloroethane	Ave	0.2371	0.2329	0.0500	9.82	10.0	-1.8	20.0
Trichlorofluoromethane	Ave	0.3035	0.3240	0.1000	10.7	10.0	6.8	20.0
Acrolein	Ave	0.0489	0.0264		16.2	30.0	-46.0*	20.0
1,1-Dichloroethene	Ave	0.2446	0.2652	0.1000	10.8	10.0	8.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1546	0.1709	0.0500	11.1	10.0	10.6	20.0
Acetone	Lin1		0.1057	0.0500	21.1	20.0	5.5	20.0
Iodomethane	Ave	0.3433	0.3416		9.95	10.0	-0.5	20.0
Carbon disulfide	Ave	0.7261	0.7042	0.1000	9.70	10.0	-3.0	20.0
Acetonitrile	Ave	0.0346	0.0393		34.0	30.0	13.4	20.0
Methyl acetate	Ave	0.2327	0.2751	0.1000	11.8	10.0	18.2	20.0
Methylene Chloride	Lin1		0.3299	0.1000	10.6	10.0	6.0	20.0
tert-Butyl alcohol	Ave	0.0189	0.0195		207	200	3.2	20.0
Acrylonitrile	Ave	0.1114	0.1186		31.9	30.0	6.5	20.0
Methyl tert-butyl ether	Ave	0.8402	0.8405	0.1000	10.0	10.0	0.0	20.0
trans-1,2-Dichloroethene	Ave	0.2873	0.2952	0.1000	10.3	10.0	2.7	20.0
Hexane	Ave	0.0529	0.0579		10.9	10.0	9.4	20.0
1,1-Dichloroethane	Ave	0.5691	0.6028	0.1000	10.6	10.0	5.9	20.0
Vinyl acetate	Ave	0.0505	0.0387		7.67	10.0	-23.3*	20.0
2-Butanone	Ave	0.1356	0.1389	0.0500	20.5	20.0	2.4	20.0
2,2-Dichloropropane	Ave	0.2932	0.2855		9.74	10.0	-2.6	20.0
cis-1,2-Dichloroethene	Ave	0.3087	0.3186	0.1000	10.3	10.0	3.2	20.0
Bromochloromethane	Ave	0.1283	0.1312		10.2	10.0	2.2	20.0
Tetrahydrofuran	Ave	0.0828	0.0852		10.3	10.0	2.9	20.0
Chloroform	Ave	0.5296	0.5462	0.2000	10.3	10.0	3.1	20.0
1,1,1-Trichloroethane	Ave	0.3678	0.3794	0.1000	10.3	10.0	3.2	20.0
Cyclohexane	Ave	0.4605	0.4767	0.1000	10.4	10.0	3.5	20.0
1,1-Dichloropropene	Ave	0.4264	0.4383		10.3	10.0	2.8	20.0
Carbon tetrachloride	Ave	0.2770	0.2912	0.1000	10.5	10.0	5.1	20.0
1,2-Dichloroethane	Ave	0.4694	0.4938	0.1000	10.5	10.0	5.2	20.0
Benzene	Ave	1.251	1.319	0.5000	10.5	10.0	5.4	20.0
Trichloroethene	Ave	0.2698	0.2968	0.2000	11.0	10.0	10.0	20.0
1,2-Dichloropropane	Ave	0.3083	0.3319	0.1000	10.8	10.0	7.7	20.0
Methylcyclohexane	Ave	0.3477	0.3665	0.1000	10.5	10.0	5.4	20.0
Dibromomethane	Ave	0.1606	0.1738		10.8	10.0	8.2	20.0
Bromodichloromethane	Ave	0.3092	0.3331	0.1000	10.8	10.0	7.7	20.0
2-Chloroethyl vinyl ether	Ave	0.1599	0.1722		10.8	10.0	7.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-42092/14 Calibration Date: 04/29/2012 20:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.4089	0.1500	9.41	10.0	-5.9	20.0
4-Methyl-2-pentanone	Ave	0.2643	0.2914	0.0500	22.1	20.0	10.3	20.0
Toluene	Ave	1.877	1.918	0.4000	10.2	10.0	2.2	20.0
trans-1,3-Dichloropropene	Lin1		0.5291	0.1000	9.28	10.0	-7.2	20.0
1,1,2-Trichloroethane	Ave	0.3307	0.3442	0.1000	10.4	10.0	4.1	20.0
1,3-Dichloropropane	Ave	0.6962	0.7105		10.2	10.0	2.0	20.0
Tetrachloroethene	Ave	0.2617	0.2644	0.2000	10.1	10.0	1.0	20.0
2-Hexanone	Ave	0.2698	0.2927	0.0500	21.7	20.0	8.5	20.0
Dibromochloromethane	Lin1		0.2623		9.02	10.0	-9.8	20.0
1,2-Dibromoethane	Ave	0.3223	0.3341		10.4	10.0	3.7	20.0
Chlorobenzene	Ave	1.104	1.136	0.3000	10.3	10.0	2.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3116	0.3283		10.5	10.0	5.4	20.0
Ethylbenzene	Ave	0.5828	0.6250		10.7	10.0	7.2	20.0
m-Xylene & p-Xylene	Ave	0.7256	0.7452		20.5	20.0	2.7	20.0
o-Xylene	Ave	0.7207	0.7518		10.4	10.0	4.3	20.0
Styrene	Ave	1.192	1.255	0.3000	10.5	10.0	5.3	20.0
Bromoform	Lin1		0.1220	0.1000	9.03	10.0	-9.7	20.0
Isopropylbenzene	Ave	1.713	1.779	0.1000	10.4	10.0	3.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9025	0.9195	0.3000	10.2	10.0	1.9	20.0
Bromobenzene	Ave	0.8159	0.8010		9.82	10.0	-1.8	20.0
1,2,3-Trichloropropane	Ave	0.2837	0.2982		10.5	10.0	5.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2511	0.2617		20.8	20.0	4.2	20.0
n-Propylbenzene	Ave	0.8598	0.9010		10.5	10.0	4.8	20.0
2-Chlorotoluene	Ave	0.8362	0.8214		9.82	10.0	-1.8	20.0
1,3,5-Trimethylbenzene	Ave	2.791	2.836		10.2	10.0	1.6	20.0
4-Chlorotoluene	Ave	0.8762	0.8813		10.1	10.0	0.6	20.0
tert-Butylbenzene	Ave	2.471	2.497		10.1	10.0	1.1	20.0
1,2,4-Trimethylbenzene	Ave	2.906	2.988		10.3	10.0	2.8	20.0
sec-Butylbenzene	Ave	3.036	3.064		10.1	10.0	0.9	20.0
1,3-Dichlorobenzene	Ave	1.506	1.484	0.6000	9.85	10.0	-1.5	20.0
p-Isopropyltoluene	Ave	2.486	2.579		10.4	10.0	3.8	20.0
1,4-Dichlorobenzene	Ave	1.587	1.584	0.5000	9.98	10.0	-0.2	20.0
n-Butylbenzene	Ave	2.286	2.295		10.0	10.0	0.4	20.0
1,2-Dichlorobenzene	Ave	1.485	1.504	0.4000	10.1	10.0	1.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0952	0.1049	0.0500	11.0	10.0	10.1	20.0
1,2,4-Trichlorobenzene	Ave	0.6818	0.6660	0.2000	9.77	10.0	-2.3	20.0
Hexachlorobutadiene	Ave	0.2577	0.2217		8.60	10.0	-14.0	20.0
Naphthalene	Ave	2.063	2.211		10.7	10.0	7.2	20.0
1,2,3-Trichlorobenzene	Ave	0.5920	0.6250		10.6	10.0	5.6	20.0
Dibromofluoromethane (Surr)	Ave	0.2389	0.2274		9.72	10.2	-4.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3867	0.3583		9.46	10.2	-7.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-42092/14 Calibration Date: 04/29/2012 20:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.552	1.491		9.81	10.2	-3.9	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5538	0.5469		10.1	10.2	-1.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-42092/14 Calibration Date: 04/29/2012 20:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 17:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 19:50

Lab File ID: UXM5251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3182	0.3065		9.63	10.0	-3.7	20.0
Diisopropyl ether	Ave	0.2775	0.2745		9.89	10.0	-1.1	20.0
Isobutyl alcohol	Ave	0.0086	0.0091		527	500	5.4	20.0
Cyclohexanone	Lin1		0.0256		52.9	200	-73.6*	20.0
1,2,3-Trimethylbenzene	Ave	2.982	3.178		10.7	10.0	6.6	20.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab File ID: BFB2916.D BFB Injection Date: 04/30/2012

Instrument ID: A3UX16 BFB Injection Time: 11:22

Analysis Batch No.: 42171

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.2	
75	30.0 - 60.0 % of mass 95	53.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.1	(0.2)1
174	50.0 - 120.00 % of mass 95	66.2	
175	5.0 - 9.0 % of mass 174	4.8	(7.3)1
176	95.0 - 101.0 % of mass 174	63.9	(96.5)1
177	5.0 - 9.0 % of mass 176	4.2	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-42171/2	UXM5270.D	04/30/2012	11:50
	CCV 240-42171/3	UXM5271.D	04/30/2012	12:13
	LCS 240-42171/4	UXM5272.D	04/30/2012	12:36
	MB 240-42171/5	UXM5273.D	04/30/2012	12:59
TB-042512	240-10670-1	UXM5280.D	04/30/2012	15:54
MT-MW05S-042512	240-10670-2	UXM5281.D	04/30/2012	16:17
MT-MW01S-042512	240-10670-3	UXM5282.D	04/30/2012	16:40
MT-MW03S-042512	240-10670-4	UXM5283.D	04/30/2012	17:03
	240-10350-A-5 MS	UXM5284.D	04/30/2012	17:25
	240-10350-C-5 MSD	UXM5285.D	04/30/2012	17:48

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCVIS 240-42171/2 Calibration Date: 04/30/2012 11:50

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5270.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2829	0.2885	0.1000	10.2	10.0	2.0	20.0
Chloromethane	Ave	0.4613	0.4195	0.1000	9.10	10.0	-9.0	20.0
Vinyl chloride	Ave	0.4246	0.4029	0.1000	9.49	10.0	-5.1	20.0
Bromomethane	Ave	0.1684	0.1518	0.0500	9.02	10.0	-9.8	20.0
Chloroethane	Ave	0.2371	0.2197	0.0500	9.27	10.0	-7.3	20.0
Trichlorofluoromethane	Ave	0.3035	0.3119	0.1000	10.3	10.0	2.8	20.0
~~Acrolein~~	Ave	0.0489	0.0440		89.9	100	-10.1	20.0
1,1-Dichloroethene	Ave	0.2446	0.2428	0.1000	9.93	10.0	-0.7	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1546	0.1669	0.0500	10.8	10.0	8.0	20.0
Acetone	Lin1		0.0864	0.0500	16.6	20.0	-17.0	20.0
Iodomethane	Ave	0.3433	0.3500		10.2	10.0	1.9	20.0
Carbon disulfide	Ave	0.7261	0.7265	0.1000	10.0	10.0	0.0	20.0
~~Acetonitrile~~	Ave	0.0346	0.0292		84.2	100	-15.8	20.0
Methyl acetate	Ave	0.2327	0.1967	0.1000	16.9	20.0	-15.5	20.0
Methylene Chloride	Lin1		0.3004	0.1000	9.58	10.0	-4.2	20.0
tert-Butyl alcohol	Ave	0.0189	0.0158		167	200	-16.6	20.0
Acrylonitrile	Ave	0.1114	0.0998		17.9	20.0	-10.5	20.0
Methyl tert-butyl ether	Ave	0.8402	0.7869	0.1000	9.36	10.0	-6.4	20.0
trans-1,2-Dichloroethene	Ave	0.2873	0.2775	0.1000	9.66	10.0	-3.4	20.0
Hexane	Ave	0.0529	0.0551		10.4	10.0	4.1	20.0
1,1-Dichloroethane	Ave	0.5691	0.5381	0.1000	9.45	10.0	-5.5	20.0
Vinyl acetate	Ave	0.0505	0.0473		9.37	10.0	-6.3	20.0
2-Butanone	Ave	0.1356	0.1228	0.0500	18.1	20.0	-9.5	20.0
cis-1,2-Dichloroethene	Ave	0.3087	0.2944	0.1000	9.54	10.0	-4.6	20.0
2,2-Dichloropropane	Ave	0.2932	0.3012		10.3	10.0	2.7	20.0
Bromochloromethane	Ave	0.1283	0.1246		9.71	10.0	-2.9	20.0
Tetrahydrofuran	Ave	0.0828	0.0713		8.61	10.0	-13.9	20.0
Chloroform	Ave	0.5296	0.5127	0.2000	9.68	10.0	-3.2	20.0
1,1,1-Trichloroethane	Ave	0.3678	0.3764	0.1000	10.2	10.0	2.3	20.0
Cyclohexane	Ave	0.4605	0.4777	0.1000	10.4	10.0	3.7	20.0
1,1-Dichloropropene	Ave	0.4264	0.4061		9.53	10.0	-4.7	20.0
Carbon tetrachloride	Ave	0.2770	0.2871	0.1000	10.4	10.0	3.7	20.0
1,2-Dichloroethane	Ave	0.4694	0.4390	0.1000	9.35	10.0	-6.5	20.0
Benzene	Ave	1.251	1.173	0.5000	9.38	10.0	-6.2	20.0
Trichloroethene	Ave	0.2698	0.2578	0.2000	9.56	10.0	-4.4	20.0
1,2-Dichloropropane	Ave	0.3083	0.2961	0.1000	9.61	10.0	-3.9	20.0
Methylcyclohexane	Ave	0.3477	0.3809	0.1000	11.0	10.0	9.5	20.0
Dibromomethane	Ave	0.1606	0.1478		9.20	10.0	-8.0	20.0
~~1,4-Dioxane~~	Ave	0.0024	0.0019		403	500	-19.5	20.0
Bromodichloromethane	Ave	0.3092	0.3153	0.1000	10.2	10.0	2.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCVIS 240-42171/2 Calibration Date: 04/30/2012 11:50

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5270.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1599	0.1432		17.9	20.0	-10.4	20.0
cis-1,3-Dichloropropene	Lin1		0.3918	0.1500	9.04	10.0	-9.6	20.0
4-Methyl-2-pentanone	Ave	0.2643	0.2348	0.0500	17.8	20.0	-11.1	20.0
Toluene	Ave	1.877	1.787	0.4000	9.52	10.0	-4.8	20.0
trans-1,3-Dichloropropene	Lin1		0.5043	0.1000	8.87	10.0	-11.3	20.0
Ethyl methacrylate	Ave	0.5543	0.5335		9.62	10.0	-3.8	20.0
1,1,2-Trichloroethane	Ave	0.3307	0.3148	0.1000	9.52	10.0	-4.8	20.0
1,3-Dichloropropane	Ave	0.6962	0.6368		9.15	10.0	-8.5	20.0
Tetrachloroethene	Ave	0.2617	0.2605	0.2000	9.95	10.0	-0.5	20.0
2-Hexanone	Ave	0.2698	0.2379	0.0500	17.6	20.0	-11.8	20.0
Dibromochloromethane	Lin1		0.2633		9.05	10.0	-9.5	20.0
1,2-Dibromoethane	Ave	0.3223	0.3055		9.48	10.0	-5.2	20.0
Chlorobenzene	Ave	1.104	1.033	0.3000	9.36	10.0	-6.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3116	0.3137		10.1	10.0	0.7	20.0
Ethylbenzene	Ave	0.5828	0.5604		9.61	10.0	-3.9	20.0
m-Xylene & p-Xylene	Ave	0.7256	0.7011		19.3	20.0	-3.4	20.0
o-Xylene	Ave	0.7207	0.6828		9.47	10.0	-5.3	20.0
Styrene	Ave	1.192	1.161	0.3000	9.74	10.0	-2.6	20.0
Bromoform	Lin1		0.1180	0.1000	8.76	10.0	-12.4	20.0
Isopropylbenzene	Ave	1.713	1.674	0.1000	9.78	10.0	-2.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9025	0.8145	0.3000	9.03	10.0	-9.7	20.0
Bromobenzene	Ave	0.8159	0.7672		9.40	10.0	-6.0	20.0
1,2,3-Trichloropropane	Ave	0.2837	0.2411		8.50	10.0	-15.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2511	0.2253		8.97	10.0	-10.3	20.0
n-Propylbenzene	Ave	0.8598	0.8408		9.78	10.0	-2.2	20.0
2-Chlorotoluene	Ave	0.8362	0.7704		9.21	10.0	-7.9	20.0
1,3,5-Trimethylbenzene	Ave	2.791	2.685		9.62	10.0	-3.8	20.0
4-Chlorotoluene	Ave	0.8762	0.8030		9.16	10.0	-8.4	20.0
tert-Butylbenzene	Ave	2.471	2.377		9.62	10.0	-3.8	20.0
1,2,4-Trimethylbenzene	Ave	2.906	2.768		9.52	10.0	-4.8	20.0
sec-Butylbenzene	Ave	3.036	2.929		9.65	10.0	-3.5	20.0
1,3-Dichlorobenzene	Ave	1.506	1.415	0.6000	9.40	10.0	-6.0	20.0
p-Isopropyltoluene	Ave	2.486	2.404		9.67	10.0	-3.3	20.0
1,4-Dichlorobenzene	Ave	1.587	1.474	0.5000	9.29	10.0	-7.1	20.0
n-Butylbenzene	Ave	2.286	2.220		9.71	10.0	-2.9	20.0
1,2-Dichlorobenzene	Ave	1.485	1.388	0.4000	9.35	10.0	-6.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0952	0.0894	0.0500	9.39	10.0	-6.1	20.0
1,3,5-Trichlorobenzene	Ave	0.7690	0.7641		9.94	10.0	-0.6	20.0
1,2,4-Trichlorobenzene	Ave	0.6818	0.6748	0.2000	9.90	10.0	-1.0	20.0
Hexachlorobutadiene	Ave	0.2577	0.2544		9.87	10.0	-1.3	20.0
Naphthalene	Ave	2.063	1.886		9.14	10.0	-8.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCVIS 240-42171/2 Calibration Date: 04/30/2012 11:50

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5270.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.5920	0.5682		9.60	10.0	-4.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2389	0.2170		9.27	10.2	-9.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3867	0.3153		8.32	10.2	-18.5	20.0
Toluene-d8 (Surr)	Ave	1.552	1.338		8.81	10.2	-13.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5538	0.5067		9.34	10.2	-8.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42171/3 Calibration Date: 04/30/2012 12:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5271.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2389	0.2197		9.39	10.2	-8.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3867	0.3395		8.96	10.2	-12.2	20.0
Toluene-d8 (Surr)	Ave	1.552	1.410		9.28	10.2	-9.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5538	0.5352		9.87	10.2	-3.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42171/3 Calibration Date: 04/30/2012 12:13

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 17:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 19:50

Lab File ID: UXM5271.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.5291	0.4967		9.39	10.0	-6.1	20.0
Ethyl ether	Ave	0.3182	0.2722		8.56	10.0	-14.4	20.0
3-Chloro-1-propene	Ave	0.1408	0.1458		10.4	10.0	3.5	20.0
Diisopropyl ether	Ave	0.2775	0.2702		48.7	50.0	-2.6	20.0
2-Chloro-1,3-butadiene	Ave	0.5156	0.4999		9.70	10.0	-3.0	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8899	0.8664		9.74	10.0	-2.6	20.0
~~Propionitrile~~	Ave	0.0386	~~0.0384~~		19.9	20.0	-0.6	20.0
Ethyl acetate	Ave	0.2719	0.2478		18.2	20.0	-8.9	20.0
Methacrylonitrile	Ave	0.1921	0.1753		9.13	10.0	-8.7	20.0
~~Isobutyl alcohol~~	Ave	0.0086	~~0.0076~~		176	200	-12.2	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7157	0.6972		9.74	10.0	-2.6	20.0
~~n-Heptane~~	Ave	0.0406	~~0.0438~~		10.8	10.0	7.7	20.0
~~n-Butanol~~	Lin1		~~0.0054~~		165	200	-17.6	20.0
~~2-Nitropropane~~	Qua		~~0.0379~~		18.5	20.0	-7.5	20.0
~~Cyclohexanone~~	Lin1		0.0798		79.4	100	~~-20.6~~	20.0
1,2,3-Trimethylbenzene	Ave	2.982	2.888		9.68	10.0	-3.2	20.0
2-Methylnaphthalene	Qua		0.8088		16.2	20.0	-19.0	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab File ID: UXM5273.D Lab Sample ID: MB 240-42171/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 04/30/2012 12:59

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-42171/4	UXM5272.D	04/30/2012 12:36
TB-042512	240-10670-1	UXM5280.D	04/30/2012 15:54
MT-MW05S-042512	240-10670-2	UXM5281.D	04/30/2012 16:17
MT-MW01S-042512	240-10670-3	UXM5282.D	04/30/2012 16:40
MT-MW03S-042512	240-10670-4	UXM5283.D	04/30/2012 17:03
	240-10350-A-5 MS	UXM5284.D	04/30/2012 17:25
	240-10350-C-5 MSD	UXM5285.D	04/30/2012 17:48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-42171/5

Matrix: Water | Lab File ID: UXM5273.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/30/2012 12:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42171 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	0.288	J	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-42171/5

Matrix: Water Lab File ID: UXM5273.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-42171/5

Matrix: Water Lab File ID: UXM5273.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		63-129
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
2037-26-5	Toluene-d8 (Surr)	92		74-115
1868-53-7	Dibromofluoromethane (Surr)	86		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-42171/5

Matrix: Water Lab File ID: UXM5273.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/30/2012 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42171 Units: ug/L

Number TICs Found: 1 TIC Result Total: 0.197

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
108-87-2	Methylcyclohexane	6.21	0.197	J

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5272.D

Lab ID: LCS 240-42171/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.29	93	72-116	
1,1,1-Trichloroethane	10.0	9.17	92	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.61	86	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.47	95	74-151	
1,1-Dichloroethane	10.0	9.12	91	82-115	
1,1-Dichloroethene	10.0	9.37	94	78-131	
1,1-Dichloropropene	10.0	8.82	88	83-114	
1,2,3-Trichlorobenzene	10.0	9.27	93	54-126	
1,2,3-Trichloropropane	10.0	8.58	86	73-129	
1,2,3-Trimethylbenzene	10.0	9.34	93	70-130	
1,2,4-Trichlorobenzene	10.0	9.24	92	48-135	
1,2,4-Trimethylbenzene	10.0	9.09	91	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.48	85	42-136	
1,2-Dichlorobenzene	10.0	8.87	89	81-110	
1,2-Dichloroethane	10.0	9.10	91	71-127	
1,2-Dichloropropane	10.0	9.15	92	81-115	
1,3-Dichlorobenzene	10.0	9.09	91	80-110	
1,3-Dichloropropane	10.0	8.52	85	79-116	
1,4-Dichlorobenzene	10.0	8.91	89	82-110	
2,2-Dichloropropane	10.0	9.51	95	50-129	
2-Chloroethyl vinyl ether	10.0	8.76 J	88	52-131	
2-Chlorotoluene	10.0	8.59	86	76-116	
2-Hexanone	20.0	17.5	88	55-133	
Bromobenzene	10.0	9.12	91	76-115	
Bromochloromethane	10.0	9.21	92	77-120	
4-Chlorotoluene	10.0	8.82	88	77-115	
p-Isopropyltoluene	10.0	9.20	92	74-120	
Acetone	20.0	16.4	82	43-136	
Benzene	10.0	9.16	92	83-112	
Bromoform	10.0	8.16	82	40-131	
Bromomethane	10.0	7.64	76	11-185	
Carbon disulfide	10.0	8.61	86	62-142	
Carbon tetrachloride	10.0	9.19	92	66-128	
Chlorobenzene	10.0	8.95	90	85-110	
Chloroethane	10.0	8.17	82	25-153	
Chloroform	10.0	8.84	88	79-117	
Chloromethane	10.0	7.91	79	44-126	
cis-1,2-Dichloroethene	10.0	9.23	92	80-113	
cis-1,3-Dichloropropene	10.0	8.36	84	61-115	
Hexachlorobutadiene	10.0	8.77	88	36-134	
Dibromomethane	10.0	9.18	92	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5272.D

Lab ID: LCS 240-42171/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	9.60	96	72-121	
Dichlorodifluoromethane	10.0	5.86	59	19-129	
Ethylbenzene	10.0	9.06	91	83-112	
1,2-Dibromoethane	10.0	8.75	88	79-113	
Diisopropyl ether	10.0	8.74 J	87	77-118	
Naphthalene	10.0	8.79	88	32-141	
m-Xylene & p-Xylene	20.0	18.0	90	83-113	
n-Butylbenzene	10.0	8.83	88	66-125	
Isopropylbenzene	10.0	9.08	91	75-114	
n-Propylbenzene	10.0	9.50	95	74-121	
2-Butanone	20.0	16.7	84	60-126	
4-Methyl-2-pentanone	20.0	17.3	87	63-128	
sec-Butylbenzene	10.0	8.78	88	70-117	
Methyl tert-butyl ether	10.0	8.66	87	52-144	
Methylene Chloride	10.0	8.84	88	66-131	
o-Xylene	10.0	9.15	92	83-113	
Styrene	10.0	9.27	93	79-114	
tert-Butylbenzene	10.0	8.95	90	71-115	
Tetrachloroethene	10.0	9.17	92	79-114	
Toluene	10.0	8.87	89	84-111	
trans-1,2-Dichloroethene	10.0	9.08	91	83-117	
trans-1,3-Dichloropropene	10.0	8.11	81	58-117	
Trichloroethene	10.0	9.17	92	76-117	
Trichlorofluoromethane	10.0	9.25	93	49-157	
Vinyl acetate	10.0	8.12	81	46-161	
Vinyl chloride	10.0	8.25	83	53-127	
tert-Butyl alcohol	200	167	84	70-130	
Xylenes, Total	30.0	27.2	91	83-112	
Dibromochloromethane	10.0	8.13	81	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5284.D

Lab ID: 240-10350-A-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	1.0 U	9.57	96	64-118	
1,1,1-Trichloroethane	10.0	1.0 U	9.42	94	68-121	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	9.56	96	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	11.6	116	70-152	
1,1-Dichloroethane	10.0	1.0 U	9.26	93	79-116	
1,1-Dichloroethene	10.0	1.0 U	10.0	100	74-135	
1,1-Dichloropropene	10.0	1.0 U	9.55	96	80-114	
1,2,3-Trichlorobenzene	10.0	1.0 U	9.86	99	45-129	
1,2,3-Trichloropropane	10.0	1.0 U	9.72	97	67-132	
1,2,3-Trimethylbenzene	10.0	5.0 U	9.43	94	70-130	
1,2,4-Trichlorobenzene	10.0	1.0 U	9.37	94	38-138	
1,2,4-Trimethylbenzene	10.0	1.0 U	9.37	94	67-124	
1,2-Dibromo-3-Chloropropane	10.0	2.0 U	9.54	95	32-139	
1,2-Dichlorobenzene	10.0	1.0 U	9.15	92	75-111	
1,2-Dichloroethane	10.0	1.0 U	9.37	94	68-129	
1,2-Dichloropropane	10.0	1.0 U	9.68	97	78-115	
1,3-Dichlorobenzene	10.0	1.0 U	9.16	92	73-110	
1,3-Dichloropropane	10.0	1.0 U	9.44	94	74-118	
1,4-Dichlorobenzene	10.0	1.0 U	9.01	90	75-110	
2,2-Dichloropropane	10.0	1.0 U	9.23	92	38-127	
2-Chloroethyl vinyl ether	10.0	10 U	10 U	0	10-150	F
2-Chlorotoluene	10.0	1.0 U	8.96	90	69-117	
2-Hexanone	20.0	10 U	21.3	107	47-139	
Bromobenzene	10.0	1.0 U	9.39	94	71-116	
Bromochloromethane	10.0	1.0 U	9.28	93	73-121	
4-Chlorotoluene	10.0	1.0 U	8.98	90	71-116	
p-Isopropyltoluene	10.0	1.0 U	9.57	96	64-122	
Acetone	20.0	10 U	17.7	89	33-145	
Benzene	10.0	1.0 U	9.36	94	72-121	
Bromoform	10.0	1.0 U	8.55	86	32-128	
Bromomethane	10.0	1.0 U	4.44	44	10-186	
Carbon disulfide	10.0	1.0 U	8.83	88	57-147	
Carbon tetrachloride	10.0	1.0 U	9.67	97	59-129	
Chlorobenzene	10.0	1.0 U	9.37	94	80-110	
Chloroethane	10.0	1.0 U	6.84	68	21-165	
Chloroform	10.0	1.0 U	9.03	90	76-118	
Chloromethane	10.0	1.0 U	7.92	79	33-132	
cis-1,2-Dichloroethene	10.0	1.0 U	9.38	94	70-120	
cis-1,3-Dichloropropene	10.0	1.0 U	8.26	83	51-110	
Hexachlorobutadiene	10.0	1.0 U	8.51	85	27-132	
Dibromomethane	10.0	1.0 U	9.68	97	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5284.D

Lab ID: 240-10350-A-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	1.0 U	9.64	96	67-120	
Dichlorodifluoromethane	10.0	1.0 U	7.19	72	17-128	
Ethylbenzene	10.0	1.0 U	9.51	95	75-116	
1,2-Dibromoethane	10.0	1.0 U	9.96	100	74-113	
Diisopropyl ether	10.0	10 U	8.79 J	88	73-118	
Naphthalene	10.0	1.0 U	9.96	100	15-158	
m-Xylene & p-Xylene	20.0	2.0 U	19.0	95	75-117	
n-Butylbenzene	10.0	1.0 U	9.11	91	56-127	
Isopropylbenzene	10.0	1.0 U	9.45	95	68-116	
n-Propylbenzene	10.0	1.0 U	9.58	96	64-124	
2-Butanone	20.0	10 U	19.4	97	54-129	
4-Methyl-2-pentanone	20.0	10 U	20.9	105	56-131	
sec-Butylbenzene	10.0	1.0 U	9.33	93	60-119	
Methyl tert-butyl ether	10.0	5.0 U	9.03	90	46-144	
Methylene Chloride	10.0	1.0 U	8.65	87	63-128	
o-Xylene	10.0	1.0 U	9.39	94	76-116	
Styrene	10.0	1.0 U	9.60	96	71-117	
tert-Butylbenzene	10.0	1.0 U	9.33	93	61-119	
Tetrachloroethene	10.0	1.0 U	10.0	100	70-117	
Toluene	10.0	1.0 U	9.36	94	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	9.18	92	80-119	
trans-1,3-Dichloropropene	10.0	1.0 U	8.16	82	46-116	
Trichloroethene	10.0	1.0 U	9.41	94	66-120	
Trichlorofluoromethane	10.0	1.0 U	8.71	87	46-157	
Vinyl acetate	10.0	2.0 U	8.93	89	43-157	
Vinyl chloride	10.0	1.0 U	9.08	91	49-130	
tert-Butyl alcohol	200	50 U	217	109	70-130	
Xylenes, Total	30.0	2.0 U	28.4	95	76-116	
Dibromochloromethane	10.0	1.0 U	8.56	86	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5285.D

Lab ID: 240-10350-C-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.67	97	1	30	64-118	
1,1,1-Trichloroethane	10.0	9.09	91	4	30	68-121	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	5	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.92	99	16	30	70-152	
1,1-Dichloroethane	10.0	9.28	93	0	30	79-116	
1,1-Dichloroethene	10.0	9.69	97	3	30	74-135	
1,1-Dichloropropene	10.0	9.22	92	4	30	80-114	
1,2,3-Trichlorobenzene	10.0	8.21	82	18	30	45-129	
1,2,3-Trichloropropane	10.0	9.80	98	1	30	67-132	
1,2,3-Trimethylbenzene	10.0	9.03	90	4	30	70-130	
1,2,4-Trichlorobenzene	10.0	7.84	78	18	30	38-138	
1,2,4-Trimethylbenzene	10.0	9.00	90	4	30	67-124	
1,2-Dibromo-3-Chloropropane	10.0	9.69	97	2	30	32-139	
1,2-Dichlorobenzene	10.0	8.74	87	5	30	75-111	
1,2-Dichloroethane	10.0	9.04	90	4	30	68-129	
1,2-Dichloropropane	10.0	9.25	93	5	30	78-115	
1,3-Dichlorobenzene	10.0	8.99	90	2	30	73-110	
1,3-Dichloropropane	10.0	9.43	94	0	30	74-118	
1,4-Dichlorobenzene	10.0	8.88	89	1	30	75-110	
2,2-Dichloropropane	10.0	8.87	89	4	30	38-127	
2-Chloroethyl vinyl ether	10.0	10 U	0	NC	30	10-150	F
2-Chlorotoluene	10.0	9.37	94	4	30	69-117	
2-Hexanone	20.0	20.5	103	4	30	47-139	
Bromobenzene	10.0	9.57	96	2	30	71-116	
Bromochloromethane	10.0	8.92	89	4	30	73-121	
4-Chlorotoluene	10.0	9.06	91	1	30	71-116	
p-Isopropyltoluene	10.0	8.93	89	7	30	64-122	
Acetone	20.0	13.9	70	24	30	33-145	
Benzene	10.0	9.16	92	2	30	72-121	
Bromoform	10.0	8.51	85	0	30	32-128	
Bromomethane	10.0	5.19	52	16	30	10-186	
Carbon disulfide	10.0	8.03	80	9	30	57-147	
Carbon tetrachloride	10.0	9.13	91	6	30	59-129	
Chlorobenzene	10.0	9.23	92	2	30	80-110	
Chloroethane	10.0	6.73	67	2	30	21-165	
Chloroform	10.0	8.90	89	1	30	76-118	
Chloromethane	10.0	8.81	88	11	30	33-132	
cis-1,2-Dichloroethene	10.0	9.27	93	1	30	70-120	
cis-1,3-Dichloropropene	10.0	7.99	80	3	30	51-110	
Hexachlorobutadiene	10.0	6.53	65	26	30	27-132	
Dibromomethane	10.0	9.52	95	2	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5285.D

Lab ID: 240-10350-C-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	10.0	9.34	93	3	30	67-120	
Dichlorodifluoromethane	10.0	5.82	58	21	30	17-128	
Ethylbenzene	10.0	9.29	93	2	30	75-116	
1,2-Dibromoethane	10.0	9.55	96	4	30	74-113	
Diisopropyl ether	10.0	8.71 J	87	1	30	73-118	
Naphthalene	10.0	8.36	84	17	30	15-158	
m-Xylene & p-Xylene	20.0	18.3	92	4	30	75-117	
n-Butylbenzene	10.0	8.35	84	9	30	56-127	
Isopropylbenzene	10.0	9.07	91	4	30	68-116	
n-Propylbenzene	10.0	9.61	96	0	30	64-124	
2-Butanone	20.0	17.6	88	10	30	54-129	
4-Methyl-2-pentanone	20.0	20.2	101	3	30	56-131	
sec-Butylbenzene	10.0	8.71	87	7	30	60-119	
Methyl tert-butyl ether	10.0	8.88	89	2	30	46-144	
Methylene Chloride	10.0	8.38	84	3	30	63-128	
o-Xylene	10.0	9.08	91	3	30	76-116	
Styrene	10.0	9.26	93	4	30	71-117	
tert-Butylbenzene	10.0	9.04	90	3	30	61-119	
Tetrachloroethene	10.0	9.57	96	4	30	70-117	
Toluene	10.0	9.29	93	1	30	78-114	
trans-1,2-Dichloroethene	10.0	8.99	90	2	30	80-119	
trans-1,3-Dichloropropene	10.0	8.50	85	4	30	46-116	
Trichloroethene	10.0	9.19	92	2	30	66-120	
Trichlorofluoromethane	10.0	8.33	83	4	30	46-157	
Vinyl acetate	10.0	9.09	91	2	30	43-157	
Vinyl chloride	10.0	8.71	87	4	30	49-130	
tert-Butyl alcohol	200	159	79	31	30	70-130	F
Xylenes, Total	30.0	27.4	91	4	30	76-116	
Dibromochloromethane	10.0	8.69	87	2	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-042512	240-10670-1	82	83	85	88
MT-MW05S-042512	240-10670-2	80	81	86	89
MT-MW01S-042512	240-10670-3	81	83	86	90
MT-MW03S-042512	240-10670-4	86	87	91	93
	MB 240-42171/5	86	87	92	96
	LCS 240-42171/4	84	80	83	90
	240-10350-A-5 MS	86	84	90	93
	240-10350-C-5 MSD	86	83	89	88

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Sample No.: STD8260 240-42092/4 Date Analyzed: 04/29/2012 16:26

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM5241.D Heated Purge: (Y/N) N

Calibration ID: 8426

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1530000	5.70	1036987	8.39	499405	10.64
UPPER LIMIT		3060000	6.20	2073974	8.89	998810	11.14
LOWER LIMIT		765000	5.20	518494	7.89	249703	10.14
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-42092/14		1382789	5.70	929711	8.39	462842	10.64
CCVIS 240-42171/2		1827438	5.70	1228317	8.39	614323	10.64

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Sample No.: CCVIS 240-42171/2 Date Analyzed: 04/30/2012 11:50

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM5270.D Heated Purge: (Y/N) N

Calibration ID: 8428

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1827438	5.70	1228317	8.39	614323	10.64
UPPER LIMIT		3654876	6.20	2456634	8.89	1228646	11.14
LOWER LIMIT		913719	5.20	614159	7.89	307162	10.14
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-42171/3		1675303	5.70	1143405	8.39	543922	10.64
LCS 240-42171/4		1858112	5.70	1240826	8.39	615173	10.64
MB 240-42171/5		1636782	5.70	1107392	8.39	536650	10.64
240-10670-1	TB-042512	1728642	5.70	1158395	8.39	560774	10.64
240-10670-2	MT-MW05S-042512	1739898	5.70	1159226	8.39	556455	10.64
240-10670-3	MT-MW01S-042512	1708185	5.70	1126282	8.39	536921	10.64
240-10670-4	MT-MW03S-042512	1629127	5.70	1072431	8.39	520849	10.64
240-10350-A-5 MS		1710874	5.70	1135916	8.39	559548	10.64
240-10350-C-5 MSD		1786806	5.70	1151558	8.39	541302	10.64

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

Method 8270C

Semivolatile Organic Compounds (GC/MS) by Method 8270C

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab File ID: 20502001.D DFTPP Injection Date: 05/02/2012

Instrument ID: A4HP7 DFTPP Injection Time: 10:03

Analysis Batch No.: 42463

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	60.2	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	45.5	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	25.0 - 75.0% of mass 198	50.3	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0- 30.0% of mass 198	23.2	
365	Greater than 0.75% of mass 198	2.0	
441	Present, but less than mass 443	7.0	
442	40.0 - 110.0% of mass 198	44.8	
443	15.0 - 24.0% of mass 442	8.8	(19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-42463/2	20502002.D	05/02/2012	10:23
	STD4 240-42463/3	20502003.D	05/02/2012	10:42
	STD3 240-42463/4	20502004.D	05/02/2012	11:01
	STD2 240-42463/5	20502005.D	05/02/2012	11:19
	STD1 240-42463/6	20502006.D	05/02/2012	11:38
	STD9 240-42463/7	20502007.D	05/02/2012	11:57
	STD8 240-42463/8	20502008.D	05/02/2012	12:16
	STD7 240-42463/9	20502009.D	05/02/2012	12:35
	STD6 240-42463/10	20502010.D	05/02/2012	12:54
	ICV 240-42463/11	20502011.D	05/02/2012	13:13
	ICV 240-42463/29	20502029.D	05/02/2012	19:09

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42463

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2012 10:23 Calibration End Date: 05/02/2012 12:54 Calibration ID: 8490

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-42463/6	20502006.D
Level 2	STD2 240-42463/5	20502005.D
Level 3	STD3 240-42463/4	20502004.D
Level 4	STD4 240-42463/3	20502003.D
Level 5	STD5 240-42463/2	20502002.D
Level 6	STD6 240-42463/10	20502010.D
Level 7	STD7 240-42463/9	20502009.D
Level 8	STD8 240-42463/8	20502008.D
Level 9	STD9 240-42463/7	20502007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5797	0.7266 0.5728	0.4617 0.6094	0.5087 0.5684	0.4851	Ave		0.5640				15.0		15.0			
N-Nitrosodimethylamine	0.8841	0.7933 0.8811	0.7168 0.9316	0.7448 0.9112	0.7452	Ave		0.8260				10.0		15.0			
Pyridine	1.5075	1.3258 1.5146	1.1707 1.6776	1.1870 1.6034	1.1707	Ave		1.3947				15.0		15.0			
Ethyl methacrylate	1.1731	0.9728 1.1757	1.0484 1.2864	1.0037 1.2062	1.0290	Ave		1.1119				10.0		15.0			
Benzaldehyde	1.3735 0.7433	1.0441 +++++	1.0548 +++++	1.0867 +++++	0.9578	Ave		1.0434				20.0	*	15.0			
3-Chloropropionitrile	1.0012	0.9519 1.0222	0.9033 1.1093	0.8667 1.0492	0.8718	Ave		0.9719				9.1		15.0			
Malononitrile	1.5032	1.4102 1.2671	1.3756 1.2102	1.4463 1.0266	1.4564	Ave		1.3370				12.0		15.0			
Benzoic acid	0.2334	+++++ 0.2441	+++++ 0.2610	0.1647 0.2825	0.2322	Qua	0.0075	0.1951	0.0017						0.9990		0.9900
Phenol	1.7085	1.5885 1.7359	1.4815 1.9095	1.5782 1.8649	1.5731	Ave		1.6800				9.0		15.0			
Aniline	2.1278	1.9210 2.1146	1.8743 2.3821	2.0349 2.3349	1.9327	Ave		2.0903				9.0		15.0			
Bis(2-chloroethyl)ether	1.2927	1.2120 1.4453	1.3088 1.4464	1.1722 1.4211	1.1887	Ave		1.3109				8.8		15.0			
2-Chlorophenol	1.5020	1.3476 1.5269	1.3800 1.6760	1.4496 1.6251	1.4098	Ave		1.4896				7.8		15.0			
1,3-Dichlorobenzene	1.6350	1.3701 1.6113	1.5553 1.7820	1.5792 1.6988	1.5113	Ave		1.5929				7.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 42463

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2012 10:23 Calibration End Date: 05/02/2012 12:54 Calibration ID: 8490

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-42463/6	20502006.D
Level 2	STD2 240-42463/5	20502005.D
Level 3	STD3 240-42463/4	20502004.D
Level 4	STD4 240-42463/3	20502003.D
Level 5	STD5 240-42463/2	20502002.D
Level 6	STD6 240-42463/10	20502010.D
Level 7	STD7 240-42463/9	20502009.D
Level 8	STD8 240-42463/8	20502008.D
Level 9	STD9 240-42463/7	20502007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	295395	15059 438022	23147 625497	45772 673269	99759	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	450536	16441 673759	35936 956142	67018 1079397	153230	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	768213	27478 1158210	58696 1721786	106807 1899329	240725	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Ethyl methacrylate	DCB	Ave	597788	20162 899063	52561 1320239	90314 1428878	211595	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	6716 378785	21639 +++++	52883 +++++	97785 +++++	196945	0.100 10.0	0.500 +++++	1.00 +++++	2.00 +++++	5.00
3-Chloropropionitrile	DCB	Ave	510186	19728 781632	45289 1138488	77990 1242817	179271	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Malononitrile	DCB	Ave	766019	29227 968969	68966 1242126	130144 1216141	299474	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Qua	875958	+++++ 1316669	+++++ 1896774	116824 2481316	377621	20.0	+++++ 30.0	+++++ 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	870609	32922 1327444	74279 1959830	142015 2209157	323473	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1084265	39813 1617005	93973 2444854	183107 2765811	397413	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	658742	25119 1105232	65620 1484510	105481 1683453	244438	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	765390	27929 1167612	69190 1720143	130437 1925074	289895	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	833174	28397 1232139	77977 1828913	142098 2012335	310759	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Caprolactam	NPT	Qua	213594	+++++ 328191	11115 466991	31422 +++++	84526	10.0	+++++ 15.0	1.00 20.0	2.00 +++++	5.00

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-42463/11 Calibration Date: 05/02/2012 13:13

Instrument ID: A4HP7 Calib Start Date: 05/02/2012 10:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/02/2012 12:54

Lab File ID: 20502011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5640	0.5264		9.33	10.0	-6.7	50.0
N-Nitrosodimethylamine	Ave	0.8260	0.8251		9.99	10.0	-0.1	50.0
Pyridine	Ave	1.395	1.479		10.6	10.0	6.0	50.0
Ethyl methacrylate	Ave	1.112	1.109		9.97	10.0	-0.3	50.0
3-Chloropropionitrile	Ave	0.9719	0.9803		10.1	10.0	0.9	50.0
Malononitrile	Ave	1.337	1.496		11.2	10.0	11.9	50.0
Benzaldehyde	Ave	1.043	0.6145		5.89	10.0	-41.1	50.0
Phenol	Ave	1.680	1.722		10.2	10.0	2.5	20.0
Aniline	Ave	2.090	2.144		10.3	10.0	2.6	50.0
Bis(2-chloroethyl)ether	Ave	1.311	1.327		10.1	10.0	1.2	50.0
2-Chlorophenol	Ave	1.490	1.506		10.1	10.0	1.1	50.0
1,3-Dichlorobenzene	Ave	1.593	1.567		9.84	10.0	-1.6	50.0
1,4-Dichlorobenzene	Ave	1.646	1.623		9.86	10.0	-1.4	20.0
Benzyl alcohol	Ave	0.8859	0.8898		10.0	10.0	0.4	50.0
1,2-Dichlorobenzene	Ave	1.544	1.517		9.83	10.0	-1.7	50.0
2-Methylphenol	Ave	1.290	1.293		10.0	10.0	0.2	50.0
bis (2-chloroisopropyl) ether	Ave	1.740	1.616		9.29	10.0	-7.1	50.0
3 & 4 Methylphenol	Ave	1.324	1.366		10.3	10.0	3.2	50.0
N-Nitrosodi-n-propylamine	Ave	0.8988	0.8701	0.0500	9.68	10.0	-3.2	50.0
Acetophenone	Ave	1.873	1.869		9.98	10.0	-0.2	50.0
Hexachloroethane	Ave	0.5453	0.5299		9.72	10.0	-2.8	50.0
Nitrobenzene	Ave	0.3636	0.3573		9.83	10.0	-1.7	50.0
Isophorone	Ave	0.6461	0.6605		10.2	10.0	2.2	50.0
2,4-Dimethylphenol	Ave	0.3785	0.3876		10.2	10.0	2.4	50.0
2-Nitrophenol	Ave	0.2067	0.2181		10.5	10.0	5.5	20.0
1,3,5-Trichlorobenzene	Ave	0.3633	0.3733		10.3	10.0	2.8	50.0
Bis(2-chloroethoxy)methane	Ave	0.3739	0.3789		10.1	10.0	1.3	50.0
Benzoic acid	Qua		0.2340		20.3	20.0	1.5	50.0
2,4-Dichlorophenol	Ave	0.3173	0.3295		10.4	10.0	3.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3480	0.3617		10.4	10.0	3.9	50.0
Naphthalene	Ave	1.144	1.159		10.1	10.0	1.3	50.0
4-Chloroaniline	Ave	0.4747	0.4591		9.67	10.0	-3.3	50.0
Hexachlorobutadiene	Ave	0.1832	0.1824		9.96	10.0	-0.4	20.0
1,2,3-Trichlorobenzene	Ave	0.3305	0.3260		9.86	10.0	-1.4	50.0
Caprolactam	Qua		0.1203		10.5	10.0	5.0	50.0
4-Chloro-3-methylphenol	Ave	0.3023	0.3207		10.6	10.0	6.1	20.0
2-Methylnaphthalene	Ave	0.7358	0.7408		10.1	10.0	0.7	50.0
1-Methylnaphthalene	Ave	0.7008	0.7068		10.1	10.0	0.8	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5580	0.5505		9.87	10.0	-1.3	50.0
Hexachlorocyclopentadiene	Ave	0.3259	0.3366	0.0500	10.3	10.0	3.3	50.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab File ID: 20504001.D DFTPP Injection Date: 05/04/2012

Instrument ID: A4HP7 DFTPP Injection Time: 09:24

Analysis Batch No.: 42787

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	63.4	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	61.5	
70	Less than 2.0% of mass 69	0.4	(0.6)1
127	25.0 - 75.0% of mass 198	61.4	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0- 30.0% of mass 198	25.9	
365	Greater than 0.75% of mass 198	3.0	
441	Present, but less than mass 443	11.0	
442	40.0 - 110.0% of mass 198	71.9	
443	15.0 - 24.0% of mass 442	13.9	(19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-42787/2	20504002.D	05/04/2012	09:42
	CCV 240-42787/4	20504004.D	05/04/2012	10:20
	MB 240-42319/22-A	20504005.D	05/04/2012	10:39
	LCS 240-42319/23-A	20504006.D	05/04/2012	10:57
	240-10623-N-4-A MS	20504011.D	05/04/2012	12:31
	240-10623-P-4-A MSD	20504012.D	05/04/2012	12:49
MT-MW05S-042512	240-10670-2	20504026.D	05/04/2012	17:10
MT-MW01S-042512	240-10670-3	20504027.D	05/04/2012	17:29
MT-MW03S-042512	240-10670-4	20504028.D	05/04/2012	17:48

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42787/2 Calibration Date: 05/04/2012 09:42

Instrument ID: A4HP7 Calib Start Date: 05/02/2012 10:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/02/2012 12:54

Lab File ID: 20504002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5640	0.5147		9.13	10.0	-8.7	50.0
N-Nitrosodimethylamine	Ave	0.8260	0.7894		9.56	10.0	-4.4	50.0
Pyridine	Ave	1.395	1.305		9.35	10.0	-6.5	50.0
Ethyl methacrylate	Ave	1.112	1.085		9.76	10.0	-2.4	50.0
3-Chloropropionitrile	Ave	0.9719	0.7970		8.20	10.0	-18.0	50.0
Malononitrile	Ave	1.337	1.282		9.59	10.0	-4.1	50.0
Benzaldehyde	Ave	1.043	0.6837		6.55	10.0	-34.5	50.0
Phenol	Ave	1.680	1.659		9.87	10.0	-1.3	20.0
Aniline	Ave	2.090	2.047		9.79	10.0	-2.1	50.0
Bis(2-chloroethyl)ether	Ave	1.311	1.492		11.4	10.0	13.8	50.0
2-Chlorophenol	Ave	1.490	1.515		10.2	10.0	1.7	50.0
1,3-Dichlorobenzene	Ave	1.593	1.618		10.2	10.0	1.6	50.0
1,4-Dichlorobenzene	Ave	1.646	1.651		10.0	10.0	0.3	50.0
Benzyl alcohol	Ave	0.8859	0.8461		9.55	10.0	-4.5	50.0
1,2-Dichlorobenzene	Ave	1.544	1.543		10.0	10.0	0.0	50.0
2-Methylphenol	Ave	1.290	1.264		9.79	10.0	-2.1	50.0
bis (2-chloroisopropyl) ether	Ave	1.740	1.620		9.31	10.0	-6.9	50.0
3 & 4 Methylphenol	Ave	1.324	1.318		9.96	10.0	-0.4	50.0
N-Nitrosodi-n-propylamine	Ave	0.8988	0.8955	0.0500	9.96	10.0	-0.4	50.0
Acetophenone	Ave	1.873	1.930		10.3	10.0	3.1	50.0
Hexachloroethane	Ave	0.5453	0.5812		10.7	10.0	6.6	50.0
Nitrobenzene	Ave	0.3636	0.3799		10.4	10.0	4.5	50.0
Isophorone	Ave	0.6461	0.6547		10.1	10.0	1.3	50.0
2,4-Dimethylphenol	Ave	0.3785	0.3787		10.0	10.0	0.0	50.0
2-Nitrophenol	Ave	0.2067	0.2099		10.2	10.0	1.5	20.0
1,3,5-Trichlorobenzene	Ave	0.3633	0.3340		9.19	10.0	-8.1	50.0
Bis(2-chloroethoxy)methane	Ave	0.3739	0.3742		10.0	10.0	0.0	50.0
Benzoic acid	Qua		0.1954		17.4	20.0	-13.0	50.0
2,4-Dichlorophenol	Ave	0.3173	0.2927		9.22	10.0	-7.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3480	0.3279		9.42	10.0	-5.8	50.0
Naphthalene	Ave	1.144	1.109		9.69	10.0	-3.1	50.0
4-Chloroaniline	Ave	0.4747	0.4510		9.50	10.0	-5.0	50.0
Hexachlorobutadiene	Ave	0.1832	0.1632		8.91	10.0	-10.9	20.0
1,2,3-Trichlorobenzene	Ave	0.3305	0.3012		9.11	10.0	-8.9	50.0
Caprolactam	Qua		0.1171		10.2	10.0	2.0	50.0
4-Chloro-3-methylphenol	Ave	0.3023	0.3115		10.3	10.0	3.0	20.0
2-Methylnaphthalene	Ave	0.7358	0.7205		9.79	10.0	-2.1	50.0
1-Methylnaphthalene	Ave	0.7008	0.6837		9.76	10.0	-2.4	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5580	0.5328		9.55	10.0	-4.5	50.0
Hexachlorocyclopentadiene	Ave	0.3259	0.3398	0.0500	10.4	10.0	4.3	50.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab File ID: 20504005.D Lab Sample ID: MB 240-42319/22-A

Matrix: Water Date Extracted: 05/01/2012 10:12

Instrument ID: A4HP7 Date Analyzed: 05/04/2012 10:39

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-42319/23-A	20504006.D	05/04/2012 10:57
	240-10623-N-4-A MS	20504011.D	05/04/2012 12:31
	240-10623-P-4-A MSD	20504012.D	05/04/2012 12:49
MT-MW05S-042512	240-10670-2	20504026.D	05/04/2012 17:10
MT-MW01S-042512	240-10670-3	20504027.D	05/04/2012 17:29
MT-MW03S-042512	240-10670-4	20504028.D	05/04/2012 17:48

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-42319/22-A

Matrix: Water | Lab File ID: 20504005.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/01/2012 10:12

Sample wt/vol: 1000(mL) | Date Analyzed: 05/04/2012 10:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42787 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	60		28-110
367-12-4	2-Fluorophenol (Surr)	71		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	85		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	67		27-111
4165-62-2	Phenol-d5 (Surr)	72		10-110
1718-51-0	Terphenyl-d14 (Surr)	90		37-119

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20504006.D

Lab ID: LCS 240-42319/23-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	10.2	51	10-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20504011.D

Lab ID: 240-10623-N-4-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	19.8	2.3	12.7	53	10-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20504012.D

Lab ID: 240-10623-P-4-A MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	19.0	11.8	50	8	30	10-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MT-MW05S-042512	240-10670-2	6 X	6 X	39	40	15 X	71
MT-MW01S-042512	240-10670-3	61	58	56	51	83	64
MT-MW03S-042512	240-10670-4	61	59	53	53	81	40
	MB 240-42319/22-A	71	72	67	60	85	90
	LCS 240-42319/23-A	62	68	66	60	99	80
	240-10623-N-4-A MS	63	66	64	62	89	63
	240-10623-P-4-A MSD	68	69	66	58	89	64

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	10-110
NBZ = Nitrobenzene-d5 (Surr)	27-111
FBP = 2-Fluorobiphenyl (Surr)	28-110
TBP = 2,4,6-Tribromophenol (Surr)	22-120
TPH = Terphenyl-d14 (Surr)	37-119

Column to be used to flag recovery values

FORM II 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Sample No.: STD6 240-42463/10 Date Analyzed: 05/02/2012 12:54

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20502010.D Heated Purge: (Y/N) N

Calibration ID: 8490

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		203831	3.51	750748	4.40	449631	5.66
UPPER LIMIT		407662	4.01	1501496	4.90	899262	6.16
LOWER LIMIT		101916	3.01	375374	3.90	224816	5.16
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-42463/11		219450	3.51	793338	4.40	481824	5.66
ICV 240-42463/29		242991	3.51	881103	4.40	540358	5.66
CCV 240-42787/2 CCVIS		179592	3.42	711543	4.31	398182	5.57

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Sample No.: STD6 240-42463/10 Date Analyzed: 05/02/2012 12:54

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20502010.D Heated Purge: (Y/N) N

Calibration ID: 8490

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		701859	6.74	609578	8.73	444154	10.12
UPPER LIMIT		1403718	7.24	1219156	9.23	888308	10.62
LOWER LIMIT		350930	6.24	304789	8.23	222077	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-42463/11		750463	6.74	697064	8.71	502891	10.10
ICV 240-42463/29		886222	6.74	821260	8.72	566597	10.12
CCV 240-42787/2 CCVIS		635458	6.64	630030	8.61	474108	9.93

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Sample No.: CCV 240-42787/2 Date Analyzed: 05/04/2012 09:42

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20504002.D Heated Purge: (Y/N) N

Calibration ID: 8498

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		179592	3.42	711543	4.31	398182	5.57
UPPER LIMIT		359184	3.92	1423086	4.81	796364	6.07
LOWER LIMIT		89796	2.92	355772	3.81	199091	5.07
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-42787/4		160196	3.42	700703	4.31	414289	5.57
MB 240-42319/22-A		192020	3.42	723583	4.31	432587	5.57
LCS 240-42319/23-A		187950	3.42	733913	4.31	431552	5.57
240-10623-N-4-A MS		194222	3.42	740766	4.31	440091	5.57
240-10623-P-4-A MSD		226364	3.42	864840	4.31	529556	5.57
240-10670-2	MT-MW05S-042512	220671	3.42	889505	4.31	509659	5.57
240-10670-3	MT-MW01S-042512	210329	3.42	821841	4.31	497101	5.57
240-10670-4	MT-MW03S-042512	231318	3.42	927902	4.31	546380	5.57

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Sample No.: CCV 240-42787/2 Date Analyzed: 05/04/2012 09:42

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20504002.D Heated Purge: (Y/N) N

Calibration ID: 8498

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		635458	6.64	630030	8.61	474108	9.93
UPPER LIMIT		1270916	7.14	1260060	9.11	948216	10.43
LOWER LIMIT		317729	6.14	315015	8.11	237054	9.43
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-42787/4		647849	6.64	609763	8.61	463017	9.93
MB 240-42319/22-A		716018	6.64	654282	8.60	484735	9.93
LCS 240-42319/23-A		700940	6.64	663757	8.61	496305	9.93
240-10623-N-4-A MS		714597	6.65	740981	8.62	595192	9.95
240-10623-P-4-A MSD		824289	6.65	774384	8.64	595819	9.98
240-10670-2	MT-MW05S-042512	856705	6.65	794494	8.61	622203	9.94
240-10670-3	MT-MW01S-042512	799659	6.64	763367	8.60	597274	9.93
240-10670-4	MT-MW03S-042512	889624	6.65	803060	8.61	641121	9.94

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

Method 8015B - GRO

Gasoline Range Organics (GC) by Method 8015B

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: YPID Start Date: 02/10/2012 10:35

Analysis Batch Number: 33435 End Date: 02/10/2012 23:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		02/10/2012 10:35	1		RTX-VRX 0.45(mm)
STD1 240-33435/12 IC		02/10/2012 16:17	1	YF021012.D	RTX-VRX 0.45(mm)
STD2 240-33435/13 IC		02/10/2012 16:55	1	YF021013.D	RTX-VRX 0.45(mm)
STD3 240-33435/14 IC		02/10/2012 17:32	1	YF021014.D	RTX-VRX 0.45(mm)
STD4 240-33435/15 ICRT		02/10/2012 18:11	1	YF021015.D	RTX-VRX 0.45(mm)
STD5 240-33435/16 IC		02/10/2012 18:49	1	YF021016.D	RTX-VRX 0.45(mm)
STD6 240-33435/17 IC		02/10/2012 19:27	1	YF021017.D	RTX-VRX 0.45(mm)
ICV 240-33435/18		02/10/2012 20:05	1	YF021018.D	RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 20:43	1		RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 21:21	1		RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 21:59	10		RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 22:37	10		RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 23:15	10		RTX-VRX 0.45(mm)
CCV 240-33435/24		02/10/2012 23:53	1		RTX-VRX 0.45(mm)

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 33435

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/10/2012 16:17 Calibration End Date: 02/10/2012 19:27 Calibration ID: 6924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-33435/12	YF021012.D
Level 2	STD2 240-33435/13	YF021013.D
Level 3	STD3 240-33435/14	YF021014.D
Level 4	STD4 240-33435/15	YF021015.D
Level 5	STD5 240-33435/16	YF021016.D
Level 6	STD6 240-33435/17	YF021017.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	318103 289067	320460 294590	282575	294457	Ave		299875.299				5.2		20.0			
C6-C12	375472 318195	363940 323226	316555	324196	Ave		336930.834				7.7		20.0			
Trifluorotoluene (Surr)	384133 460736	375012 483108	395882	424093	Ave		420494.083				10.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 33435

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/10/2012 16:17 Calibration End Date: 02/10/2012 19:27 Calibration ID: 6924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-33435/12	YF021012.D
Level 2	STD2 240-33435/13	YF021013.D
Level 3	STD3 240-33435/14	YF021014.D
Level 4	STD4 240-33435/15	YF021015.D
Level 5	STD5 240-33435/16	YF021016.D
Level 6	STD6 240-33435/17	YF021017.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Total Petroleum Hydrocarbons (C6-C10)	Ave	31810312 471343808	64091921	113029874	235565977	346880438	100 1600	200	400	800	1200
C6-C12	Ave	37547242 517161889	72788086	126621830	259357128	381833988	100 1600	200	400	800	1200
Trifluorotoluene (Surr)	Ave	3841333 4831084	3750122	3958818	4240925	4607363	10.0 10.0	10.0	10.0	10.0	10.0

Curve Type Legend:
Ave = Average

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 33435

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/10/2012 16:17 Calibration End Date: 02/10/2012 19:27 Calibration ID: 6924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-33435/12	YF021012.D
Level 2	STD2 240-33435/13	YF021013.D
Level 3	STD3 240-33435/14	YF021014.D
Level 4	STD4 240-33435/15	YF021015.D
Level 5	STD5 240-33435/16	YF021016.D
Level 6	STD6 240-33435/17	YF021017.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.810	11.810	11.810	11.810	11.810	11.810					4.817 - 18.802	11.810
C6-C12	13.469	13.469	13.469	13.469	13.469	13.469					4.917 - 22.022	13.469
Trifluorotoluene (Surr)	9.768	9.772	9.769	9.772	9.771	9.774					9.522 - 10.022	9.771

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-33435/18 Calibration Date: 02/10/2012 20:05

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF021018.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	333932		891	800	11.4	20.0
C6-C12	Ave	336931	375679		892	800	11.5	20.0
Trifluorotoluene (Surr)	Ave	420494	416828		9.91	10.0	-0.9	20.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-33435/18 Calibration Date: 02/10/2012 20:05

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF021018.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.81	4.82	18.80
C6-C12	13.47	4.92	22.02
Trifluorotoluene (Surr)	9.77	9.52	10.02

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Sample No.: CCV 240-42055/6 Date Analyzed: 04/28/2012 16:30

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF042806.D Heated Purge: (Y/N) N

Calibration ID: 6924

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.75		
UPPER LIMIT				9.85		
LOWER LIMIT				9.65		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-42055/6 CCVRT		04/28/2012 16:30	YF042806.D	9.75		
MB 240-42055/7		04/28/2012 17:07	YF042807.D	9.75		
LCS 240-42055/8		04/28/2012 17:45	YF042808.D	9.76		
240-10598-B-2 MS		04/28/2012 18:59	YF042810.D	9.75		
240-10598-B-2 MSD		04/28/2012 19:36	YF042811.D	9.76		
240-10670-2	MT-MW05S-042512	04/28/2012 20:51	YF042813.D	9.75		
240-10670-3	MT-MW01S-042512	04/28/2012 21:28	YF042814.D	9.75		
240-10670-4	MT-MW03S-042512	04/28/2012 22:06	YF042815.D	9.75		
CCV 240-42055/16		04/28/2012 22:43	YF042816.D	9.75		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015B

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42055/6 Calibration Date: 04/28/2012 16:30

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF042806.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	319489		852	800	6.5	15.0
C6-C12	Ave	336931	355619		844	800	5.5	15.0
Trifluorotoluene (Surr)	Ave	420494	318723		7.58	10.0	-24.2*	15.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42055/6 Calibration Date: 04/28/2012 16:30

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF042806.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.80	4.81	18.78
C6-C12	13.41	4.91	21.91
Trifluorotoluene (Surr)	9.75	9.50	10.00

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42055/16 Calibration Date: 04/28/2012 22:43

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF042816.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	304088		811	800	1.4	15.0
C6-C12	Ave	336931	340309		808	800	1.0	15.0
Trifluorotoluene (Surr)	Ave	420494	314986		7.49	10.0	-25.1*	15.0

FORM VII

GASOLINE RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42055/16 Calibration Date: 04/28/2012 22:43

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF042816.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.80	4.81	18.78
C6-C12	13.41	4.91	21.91
Trifluorotoluene (Surr)	9.75	9.50	10.00

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: MB 240-42055/7

Matrix: Water Date Extracted: 04/28/2012 17:07

Lab File ID:(1) YF042807.D Lab File ID:(2)

Date Analyzed:(1) 04/28/2012 17:07 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-42055/8	04/28/2012 17:45	
	240-10598-B-2 MS	04/28/2012 18:59	
	240-10598-B-2 MSD	04/28/2012 19:36	
MT-MW05S-042512	240-10670-2	04/28/2012 20:51	
MT-MW01S-042512	240-10670-3	04/28/2012 21:28	
MT-MW03S-042512	240-10670-4	04/28/2012 22:06	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-42055/7

Matrix: Water | Lab File ID: YF042807.D

Analysis Method: 8015B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/28/2012 17:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10) GRO	32.9	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	63		10-150

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF042808.D

Lab ID: LCS 240-42055/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	896	112	72-140	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF042810.D

Lab ID: 240-10598-B-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	49 J	963	114	63-143	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF042811.D

Lab ID: 240-10598-B-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	930	110	4	20	63-143	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
MT-MW05S-042512	240-10670-2	66
MT-MW01S-042512	240-10670-3	63
MT-MW03S-042512	240-10670-4	65
	MB 240-42055/7	63
	LCS 240-42055/8	73
	240-10598-B-2 MS	75
	240-10598-B-2 MSD	71

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015B

Method 8015B - DRO

Diesel Range Organics (DRO) (GC) by Method 8015B

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: A2HP6F Start Date: 04/26/2012 12:11

Analysis Batch Number: 41691 End Date: 04/26/2012 22:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-41691/4 IC		04/26/2012 12:11	1	P6F04264.D	RTX-5 0.53(mm)
STD2 240-41691/5 IC		04/26/2012 12:42	1	P6F04265.D	RTX-5 0.53(mm)
STD3 240-41691/6 IC		04/26/2012 13:13	1	P6F04266.D	RTX-5 0.53(mm)
STD4 240-41691/7 IC		04/26/2012 13:45	1	P6F04267.D	RTX-5 0.53(mm)
STD5 240-41691/8 IC		04/26/2012 14:16	1	P6F04268.D	RTX-5 0.53(mm)
ICV 240-41691/9		04/26/2012 14:47	1	P6F04269.D	RTX-5 0.53(mm)
STD1 240-41691/10 IC		04/26/2012 15:18	1		RTX-5 0.53(mm)
STD2 240-41691/11 IC		04/26/2012 15:49	1		RTX-5 0.53(mm)
STD3 240-41691/12 IC		04/26/2012 16:20	1		RTX-5 0.53(mm)
STD4 240-41691/13 IC		04/26/2012 16:51	1		RTX-5 0.53(mm)
STD5 240-41691/14 IC		04/26/2012 17:23	1		RTX-5 0.53(mm)
ICV 240-41691/15		04/26/2012 17:54	1		RTX-5 0.53(mm)
ZZZZZ		04/26/2012 18:25	500		RTX-5 0.53(mm)
ZZZZZ		04/26/2012 18:56	1		RTX-5 0.53(mm)
ZZZZZ		04/26/2012 19:27	5		RTX-5 0.53(mm)
ZZZZZ		04/26/2012 19:58	5		RTX-5 0.53(mm)
RINSE 240-41691/20		04/26/2012 20:29	1		RTX-5 0.53(mm)
CCV 240-41691/21		04/26/2012 20:59	1		RTX-5 0.53(mm)
CCV 240-41691/24		04/26/2012 22:33	1		RTX-5 0.53(mm)

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 41691

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/26/2012 12:11 Calibration End Date: 04/26/2012 14:16 Calibration ID: 8406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-41691/4	P6F04264.D
Level 2	STD2 240-41691/5	P6F04265.D
Level 3	STD3 240-41691/6	P6F04266.D
Level 4	STD4 240-41691/7	P6F04267.D
Level 5	STD5 240-41691/8	P6F04268.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	198430 174115	188482	182432	173562	Ave		183404.386				5.7		20.0			
n-Nonane	213382 212758	214563	217346	210050	Ave		213619.735				1.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 41691

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/26/2012 12:11 Calibration End Date: 04/26/2012 14:16 Calibration ID: 8406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-41691/4	P6F04264.D
Level 2	STD2 240-41691/5	P6F04265.D
Level 3	STD3 240-41691/6	P6F04266.D
Level 4	STD4 240-41691/7	P6F04267.D
Level 5	STD5 240-41691/8	P6F04268.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel	Ave	19843021	37696404	91215944	173562318	348230992	100	200	500	1000	2000
n-Nonane	Ave	2133821	4291261	10867284	21005029	42551511	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1 Analy Batch No.: 41691

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/26/2012 12:11 Calibration End Date: 04/26/2012 14:16 Calibration ID: 8406

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-41691/4	P6F04264.D
Level 2	STD2 240-41691/5	P6F04265.D
Level 3	STD3 240-41691/6	P6F04266.D
Level 4	STD4 240-41691/7	P6F04267.D
Level 5	STD5 240-41691/8	P6F04268.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	9.493	9.493	9.493	9.493	9.493						5.280 - 13.709	9.493
n-Nonane	4.296	4.295	4.296	4.296	4.298						4.246 - 4.346	4.296

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-41691/9 Calibration Date: 04/26/2012 14:47

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04269.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	183404	171101		467	500	-6.7	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICV 240-41691/9 Calibration Date: 04/26/2012 14:47

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04269.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.49	5.28	13.71

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Sample No.: CCVRT 240-42140/4 Date Analyzed: 04/30/2012 11:25

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F04304.D Heated Purge: (Y/N) N

Calibration ID: 8406

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.29		
UPPER LIMIT				4.39		
LOWER LIMIT				4.19		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-42140/4		04/30/2012 11:25	P6F04304.D	4.29		
240-10670-2	MT-MW05S-042512	04/30/2012 11:56	P6F04305.D	4.29		
240-10670-3	MT-MW01S-042512	04/30/2012 12:27	P6F04306.D	4.29		
240-10670-4	MT-MW03S-042512	04/30/2012 12:58	P6F04307.D	4.29		
MB 240-41890/15-A		04/30/2012 19:13	P6F04319.D	4.29		
LCS 240-41890/16-A		04/30/2012 19:44	P6F04320.D	4.29		
CCV 240-42140/21		04/30/2012 20:15	P6F04321.D	4.30		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015B

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCVRT 240-42140/4 Calibration Date: 04/30/2012 11:25

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04304.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	183404	184302		502	500	0.5	15.0
n-Nonane	Ave	213620	221736		51.9	50.0	3.8	15.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCVRT 240-42140/4 Calibration Date: 04/30/2012 11:25

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04304.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.49	5.27	13.70
n-Nonane	4.29	4.24	4.34

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42140/21 Calibration Date: 04/30/2012 20:15

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04321.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	183404	202278		552	500	10.3	15.0
n-Nonane	Ave	213620	238934		55.9	50.0	11.8	15.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCV 240-42140/21 Calibration Date: 04/30/2012 20:15

Instrument ID: A2HP6F Calib Start Date: 04/26/2012 12:11

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 04/26/2012 14:16

Lab File ID: P6F04321.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.49	5.27	13.70
n-Nonane	4.30	4.24	4.34

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: MB 240-41890/15-A

Matrix: Water Date Extracted: 04/27/2012 10:39

Lab File ID:(1) P6F04319.D Lab File ID:(2)

Date Analyzed:(1) 04/30/2012 19:13 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MT-MW05S-042512	240-10670-2	04/30/2012 11:56	
MT-MW01S-042512	240-10670-3	04/30/2012 12:27	
MT-MW03S-042512	240-10670-4	04/30/2012 12:58	
	LCS 240-41890/16-A	04/30/2012 19:44	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10670-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-41890/15-A

Matrix: Water | Lab File ID: P6F04319.D

Analysis Method: 8015B | Date Collected:

Extraction Method: 3520C | Date Extracted: 04/27/2012 10:39

Sample wt/vol: 1000(mL) | Date Analyzed: 04/30/2012 19:13

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42140 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32) DRO	422	J	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	62		10-110

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P6F04320.D

Lab ID: LCS 240-41890/16-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2500	1860	74	36-124	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-5 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	C91 #
MT-MW05S-042512	240-10670-2	47
MT-MW01S-042512	240-10670-3	22
MT-MW03S-042512	240-10670-4	45
	MB 240-41890/15-A	62
	LCS 240-41890/16-A	47

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015B

ICAL Data

Perchlorates

QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-05-14 15:01		
Data Path	D:\MassHunter\Tune\QQQ\atunes.tune.xml		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.10	0.00	Pass	0.69	0.70	0.10	-0.01	Pass	92868	0	Pass
301.98	302.00	0.10	-0.02	Pass	0.71	0.70	0.10	0.01	Pass	388044	0	Pass
601.93	601.98	0.10	-0.05	Pass	0.69	0.70	0.10	-0.01	Pass	1062794	0	Pass
1033.92	1033.99	0.10	-0.07	Pass	0.70	0.70	0.10	0.00	Pass	516938	0	Pass
1333.91	1333.97	0.10	-0.06	Pass	0.70	0.70	0.10	0.00	Pass	846657	0	Pass
1633.89	1633.95	0.10	-0.06	Pass	0.73	0.70	0.10	0.03	Pass	712638	0	Pass

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.01	112.99	0.10	0.02	Pass	0.68	0.70	0.10	-0.02	Pass	288847	0	Pass
302.00	302.00	0.10	0.00	Pass	0.69	0.70	0.10	-0.01	Pass	311553	0	Pass
601.99	601.98	0.10	0.01	Pass	0.69	0.70	0.10	-0.01	Pass	485145	0	Pass
1034.00	1033.99	0.10	0.01	Pass	0.70	0.70	0.10	0.00	Pass	254185	0	Pass
1333.98	1333.97	0.10	0.01	Pass	0.69	0.70	0.10	-0.01	Pass	651822	0	Pass
1633.93	1633.95	0.10	-0.02	Pass	0.68	0.70	0.10	-0.02	Pass	468989	0	Pass

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.98	112.99	0.30	-0.01	Pass	1.20	1.20	0.60	0.00	Pass	107551	0	Pass
301.93	302.00	0.30	-0.07	Pass	1.30	1.20	0.60	0.10	Pass	539361	0	Pass
601.92	601.98	0.30	-0.06	Pass	1.30	1.20	0.60	0.10	Pass	1600495	0	Pass
1033.87	1033.99	0.30	-0.12	Pass	1.33	1.20	0.60	0.13	Pass	998141	0	Pass
1333.85	1333.97	0.30	-0.12	Pass	1.31	1.20	0.60	0.11	Pass	1909805	0	Pass
1633.87	1633.95	0.30	-0.08	Pass	1.23	1.20	0.60	0.03	Pass	1817124	0	Pass

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QQQ Checktune Report

Analyzer: MS2 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.03	112.99	0.30	0.04	Pass	1.16	1.20	0.60	-0.04	Pass	377641	0	Pass
301.98	302.00	0.30	-0.02	Pass	1.23	1.20	0.60	0.03	Pass	451748	0	Pass
601.93	601.98	0.30	-0.05	Pass	1.25	1.20	0.60	0.05	Pass	765433	0	Pass
1033.93	1033.99	0.30	-0.06	Pass	1.25	1.20	0.60	0.05	Pass	484189	0	Pass
1333.91	1333.97	0.30	-0.06	Pass	1.28	1.20	0.60	0.08	Pass	1182818	0	Pass
1633.91	1633.95	0.30	-0.04	Pass	1.25	1.20	0.60	0.05	Pass	937789	0	Pass

Analyzer: MS1 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.89	112.99	0.50	-0.10	Pass	2.79	2.50	1.25	0.29	Pass	131443	0	Pass
301.87	302.00	0.50	-0.13	Pass	2.81	2.50	1.25	0.31	Pass	756159	0	Pass
601.87	601.98	0.50	-0.11	Pass	2.85	2.50	1.25	0.35	Pass	2040963	0	Pass
1033.88	1033.99	0.50	-0.11	Pass	2.82	2.50	1.25	0.32	Pass	1462657	0	Pass
1333.93	1333.97	0.50	-0.04	Pass	2.73	2.50	1.25	0.23	Pass	2934488	0	Pass
1633.95	1633.95	0.50	0.00	Pass	2.60	2.50	1.25	0.10	Pass	3099613	0	Pass

Analyzer: MS2 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.88	112.99	0.50	-0.11	Pass	2.52	2.50	1.25	0.02	Pass	484114	0	Pass
301.92	302.00	0.50	-0.08	Pass	2.56	2.50	1.25	0.06	Pass	643280	0	Pass
601.90	601.98	0.50	-0.08	Pass	2.55	2.50	1.25	0.05	Pass	1318633	0	Pass
1033.99	1033.99	0.50	0.00	Pass	2.41	2.50	1.25	-0.09	Pass	1008315	0	Pass
1333.95	1333.97	0.50	-0.02	Pass	2.47	2.50	1.25	-0.03	Pass	2453702	0	Pass
1634.01	1633.95	0.50	0.06	Pass	2.42	2.50	1.25	-0.08	Pass	2229412	0	Pass

[1] *NOTE: 1) Actual abundances depend on many factors and are instrument specific.*
To change the minimum abundance, edit the values on the "Options" sheet.

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TestAmerica Inc.

Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\14MAY2012\QuantResults\14May2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
14MAY12-perc-003.d	Blank No IS	P2-A5		Sample	5/14/2012 15:41
14MAY12-perc-004.d	LC6850L9_00001 Blank + IS	P2-B1		Sample	5/14/2012 15:57
14MAY12-perc-005.d	LC6850L1_00001 12LCMS0064, 0.15ng/mL	P2-B2	1	Calibration	5/14/2012 16:13
14MAY12-perc-006.d	LC6850L2_00001 12LCMS0065, 0.30ng/mL	P2-B3	2	Calibration	5/14/2012 16:29
14MAY12-perc-007.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-B4	3	Calibration	5/14/2012 16:46
14MAY12-perc-008.d	LC6850L4_00001 12LCMS0067, 1.0ng/mL	P2-B5	4	Calibration	5/14/2012 17:02
14MAY12-perc-009.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-B6	5	Calibration	5/14/2012 17:18
14MAY12-perc-010.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-B7	6	Calibration	5/14/2012 17:34
14MAY12-perc-011.d	LC6850L7_00001 12LCMS0070, 10ng/mL	P2-B8	7	Calibration	5/14/2012 17:51
14MAY12-perc-012.d	LC6850L8_00001 12LCMS0071, 20ng/mL	P2-B9	8	Calibration	5/14/2012 18:07
14MAY12-perc-013.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/14/2012 18:23
14MAY12-perc-014.d	LC6850IC_00001 12LCMS0073, 5.0ng/mL	P2-C2	ICV	QC	5/14/2012 18:39
14MAY12-perc-015.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/14/2012 18:55
14MAY12-perc-016.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-C4	CCV3	QC	5/14/2012 19:12
14MAY12-perc-017.d	G2E090000-MB, 2130084, 2.00mL/2.00mL, 331.0-L	P1-A1		Sample	5/14/2012 19:28
14MAY12-perc-018.d	G2E090000-LCS, 2130084, 2.00mL/2.00mL	P1-A2	LCS_0.5	QC	5/14/2012 19:44
14MAY12-perc-019.d	G2E010443-1, 2130084, 2.00mL/2.00mL	P1-A3		Sample	5/14/2012 20:00
14MAY12-perc-020.d	G2E010443-2, 2130084, 2.00mL/2.00mL	P1-A4		Sample	5/14/2012 20:16
14MAY12-perc-021.d	G2E010443-3, 2130084, 2.00mL/2.00mL	P1-A5		Sample	5/14/2012 20:33
14MAY12-perc-022.d	G2E010443-4, 2130084, 2.00mL/2.00mL	P1-A6		Sample	5/14/2012 20:49
14MAY12-perc-023.d	G2E010443-5, 2130084, 2.00mL/2.00mL	P1-A7		Sample	5/14/2012 21:05
14MAY12-perc-024.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-C6	CCV5	QC	5/14/2012 21:21
14MAY12-perc-025.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/14/2012 21:38
14MAY12-perc-026.d	G2E070437-1, 2130084, 2.00mL/2.00mL	P1-A8		Sample	5/14/2012 21:54
14MAY12-perc-027.d	G2E070437-1MS, 2130084, 2.00mL/2.00mL	P1-A9	MS_5	QC	5/14/2012 22:10
14MAY12-perc-028.d	G2E070437-1SD, 2130084, 2.00mL/2.00mL	P1-B1	MS_5	QC	5/14/2012 22:26

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
14MAY12-perc-005.d	1	☑	3563	0.7751	0.1500
14MAY12-perc-006.d	2	☑	5522	0.8235	0.3000
14MAY12-perc-007.d	3	☑	8313	0.7655	0.5000
14MAY12-perc-008.d	4	☑	18858	0.7690	1.0000
14MAY12-perc-009.d	5	☑	33046	0.7757	2.0000
14MAY12-perc-010.d	6	☑	80010	0.7926	5.0000
14MAY12-perc-011.d	7	☑	150271	0.8131	10.0000
14MAY12-perc-012.d	8	☑	274191	0.8454	20.0000
14MAY12-perc-016.d	CCV3	☑	7440	0.7634	0.5000
14MAY12-perc-031.d	CCV3	☑	6623	0.7837	0.5000
14MAY12-perc-061.d	CCV3	☑	7104	0.8224	0.5000
14MAY12-perc-024.d	CCV5	☑	30242	0.8042	2.0000
14MAY12-perc-042.d	CCV5	☑	18445	0.7921	2.0000
14MAY12-perc-060.d	CCV5	☑	16877	0.7762	2.0000
14MAY12-perc-015.d	CCV6	☑	74706	0.7810	5.0000
14MAY12-perc-030.d	CCV6	☑	67483	0.7884	5.0000
14MAY12-perc-050.d	CCV6	☑	47377	0.7973	5.0000
14MAY12-perc-073.d	CCV6	☑	63827	0.8162	5.0000
14MAY12-perc-014.d	ICV	☑	88291	0.8279	5.0000
14MAY12-perc-018.d	LCS_0.5	☑	6937	0.7922	0.5000
14MAY12-perc-065.d	LCS_0.5	☑	5533	0.7210	0.5000
14MAY12-perc-066.d	LCS_0.5	☑	5509	0.7213	0.5000
14MAY12-perc-034.d	LCS_5	☑	48910	0.7612	5.0000
14MAY12-perc-035.d	LCS_5	☑	50205	0.8001	5.0000
14MAY12-perc-062.d	LODV	☑	2264	0.8218	0.1500
14MAY12-perc-074.d	LODV	☑	1905	0.7910	0.1500
14MAY12-perc-068.d	MS_0.5	☑	5452	0.8081	0.5000
14MAY12-perc-069.d	MS_0.5	☑	5658	0.7835	0.5000
14MAY12-perc-027.d	MS_5	☑	77333	1.2649	5.0000
14MAY12-perc-028.d	MS_5	☑	87232	1.3817	5.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate (35Cl18O4)*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
14MAY12-perc-005.d	1	☑	306483	30648.2528	10.0000
14MAY12-perc-006.d	2	☑	223525	22352.5077	10.0000
14MAY12-perc-007.d	3	☑	217168	21716.8481	10.0000
14MAY12-perc-008.d	4	☑	245210	24521.0230	10.0000
14MAY12-perc-009.d	5	☑	212997	21299.6906	10.0000
14MAY12-perc-010.d	6	☑	201883	20188.3139	10.0000
14MAY12-perc-011.d	7	☑	184820	18482.0256	10.0000
14MAY12-perc-012.d	8	☑	162173	16217.2955	10.0000
14MAY12-perc-016.d	CCV3	☑	194925	19492.5007	10.0000
14MAY12-perc-031.d	CCV3	☑	169030	16903.0052	10.0000
14MAY12-perc-061.d	CCV3	☑	172762	17276.2276	10.0000
14MAY12-perc-024.d	CCV5	☑	188033	18803.2699	10.0000
14MAY12-perc-042.d	CCV5	☑	116434	11643.3691	10.0000
14MAY12-perc-060.d	CCV5	☑	108719	10871.8619	10.0000
14MAY12-perc-015.d	CCV6	☑	191311	19131.0723	10.0000
14MAY12-perc-030.d	CCV6	☑	171180	17117.9934	10.0000
14MAY12-perc-050.d	CCV6	☑	118836	11883.6480	10.0000
14MAY12-perc-073.d	CCV6	☑	156397	15639.7233	10.0000
14MAY12-perc-014.d	ICV	☑	213300	21329.9939	10.0000
14MAY12-perc-018.d	LCS_0.5	☑	175112	17511.1655	10.0000
14MAY12-perc-065.d	LCS_0.5	☑	153463	15346.2666	10.0000
14MAY12-perc-066.d	LCS_0.5	☑	152750	15275.0139	10.0000
14MAY12-perc-034.d	LCS_5	☑	128504	12850.3900	10.0000
14MAY12-perc-035.d	LCS_5	☑	125496	12549.6250	10.0000
14MAY12-perc-062.d	LODV	☑	183633	18363.2653	10.0000
14MAY12-perc-074.d	LODV	☑	160526	16052.5827	10.0000
14MAY12-perc-068.d	MS_0.5	☑	134950	13495.0416	10.0000
14MAY12-perc-069.d	MS_0.5	☑	144423	14442.3010	10.0000
14MAY12-perc-027.d	MS_5	☑	122278	12227.7853	10.0000
14MAY12-perc-028.d	MS_5	☑	126265	12626.4747	10.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

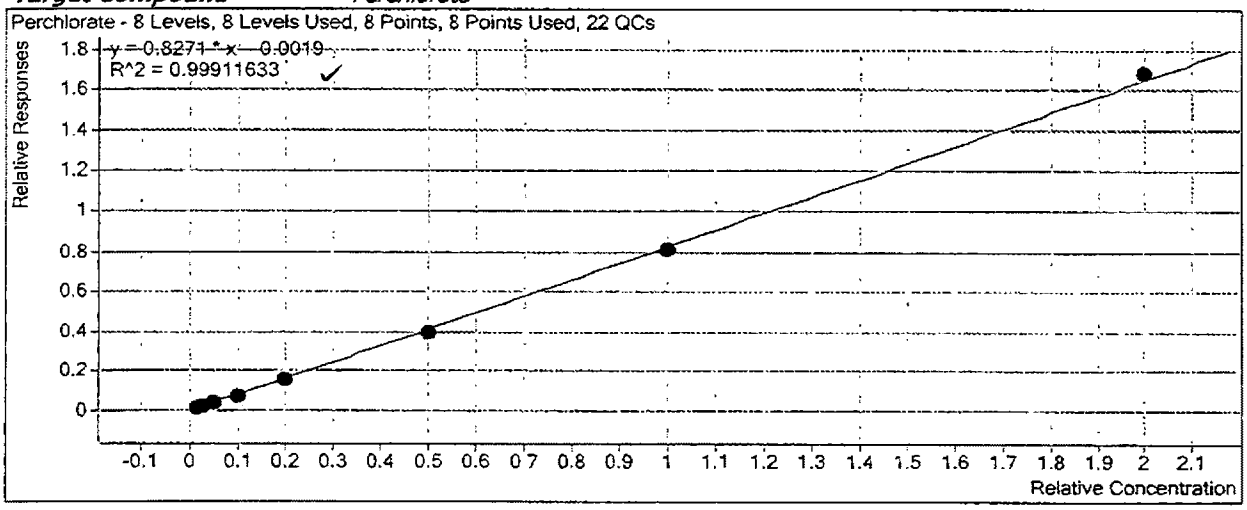
Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\14MAY2012\QuantResults\14May2012-Perchlorate.batch.xml		
Analysis Time	5/15/2012 12:43 PM	**Analyst Name**	lores
Report Time	5/22/2012 11:15 AM	**Reporter Name**	lores
Last Calib Update	5/15/2012 12:43 PM	**Batch State**	Processed

Calibration Info **Linear fit, Origin ignored, 1/x weighting**

mr 5/22/12

Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\14MAY2012\QuantResults\14May2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/14/2012 18:39
Analyst	lores
Data File	14MAY12-perc-014 d
Acquisition Method	PercMRM_2 m
Sample Name	LC6850IC_00001 12LCMS0073, 5 0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45:55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

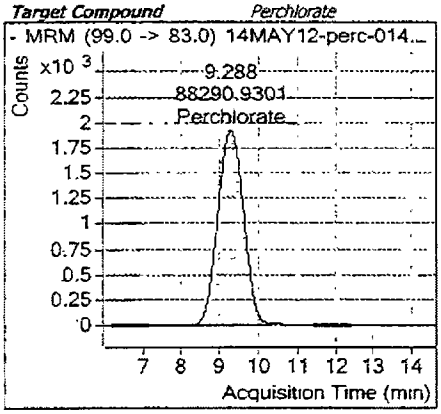
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.288	88291	99	83	5.02691	5.02691	1
Perchlorate-(35Cl18O4)	ISTD	9.282	213300	107	89			1

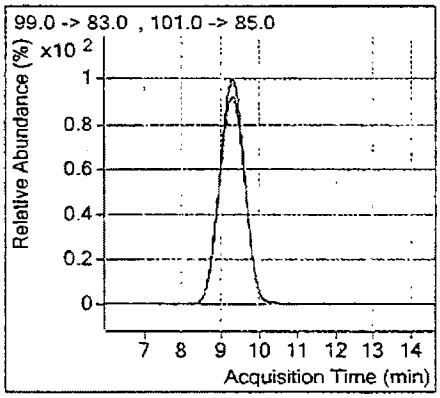
0.5 % Deviation

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	28456	101	85	3.10	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	66294	109	91	3.22	2.30	3.80	In Control

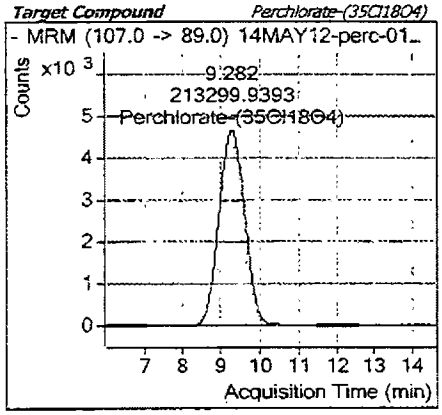
Compound Graphics

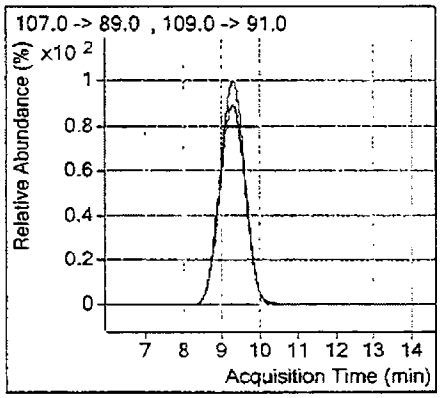
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

14MAY12-perc-029.d	G2E070438-1, 2130084, 2.00mL/2.00mL	P1-B2		Sample	5/14/2012 22:42
14MAY12-perc-030.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/14/2012 22:59
14MAY12-perc-031.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-C4	CCV3	QC	5/14/2012 23:15
14MAY12-perc-032.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/14/2012 23:31
14MAY12-perc-033.d	G2E070000-MB, 2128058, 2.00mL/2.00mL, 6850-L	P1-B3		Sample	5/14/2012 23:47
14MAY12-perc-034.d	G2E070000-LCS, 2128058, 2.00mL/2.00mL	P1-B4	LCS_5	QC	5/15/2012 00:04
14MAY12-perc-035.d	G2E070000-SMCS, 2128058, 2.00mL/2.00mL	P1-B5	LCS_5	QC	5/15/2012 00:20
14MAY12-perc-036.d	G2E010420-1, 2128058, 2.00mL/2.00mL	P1-B6		Sample	5/15/2012 00:36
14MAY12-perc-037.d	G2E010420-2, 2128058, 2.00mL/2.00mL	P1-B7		Sample	5/15/2012 00:52
14MAY12-perc-038.d	G2E010420-3, 2128058, 2.00mL/2.00mL	P1-B8		Sample	5/15/2012 01:08
14MAY12-perc-039.d	G2E010422-1, 2128058, 2.00mL/2.00mL	P1-B9		Sample	5/15/2012 01:25
14MAY12-perc-040.d	G2E010422-2, 2128058, 2.00mL/2.00mL, IS Low. RI.	P1-C1		Sample	5/15/2012 01:41
14MAY12-perc-041.d	G2E010422-3, 2128058, 2.00mL/2.00mL, IS Low. RI.	P1-C2		Sample	5/15/2012 01:57
14MAY12-perc-042.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-C6	CCV5	QC	5/15/2012 02:13
14MAY12-perc-043.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/15/2012 02:30
14MAY12-perc-044.d	G2E010442-1, 2128058, 2.00mL/2.00mL	P1-C3		Sample	5/15/2012 02:46
14MAY12-perc-045.d	G2E010442-2, 2128058, 2.00mL/2.00mL, IS Low. RI.	P1-C4		Sample	5/15/2012 03:02
14MAY12-perc-046.d	G2E010442-3, 2128058, 2.00mL/2.00mL	P1-C5		Sample	5/15/2012 03:18
14MAY12-perc-047.d	G2E030413-1, 2128058, 2.00mL/2.00mL, IS Low. RI.	P1-C6		Sample	5/15/2012 03:34
14MAY12-perc-048.d	G2E030413-2, 2128058, 2.00mL/2.00mL, IS Low. RI.	P1-C7		Sample	5/15/2012 03:51
14MAY12-perc-049.d	G2E030413-3, 2128058, 2.00mL/2.00mL, IS Low. RI.	P1-C8		Sample	5/15/2012 04:07
14MAY12-perc-050.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/15/2012 04:23
14MAY12-perc-051.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/15/2012 04:39
14MAY12-perc-052.d	G2E030450-1, 2128058, 2.00mL/2.00mL, CCV IS Low, RI.	P1-C9		Sample	5/15/2012 04:56
14MAY12-perc-053.d	G2E030450-2, 2128058, 2.00mL/2.00mL, CCV IS Low, RI.	P1-D1		Sample	5/15/2012 05:12
14MAY12-perc-054.d	G2E030450-3, 2128058, 2.00mL/2.00mL, CCV IS Low, RI.	P1-D2		Sample	5/15/2012 05:28
14MAY12-perc-055.d	G2E030450-4, 2128058, 2.00mL/2.00mL, CCV IS Low, RI.	P1-D3		Sample	5/15/2012 05:44
14MAY12-perc-056.d	G2E030450-4MS, 2128058, 2.00mL/2.00mL, CCV IS Low, RI.	P1-D4		Sample	5/15/2012 06:00
14MAY12-perc-057.d	G2E030450-4SD, 2128058, 2.00mL/2.00mL, CCV IS Low, RI.	P1-D5		Sample	5/15/2012 06:17

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

14MAY12-perc-029.d	Perchlorate	Sample		49256	
14MAY12-perc-030.d	Perchlorate	QC	5.0000	67483	95.8
14MAY12-perc-031.d	Perchlorate	QC	0.5000	6623	99.2
14MAY12-perc-032.d	Perchlorate	Sample			
14MAY12-perc-033.d	Perchlorate	Sample			
14MAY12-perc-034.d	Perchlorate	QC	5.0000	48910	92.5
14MAY12-perc-035.d	Perchlorate	QC	5.0000	50205	97.2
14MAY12-perc-036.d	Perchlorate	Sample			
14MAY12-perc-037.d	Perchlorate	Sample			
14MAY12-perc-038.d	Perchlorate	Sample			
14MAY12-perc-039.d	Perchlorate	Sample		317	
14MAY12-perc-040.d	Perchlorate	Sample		4147	
14MAY12-perc-041.d	Perchlorate	Sample			
14MAY12-perc-042.d	Perchlorate	QC	2.0000	18445	96.9
14MAY12-perc-043.d	Perchlorate	Sample			
14MAY12-perc-044.d	Perchlorate	Sample		219	
14MAY12-perc-045.d	Perchlorate	Sample			
14MAY12-perc-046.d	Perchlorate	Sample			
14MAY12-perc-047.d	Perchlorate	Sample		972	
14MAY12-perc-048.d	Perchlorate	Sample			
14MAY12-perc-049.d	Perchlorate	Sample			
14MAY12-perc-050.d	Perchlorate	QC	5.0000	47377	96.8
14MAY12-perc-051.d	Perchlorate	Sample			
14MAY12-perc-052.d	Perchlorate	Sample			
14MAY12-perc-053.d	Perchlorate	Sample		184	
14MAY12-perc-054.d	Perchlorate	Sample			
14MAY12-perc-055.d	Perchlorate	Sample			
14MAY12-perc-056.d	Perchlorate	Sample		36015	
14MAY12-perc-057.d	Perchlorate	Sample		18213	

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\14MAY2012\QuantResults\14May2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/15/2012 02:13
Analyst	lores
Data File	14MAY12-perc-042.d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850L5_00001 12LCMS0068, 2.0ng/mL
Sample Identification	CCV 5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2.00
Injection Volume	50

Quantitation Results

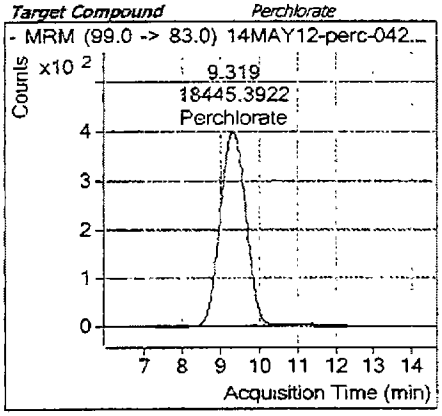
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.319	18445	99	83	1.93775	1.93775	1
Perchlorate-(35Cl18O4)	ISTD	9.310	116434	107	89			1

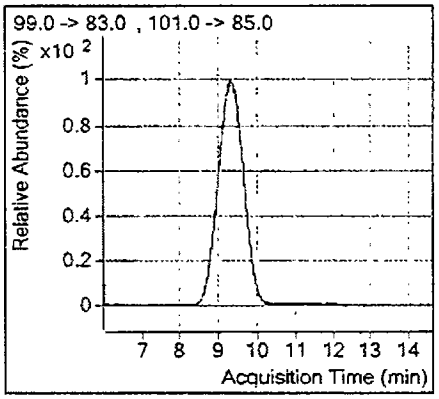
-3.1 % Deviation

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	6327	101	85	2.92	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	37366	109	91	3.12	2.30	3.80	In Control

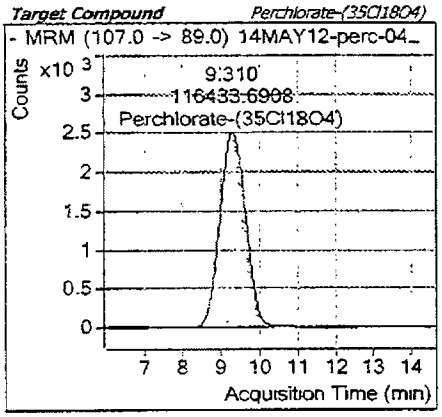
Compound Graphics

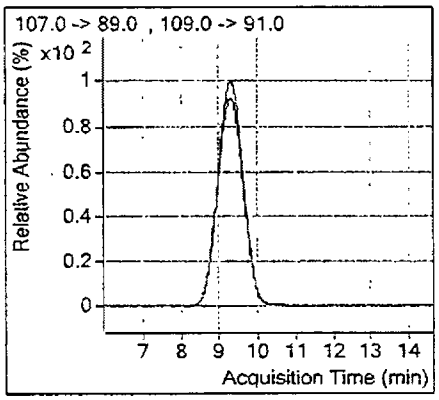
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





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TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\14MAY2012\QuantResults\14May2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/15/2012 04:23
Analyst	lores
Data File	14MAY12-perc-050 d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850L6_00001 12LCMS0069, 5 0ng/mL
Sample Identification	CCV 6
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45:55 Coil=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C7
Exp. Concentration	5.00
Injection Volume	50

Quantitation Results

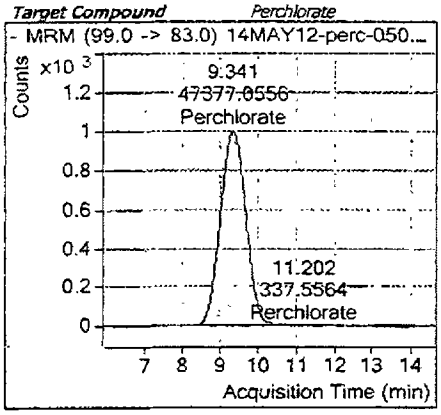
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.341	47377	99	83	4.84249	4.84249	1
Perchlorate-(35Cl18O4)	ISTD	9.334	118836	107	89			1

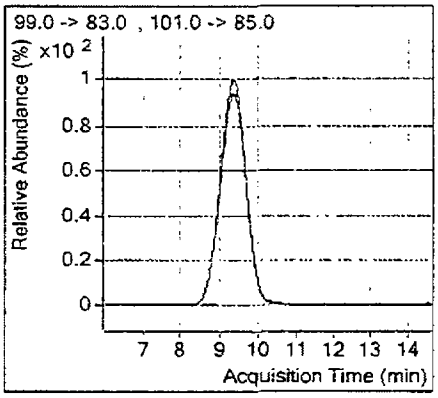
-3.2 % Deviation

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	15525	101	85	3 05	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	38145	109	91	3 12	2.30	3.80	In Control

Compound Graphics

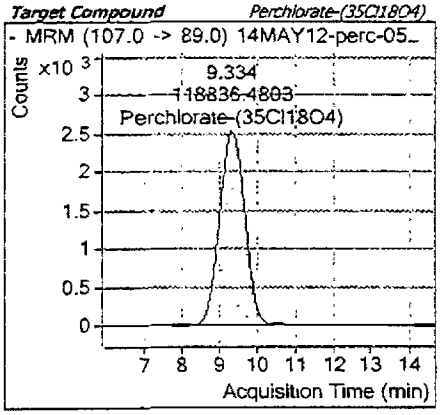
Target Compound *Perchlorate*

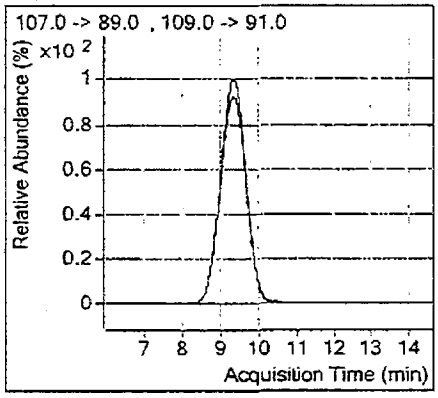




5/22/12

Target Compound *Perchlorate-(35Cl18O4)*





QQQ Checktune Report

Instrument Name	Instrument 1	**MS Model**	G6410A
Tune Date & Time	2012-05-15 15:27		
Data Path	D:\MassHunter\Tune\QQQ\atunes.tune.xml		
Ion Source	ESI		
Ionization Mode	ESI		

Negative Results

Analyzer: MS1 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.10	0.00	Pass	0.68	0.70	0.10	-0.02	Pass	80670	0	Pass
301.98	302.00	0.10	-0.02	Pass	0.71	0.70	0.10	0.01	Pass	379669	0	Pass
601.93	601.98	0.10	-0.05	Pass	0.68	0.70	0.10	-0.02	Pass	1030310	0	Pass
1033.93	1033.99	0.10	-0.06	Pass	0.70	0.70	0.10	0.00	Pass	503215	0	Pass
1333.91	1333.97	0.10	-0.06	Pass	0.69	0.70	0.10	-0.01	Pass	769842	0	Pass
1633.90	1633.95	0.10	-0.05	Pass	0.72	0.70	0.10	0.02	Pass	640518	0	Pass

Analyzer: MS2 ***Polarity: Negative*** ***Width: Unit***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.10	0.00	Pass	0.71	0.70	0.10	0.01	Pass	286201	0	Pass
301.99	302.00	0.10	-0.01	Pass	0.71	0.70	0.10	0.01	Pass	308726	0	Pass
601.98	601.98	0.10	0.00	Pass	0.70	0.70	0.10	0.00	Pass	514401	0	Pass
1033.99	1033.99	0.10	0.00	Pass	0.71	0.70	0.10	0.01	Pass	256872	0	Pass
1333.97	1333.97	0.10	0.00	Pass	0.69	0.70	0.10	-0.01	Pass	649974	0	Pass
1633.91	1633.95	0.10	-0.04	Pass	0.69	0.70	0.10	-0.01	Pass	445154	0	Pass

Analyzer: MS1 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.99	112.99	0.30	0.00	Pass	1.18	1.20	0.60	-0.02	Pass	96143	0	Pass
301.93	302.00	0.30	-0.07	Pass	1.27	1.20	0.60	0.07	Pass	542698	0	Pass
601.91	601.98	0.30	-0.07	Pass	1.32	1.20	0.60	0.12	Pass	1562602	0	Pass
1033.87	1033.99	0.30	-0.12	Pass	1.35	1.20	0.60	0.15	Pass	912832	0	Pass
1333.89	1333.97	0.30	-0.08	Pass	1.28	1.20	0.60	0.08	Pass	1760381	0	Pass
1633.87	1633.95	0.30	-0.08	Pass	1.25	1.20	0.60	0.05	Pass	1603686	0	Pass

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QQQ Checktune Report

Analyzer: MS2 ***Polarity: Negative*** ***Width: Wide***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
113.02	112.99	0.30	0.03	Pass	1.19	1.20	0.60	-0.01	Pass	361322	0	Pass
301.96	302.00	0.30	-0.04	Pass	1.23	1.20	0.60	0.03	Pass	461092	0	Pass
601.92	601.98	0.30	-0.06	Pass	1.24	1.20	0.60	0.04	Pass	831487	0	Pass
1033.92	1033.99	0.30	-0.07	Pass	1.25	1.20	0.60	0.05	Pass	481824	0	Pass
1333.90	1333.97	0.30	-0.07	Pass	1.26	1.20	0.60	0.06	Pass	1201446	0	Pass
1633.91	1633.95	0.30	-0.04	Pass	1.26	1.20	0.60	0.06	Pass	928748	0	Pass

Analyzer: MS1 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.89	112.99	0.50	-0.10	Pass	2.77	2.50	1.25	0.27	Pass	120814	0	Pass
301.88	302.00	0.50	-0.12	Pass	2.76	2.50	1.25	0.26	Pass	768792	0	Pass
601.85	601.98	0.50	-0.13	Pass	2.91	2.50	1.25	0.41	Pass	2002258	0	Pass
1033.88	1033.99	0.50	-0.11	Pass	2.85	2.50	1.25	0.35	Pass	1330670	0	Pass
1333.92	1333.97	0.50	-0.05	Pass	2.72	2.50	1.25	0.22	Pass	2650337	0	Pass
1633.94	1633.95	0.50	-0.01	Pass	2.62	2.50	1.25	0.12	Pass	2716476	0	Pass

Analyzer: MS2 ***Polarity: Negative*** ***Width: Widest***

m/z	m/z Exp	Tolerance	Delta	Result	FWHM	FWHM Exp	Tolerance	Delta	Result	Abundance	Minimum1	Result
112.88	112.99	0.50	-0.11	Pass	2.53	2.50	1.25	0.03	Pass	474968	0	Pass
301.91	302.00	0.50	-0.09	Pass	2.55	2.50	1.25	0.05	Pass	663030	0	Pass
601.89	601.98	0.50	-0.09	Pass	2.58	2.50	1.25	0.08	Pass	1377011	0	Pass
1033.98	1033.99	0.50	-0.01	Pass	2.45	2.50	1.25	-0.05	Pass	977385	0	Pass
1333.93	1333.97	0.50	-0.04	Pass	2.51	2.50	1.25	0.01	Pass	2412062	0	Pass
1634.00	1633.95	0.50	0.05	Pass	2.42	2.50	1.25	-0.08	Pass	2230974	0	Pass

[1] *NOTE: 1) Actual abundances depend on many factors and are instrument specific.*
To change the minimum abundance, edit the values on the "Options" sheet.

TestAmerica Inc.

Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path D:\Masshunter\A5-data\Perc_2RNM102911VE 09\15MAY2012\QuantResults\15May2012-Perchlorate.batch.xml

Sequence Table

Data File	Sample Name	Position	Level	Sample Type	Acq. Date & Time
15MAY12-perc-003.d	Blank No IS	P2-A5		Sample	5/15/2012 16:06
15MAY12-perc-004.d	LC6850L9_00001 Blank + IS	P2-B1		Sample	5/15/2012 16:22
15MAY12-perc-005.d	LC6850L1_00001 12LCMS0064, 0.15ng/mL	P2-B2	1	Calibration	5/15/2012 16:38
15MAY12-perc-006.d	LC6850L2_00001 12LCMS0065, 0.30ng/mL	P2-B3	2	Calibration	5/15/2012 16:55
15MAY12-perc-007.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-B4	3	Calibration	5/15/2012 17:11
15MAY12-perc-008.d	LC6850L4_00001 12LCMS0067, 1.0ng/mL	P2-B5	4	Calibration	5/15/2012 17:27
15MAY12-perc-009.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-B6	5	Calibration	5/15/2012 17:43
15MAY12-perc-010.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-B7	6	Calibration	5/15/2012 18:00
15MAY12-perc-011.d	LC6850L7_00001 12LCMS0070, 10ng/mL	P2-B8	7	Calibration	5/15/2012 18:16
15MAY12-perc-012.d	LC6850L8_00001 12LCMS0071, 20ng/mL	P2-B9	8	Calibration	5/15/2012 18:32
15MAY12-perc-013.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/15/2012 18:48
15MAY12-perc-014.d	LC6850IC_00001 12LCMS0073, 5.0ng/mL	P2-C2	ICV	QC	5/15/2012 19:04
15MAY12-perc-015.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL	P2-C7	CCV6	QC	5/15/2012 19:21
15MAY12-perc-016.d	LC6850L3_00001 12LCMS0066, 0.50ng/mL	P2-C4	CCV3	QC	5/15/2012 19:37
15MAY12-perc-017.d	G2E070437-1MS, 2130084, 2.00mL/2.00mL	P1-A9	MS_5	QC	5/15/2012 19:53
15MAY12-perc-018.d	G2E070437-1SD, 2130084, 2.00mL/2.00mL	P1-B1	MS_5	QC	5/15/2012 20:09
15MAY12-perc-019.d	G2E010422-2, 2128058, 2.00mL/2.00mL	P1-C1		Sample	5/15/2012 20:25
15MAY12-perc-020.d	G2E010422-3, 2128058, 2.00mL/2.00mL	P1-C2		Sample	5/15/2012 20:42
15MAY12-perc-021.d	LC6850L5_00001 12LCMS0068, 2.0ng/mL	P2-C6	CCV5	QC	5/15/2012 20:58
15MAY12-perc-022.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/15/2012 21:14
15MAY12-perc-023.d	G2E010442-2, 2128058, 2.00mL/2.00mL	P1-C4		Sample	5/15/2012 21:30
15MAY12-perc-024.d	G2E030413-1, 2128058, 2.00mL/2.00mL	P1-C6		Sample	5/15/2012 21:47
15MAY12-perc-025.d	G2E030413-2, 2128058, 2.00mL/2.00mL	P1-C7		Sample	5/15/2012 22:03
15MAY12-perc-026.d	G2E030413-3, 2128058, 2.00mL/2.00mL	P1-C8		Sample	5/15/2012 22:19
15MAY12-perc-027.d	LC6850L6_00001 12LCMS0069, 5.0ng/mL,vial empty,no data	P2-C7	CCV6	QC	5/15/2012 22:35
15MAY12-perc-028.d	LC6850L9_00001 Blank + IS	P2-C1		Sample	5/15/2012 22:51

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

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TestAmerica Inc.

Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Quantitation Results

Compound *Perchlorate*

Data File	Compound	Sample Type	Exp Conc	Response	Accuracy	Final Conc.
15MAY12-perc-003.d	Perchlorate	Sample				
15MAY12-perc-004.d	Perchlorate	Sample				
15MAY12-perc-005.d	Perchlorate	Calibration	0.1500	2933	118.0	
15MAY12-perc-006.d	Perchlorate	Calibration	0.3000	3832	99.2	
15MAY12-perc-007.d	Perchlorate	Calibration	0.5000	6244	95.2	
15MAY12-perc-008.d	Perchlorate	Calibration	1.0000	12696	96.4	
15MAY12-perc-009.d	Perchlorate	Calibration	2.0000	24808	92.8	
15MAY12-perc-010.d	Perchlorate	Calibration	5.0000	60459	96.0	
15MAY12-perc-011.d	Perchlorate	Calibration	10.0000	115391	101.0	
15MAY12-perc-012.d	Perchlorate	Calibration	20.0000	206571	101.4	
15MAY12-perc-013.d	Perchlorate	Sample				
15MAY12-perc-014.d	Perchlorate	QC	5.0000	75884	99.2	
15MAY12-perc-015.d	Perchlorate	QC	5.0000	64708	94.5	
15MAY12-perc-016.d	Perchlorate	QC	0.5000	6716	101.6	
15MAY12-perc-017.d	Perchlorate	QC	5.0000	89007	148.6	
15MAY12-perc-018.d	Perchlorate	QC	5.0000	83140	168.5	
15MAY12-perc-019.d	Perchlorate	Sample		4997		
15MAY12-perc-020.d	Perchlorate	Sample				
15MAY12-perc-021.d	Perchlorate	QC	2.0000	22114	100.1	
15MAY12-perc-022.d	Perchlorate	Sample				
15MAY12-perc-023.d	Perchlorate	Sample				
15MAY12-perc-024.d	Perchlorate	Sample		1473		
15MAY12-perc-025.d	Perchlorate	Sample		145		
15MAY12-perc-026.d	Perchlorate	Sample				
15MAY12-perc-027.d	Perchlorate	QC	5.0000			
15MAY12-perc-028.d	Perchlorate	Sample				

Instrument A5; Agilent 6410 Mass Spectrometer with Agilent 1200 series Binary SL HPLC.

TestAmerica West Sacramento (916) 373-5600

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

15MAY12-perc-029.d	Perchlorate	Sample			
15MAY12-perc-030.d	Perchlorate	Sample		287	
15MAY12-perc-031.d	Perchlorate	Sample			
15MAY12-perc-032.d	Perchlorate	Sample			
15MAY12-perc-033.d	Perchlorate	Sample		38986	
15MAY12-perc-034.d	Perchlorate	Sample		40293	
15MAY12-perc-035.d	Perchlorate	Sample		279	
15MAY12-perc-036.d	Perchlorate	Sample			
15MAY12-perc-037.d	Perchlorate	QC	2.0000	17210	100.1
15MAY12-perc-038.d	Perchlorate	QC	0.5000	7784	97.1
15MAY12-perc-039.d	Perchlorate	QC	0.1500	2540	110.4
15MAY12-perc-040.d	Perchlorate	Sample			
15MAY12-perc-041.d	Perchlorate	Sample			
15MAY12-perc-042.d	Perchlorate	QC	0.5000	6122	88.1
15MAY12-perc-043.d	Perchlorate	QC	0.5000	6433	94.9
15MAY12-perc-044.d	Perchlorate	Sample			
15MAY12-perc-045.d	Perchlorate	QC	0.5000	5933	96.6
15MAY12-perc-046.d	Perchlorate	QC	0.5000	6477	97.9
15MAY12-perc-047.d	Perchlorate	Sample			
15MAY12-perc-048.d	Perchlorate	Sample			
15MAY12-perc-049.d	Perchlorate	Sample			
15MAY12-perc-050.d	Perchlorate	QC	5.0000		
15MAY12-perc-051.d	Perchlorate	QC	0.1500	2768	112.2
15MAY12-perc-052.d	Perchlorate	Sample			

TestAmerica West Sacramento (916) 373-5600

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
15MAY12-perc-005.d	1	☑	2933	0.8645	0.1500
15MAY12-perc-006.d	2	☑	3832	0.7689	0.3000
15MAY12-perc-007.d	3	☑	6244	0.7592	0.5000
15MAY12-perc-008.d	4	☑	12696	0.7882	1.0000
15MAY12-perc-009.d	5	☑	24808	0.7672	2.0000
15MAY12-perc-010.d	6	☑	60459	0.7994	5.0000
15MAY12-perc-011.d	7	☑	115391	0.8428	10.0000
15MAY12-perc-012.d	8	☑	206571	0.8474	20.0000
15MAY12-perc-016.d	CCV3	☑	6716	0.8127	0.5000
15MAY12-perc-038.d	CCV3	☑	7784	0.7758	0.5000
15MAY12-perc-021.d	CCV5	☑	22114	0.8283	2.0000
15MAY12-perc-037.d	CCV5	☑	17210	0.8284	2.0000
15MAY12-perc-015.d	CCV6	☑	64708	0.7870	5.0000
14MAY12-perc-015.d	CCV6	☑	74706	0.7810	5.0000
14MAY12-perc-015.d	CCV6	☑	74706	0.7810	5.0000
15MAY12-perc-014.d	ICV	☑	75884	0.8263	5.0000
15MAY12-perc-042.d	LCS_0.5	☑	6122	0.7004	0.5000
15MAY12-perc-043.d	LCS_0.5	☑	6433	0.7575	0.5000
15MAY12-perc-039.d	LODV	☑	2540	0.8008	0.1500
15MAY12-perc-051.d	LODV	☑	2768	0.8164	0.1500
15MAY12-perc-045.d	MS_0.5	☑	5933	0.7717	0.5000
15MAY12-perc-046.d	MS_0.5	☑	6477	0.7824	0.5000
15MAY12-perc-017.d	MS_5	☑	89007	1.2396	5.0000
15MAY12-perc-018.d	MS_5	☑	83140	1.4060	5.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Target Compound *Perchlorate-(35Cl18O4)*

Calibration STD	Level	Enabled	Response	RF	Exp Conc
15MAY12-perc-005.d	1	☑	226215	22621.5115	10.0000
15MAY12-perc-006.d	2	☑	166114	16611.4350	10.0000
15MAY12-perc-007.d	3	☑	164486	16448.6314	10.0000
15MAY12-perc-008.d	4	☑	161070	16106.9999	10.0000
15MAY12-perc-009.d	5	☑	161679	16167.8588	10.0000
15MAY12-perc-010.d	6	☑	151266	15126.6341	10.0000
15MAY12-perc-011.d	7	☑	136920	13691.9938	10.0000
15MAY12-perc-012.d	8	☑	121886	12188.6009	10.0000
15MAY12-perc-016.d	CCV3	☑	165268	16526.7978	10.0000
15MAY12-perc-038.d	CCV3	☑	200658	20065.7991	10.0000
15MAY12-perc-021.d	CCV5	☑	133486	13348.6311	10.0000
15MAY12-perc-037.d	CCV5	☑	103876	10387.5742	10.0000
15MAY12-perc-015.d	CCV6	☑	164451	16445.1109	10.0000
14MAY12-perc-015.d	CCV6	☑	74706	0.7810	10.0000
14MAY12-perc-015.d	CCV6	☑	74706	0.7810	10.0000
15MAY12-perc-014.d	ICV	☑	183664	18366.4324	10.0000
15MAY12-perc-042.d	LCS_0.5	☑	174803	17480.3348	10.0000
15MAY12-perc-043.d	LCS_0.5	☑	169858	16985.8457	10.0000
15MAY12-perc-039.d	LODV	☑	211440	21144.0377	10.0000
15MAY12-perc-051.d	LODV	☑	226082	22608.1803	10.0000
15MAY12-perc-045.d	MS_0.5	☑	153767	15376.6819	10.0000
15MAY12-perc-046.d	MS_0.5	☑	165550	16555.0365	10.0000
15MAY12-perc-017.d	MS_5	☑	143601	14360.1280	10.0000
15MAY12-perc-018.d	MS_5	☑	118261	11826.1460	10.0000

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

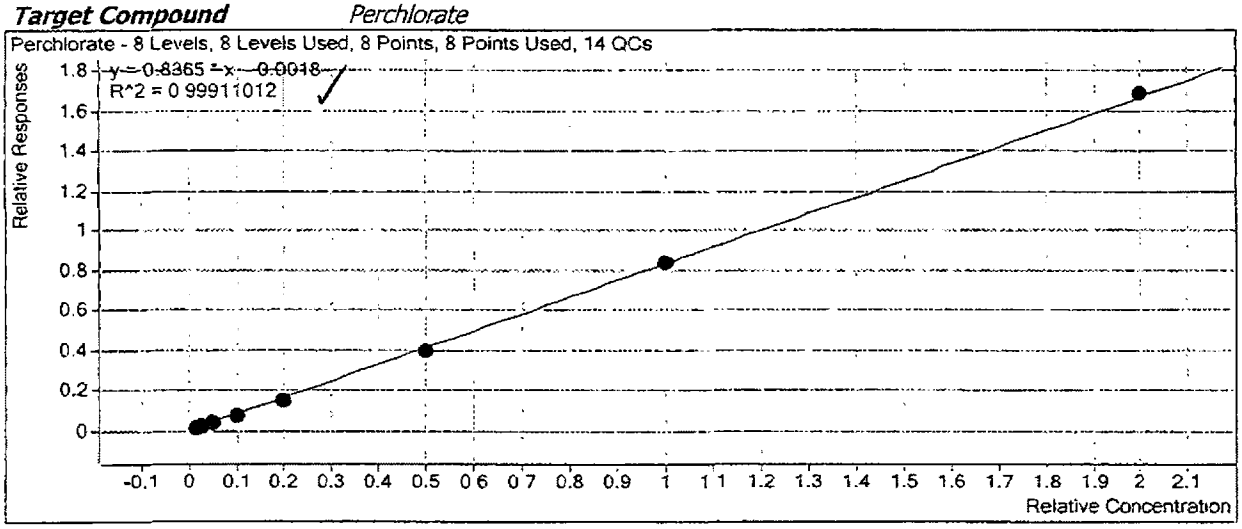
Batch Info

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\15MAY2012\QuantResults\15May2012-Perchlorate.batch.xml		
Analysis Time	5/16/2012 7:40 AM	**Analyst Name**	lores
Report Time	5/16/2012 8:07 AM	**Reporter Name**	lores
Last Calib Update	5/16/2012 7:40 AM	**Batch State**	Processed

Calibration Info Linear fit, Origin ignored, 1/x weighting

m 5/22/12

Target Compound *Perchlorate*



TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\15MAY2012\QuantResults\15May2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/15/2012 19:04
Analyst	lores
Data File	15MAY12-perc-014 d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850IC_00001 12LCMS0073, 5.0ng/mL
Sample Identification	ICV
Sample Information	IC-Pak Anion HR 75x4 6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C2
Exp. Concentration	5.00
Injection Volume	50

ICV

Quantitation Results

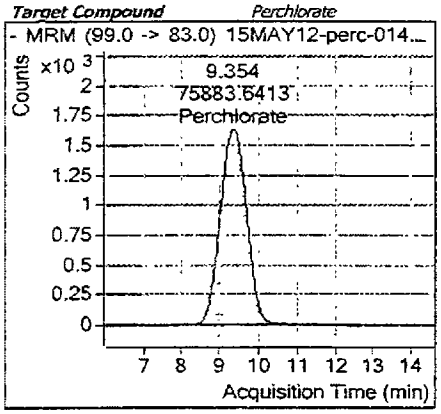
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.354	75884	99	83	4.96114	4.96114	1
Perchlorate-(35Cl18O4)	ISTD	9.347	183664	107	89			1

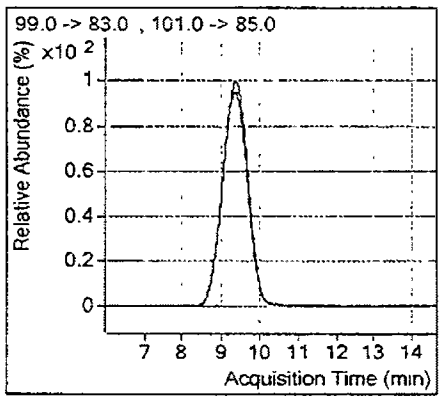
-0.8 % Deviation

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	24860	101	85	3.05	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	58372	109	91	3.15	2.30	3.80	In Control

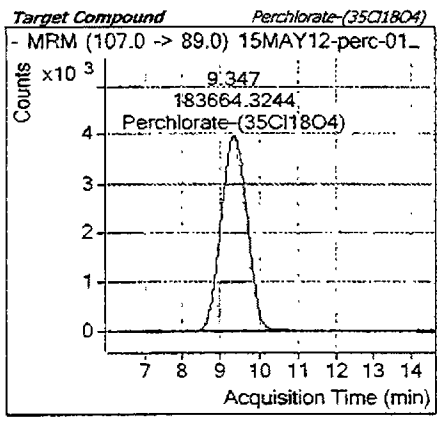
Compound Graphics

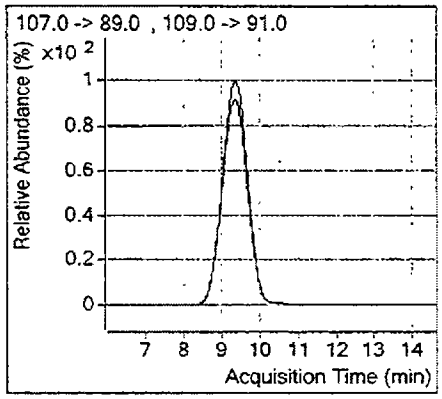
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





m 5/22/12

TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\15MAY2012\QuantResults\15May2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/15/2012 20:58
Analyst	lores
Data File	15MAY12-perc-021.d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850L5_00001 12LCMS0068, 2.0ng/mL
Sample Identification	CCV 5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45.55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2.00
Injection Volume	50

Quantitation Results

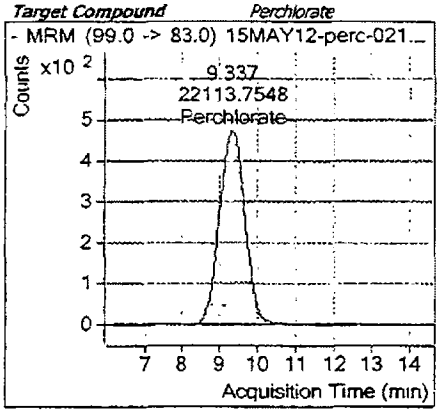
Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.337	22114	99	83	2.00239	2.00239	1
Perchlorate-(35Cl18O4)	ISTD	9.336	133486	107	89			1

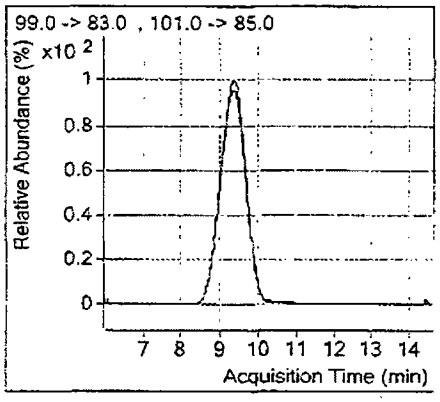
0.1 % Deviation

Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	7292	101	85	3.03	2.30	3.80	In Control
Perchlorate-(35Cl18O4)	43155	109	91	3.09	2.30	3.80	In Control

Compound Graphics

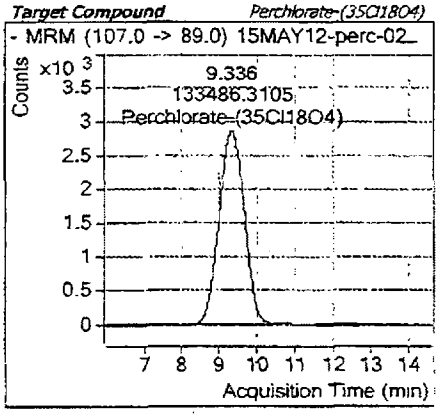
Target Compound *Perchlorate*

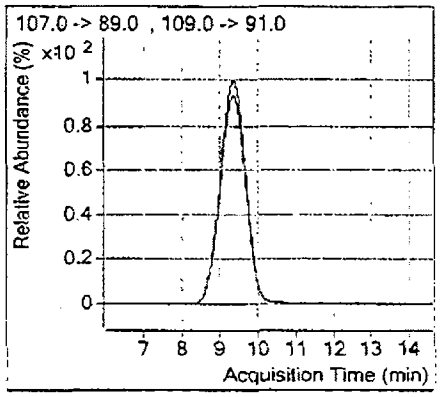




5/22/12

Target Compound *Perchlorate-(35Cl18O4)*





TestAmerica Inc.
Perchlorate Analysis by LC/MS/MS; Method 8321 / 6850 / 331 / DOD Handbook

Batch Data Path	D:\Masshunter\A5-data\Perc_2RNM102911VE 09\15MAY2012\QuantResults\15May2012-Perchlorate.batch.xml

Analysis Information

Acquisition Date - Time	5/16/2012 01:17
Analyst	lores
Data File	15MAY12-perc-037.d
Acquisition Method	PercMRM_2.m
Sample Name	LC6850L5_00001 12LCMS0068, 2 0ng/mL
Sample Identification	CCV 5
Sample Information	IC-Pak Anion HR 75x4.6mm T=40°C iso 45 55 Coll=30 frag=130 src=1750v neb=45 gas T=350 fl=12
Sample Type	QC
Sample Position	P2-C6
Exp. Concentration	2.00
Injection Volume	50

Quantitation Results

Name	Type	RT	Area	Precursor	Product	Final Conc.	Injection Conc.	Dilution
Perchlorate	Target	9.383	17210	99	83	2.00252	2.00252	1
Perchlorate-(35Cl18O4)	ISTD	9.375	103876	107	89			1

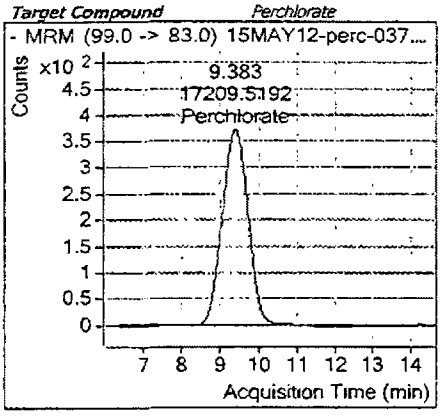
0.1 % Deviation

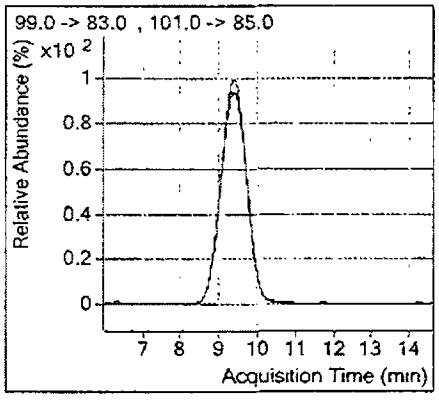
Qualifier Ion	Area	Precursor	Product	Ratio	Min	Max	
Perchlorate	5642	101	85	3 05	2.30	3 80	In Control
Perchlorate-(35Cl18O4)	33188	109	91	3.13	2 30	3 80	In Control

Compound Graphics

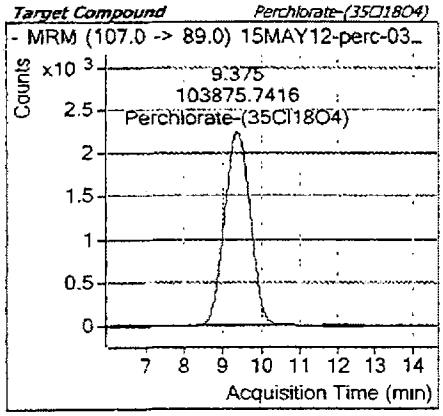
5/22/12

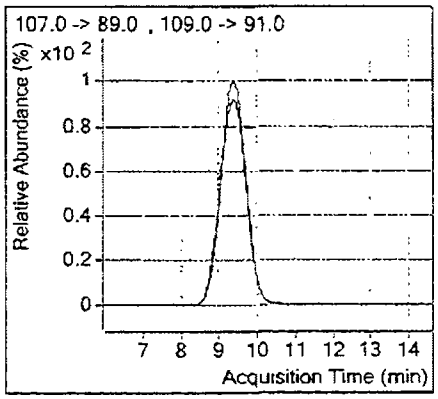
Target Compound *Perchlorate*





Target Compound *Perchlorate-(35Cl18O4)*





METHOD BLANK REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E010442 Work Order #...: MTELA1AA Matrix.....: WATER
MB Lot-Sample #: G2E070000-058
Prep Date.....: 05/07/12
Analysis Date..: 05/14/12 Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	1.0	ug/L	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E010442 Work Order #...: MTELA1AC Matrix.....: WATER
LCS Lot-Sample#: G2E070000-058
Prep Date.....: 05/07/12 Analysis Date..: 05/15/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	5.00	4.62	ug/L	92	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E010442 Work Order #...: MTELA1AD Matrix.....: WATER
LCS Lot-Sample#: G2E070000-058
Prep Date.....: 05/07/12 Analysis Date..: 05/15/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	5.00	4.86	ug/L	97	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E010442 **Work Order #...:** MTDHX1AC-MS **Matrix.....:** WATER
MS Lot-Sample #: G2E030450-004 MTDHX1AD-MSD
Date Sampled...: 05/01/12 **Date Received..:** 05/03/12
Prep Date.....: 05/07/12 **Analysis Date..:** 05/16/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	99	(80 - 120)			SW846 6850
	97	(80 - 120)	1.8	(0-15)	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E010442 Work Order #...: MTDHX1AC-MS Matrix.....: WATER
MS Lot-Sample #: G2E030450-004 MTDHX1AD-MSD
Date Sampled...: 05/01/12 Date Received..: 05/03/12
Prep Date.....: 05/07/12 Analysis Date..: 05/16/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Perchlorate	ND	5.00	4.95	ug/L	99		SW846 6850
	ND	5.00	4.86	ug/L	97	1.8	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

QC Sample Results

Client: TestAmerica North Canton
Project/Site: 240-10670

TestAmerica Job ID: G2E010442

Method: 6850 - 6850, Perchlorate by LC/MS/MS

Lab Sample ID: G2E070000058B
Matrix: Water
Analysis Batch: 2128058

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 2128058_P

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		1.0	0.082	ug/L		05/07/12 08:50	05/14/12 23:47	1

Lab Sample ID: G2E070000058C
Matrix: Water
Analysis Batch: 2128058

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 2128058_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	5.00	4.62		ug/L		92	80 - 120

Lab Sample ID: G2E070000058C
Matrix: Water
Analysis Batch: 2128058

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 2128058_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	5.00	4.86		ug/L		97	80 - 120

Lab Sample ID: G2E030450004D
Matrix: Water
Analysis Batch: 2128058

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 2128058_P

Analyte	Sample Result	Sample Qualifier	Spike Added	SD1 Result	SD1 Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		5.00	4.86		ug/L		97	80 - 120	1.8	15

Lab Sample ID: G2E030450004S
Matrix: Water
Analysis Batch: 2128058

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 2128058_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS1 Result	MS1 Qualifier	Unit	D	%Rec	%Rec. Limits
Perchlorate	ND		5.00	4.95		ug/L		99	80 - 120

Method Summary

Client: TestAmerica North Canton
Project/Site: 240-10670

TestAmerica Job ID: G2E010442

Method	Method Description	Protocol	Laboratory
6850	6850, Perchlorate by LC/MS/MS	SW846	TAL WSC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL WSC = TestAmerica West Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: TestAmerica North Canton
Project/Site: 240-10670

TestAmerica Job ID: G2E010442

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
G2E010442001	MT-MW05S-042512	Water	04/25/12 10:51	04/28/12 09:00
G2E010442002	MT-MW01S-042512	Water	04/25/12 13:35	04/28/12 09:00
G2E010442003	MT-MW03S-042512	Water	04/25/12 14:50	04/28/12 09:00

VOC CALCULATION	SAMPLE		
	MT-MW05S-042512		
TARGET ANALYTE	trichloroethene		
ANALYTE RESPONSE	16272		
INTERNAL STANDARD	fluorobenzene		
I.S. RESPONSE	1739898		
I.S. CONCENTRATION	10	µg/L	
ANALYTE CAL. RF	0.2698		
DILUTION FACTOR (DF)	1		
INITIAL SAMPLE VOLUME - V1	5	ml	
FINAL SAMPLE VOLUME - V2	5	ml	
(ANALYTE RESPONSE) X (I.S. CONCENTRATION) X DF	=	0.35	µg/L
(I.S. RESPONSE) X (CAL. R.F.)			

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX16\20120430-9532.b\UXM5281.D		
Lims ID:	240-10670-A-2	Client ID:	MT-MW05S-042512
Inject. Date:	30-Apr-2012 16:17:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0009532-013		
Misc. Info.:	M20430A,8260LLUX16,,1904		
Operator:	1904	Instrument ID:	A3UX16
Vol. Injected:	1.0000	ALS Bottle#:	12
Lims Batch ID:	42171	Lims Sample ID:	13
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX16\20120430-9532.b\8260_16.m		
Last Update:	01-May-2012 09:03:45	Calib Date:	29-Apr-2012 19:50:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX16\20120429-9509.b\UXM5250.D		
Limit Group:	MSV 8260DOD ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-15		
First Level Reviewer: williamsla		Date:	01-May-2012 17:10:27

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 141 1-Chlorooctane	1		0.000					
* 1 Fluorobenzene	96	5.702	5.702	0.0	98	1739898	10.0	
* 2 Chlorobenzene-d5	117	8.394	8.394	0.0	91	1159226	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.635	10.635	0.0	98	556455	10.0	
$ 5 Dibromofluoromethane (Surr)	113	5.121	5.121	0.0	57	339573	8.17	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.405	5.405	0.0	0	556567	8.27	
$ 7 Toluene-d8 (Surr)	98	7.077	7.077	0.0	95	1584274	8.81	
$ 131 4-Bromofluorobenzene (Surr)	95	9.508	9.508	0.0	81	581554	9.06	
134 Chlorodifluoromethane TIC	1		0.000					
12 Dichlorodifluoromethane	85		1.670					
13 Chloromethane	50	1.824	1.836	-0.012	95	27765	0.3460	
14 Vinyl chloride	62		1.954					
15 Bromomethane	94		2.298					
16 Chloroethane	64		2.405					
18 Trichlorofluoromethane	101		2.666					
21 1,1-Dichloroethene	96		3.152					
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.176					
22 Acetone	43		3.176					
26 Carbon disulfide	76		3.365					
30 Methylene Chloride	84		3.591					
31 2-Methyl-2-propanol	59		3.674					
34 Methyl tert-butyl ether	73		3.840					
33 trans-1,2-Dichloroethene	96		3.840					
36 1,1-Dichloroethane	63		4.207					
37 Vinyl acetate	86		4.243					
38 Isopropyl ether	87	4.279	4.279	0.0	87	6622	0.1372	
40 Tert-butyl ethyl ether	59		4.587					
42 cis-1,2-Dichloroethene	96		4.705					
41 2-Butanone (MEK)	43		4.705					
43 2,2-Dichloropropane	77		4.717					
47 Chlorobromomethane	128		4.919					

Report Date: 01-May-2012 17:10:27 Chrom Revision: 2.0 08-Feb-2012 11:07:54
Data File: \\Ncchrom\ChromData\A3UX16\20120430-9532.b\UXM5281.D

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
49 Chloroform	83	4.978	4.978	0.0	66	10562	0.1146	
50 1,1,1-Trichloroethane	97		5.156					
52 1,1-Dichloropropene	75		5.298					
53 Carbon tetrachloride	117		5.310					
56 1,2-Dichloroethane	62		5.476					
55 Benzene	78		5.476					
57 Tert-amyl methyl ether	73		5.559					
60 Trichloroethene	130	6.022	6.022	0.0	74	16272	0.3467	
62 1,2-Dichloropropane	63		6.212					
65 Dibromomethane	93		6.306					
67 Dichlorobromomethane	83		6.437					
69 2-Chloroethyl vinyl ether	63		6.686					
70 cis-1,3-Dichloropropene	75		6.828					
71 4-Methyl-2-pentanone (MIBK)	43		6.947					
72 Toluene	91		7.136					
73 trans-1,3-Dichloropropene	75		7.314					
76 1,3-Dichloropropane	76		7.635					
77 Tetrachloroethene	164		7.646					
78 2-Hexanone	43		7.694					
79 Chlorodibromomethane	129		7.848					
123 Ethylene Dibromide	107		7.967					
82 Chlorobenzene	112		8.429					
83 1,1,1,2-Tetrachloroethane	131		8.488					
84 Ethylbenzene	106		8.524					
10 m-Xylene & p-Xylene	106		8.631					
85 o-Xylene	106		9.010					
86 Styrene	104		9.010					
87 Bromoform	173		9.200					
88 Isopropylbenzene	105		9.354					
90 1,1,2,2-Tetrachloroethane	83		9.615					
91 Bromobenzene	156		9.662					
92 1,2,3-Trichloropropane	110		9.674					
94 N-Propylbenzene	120		9.757					
95 2-Chlorotoluene	126		9.840					
104 4-Chlorotoluene	126		9.947					
97 tert-Butylbenzene	119		10.243					
98 1,2,4-Trimethylbenzene	105		10.291					
99 sec-Butylbenzene	105		10.457					
100 1,3-Dichlorobenzene	146		10.575					
101 4-Isopropyltoluene	119		10.599					
102 1,4-Dichlorobenzene	146		10.658					
103 1,2,3-Trimethylbenzene	105		10.706					
105 n-Butylbenzene	91		11.002					
106 1,2-Dichlorobenzene	146		11.026					
107 1,2-Dibromo-3-Chloropropane	157		11.797					
109 1,2,4-Trichlorobenzene	180		12.639					
110 Hexachlorobutadiene	225		12.805					
111 Naphthalene	128		12.888					
112 1,2,3-Trichlorobenzene	180		13.149					
S 114 Xylenes, Total	106		16.530					

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: CCVIS 240-42171/2 Calibration Date: 04/30/2012 11:50

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 15:41

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 17:34

Lab File ID: UXM5270.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2829	0.2885	0.1000	10.2	10.0	2.0	20.0
Chloromethane	Ave	0.4613	0.4195	0.1000	9.10	10.0	-9.0	20.0
Vinyl chloride	Ave	0.4246	0.4029	0.1000	9.49	10.0	-5.1	20.0
Bromomethane	Ave	0.1684	0.1518	0.0500	9.02	10.0	-9.8	20.0
Chloroethane	Ave	0.2371	0.2197	0.0500	9.27	10.0	-7.3	20.0
Trichlorofluoromethane	Ave	0.3035	0.3119	0.1000	10.3	10.0	2.8	20.0
Acrolein	Ave	0.0489	0.0440		89.9	100	-10.1	20.0
1,1-Dichloroethene	Ave	0.2446	0.2428	0.1000	9.93	10.0	-0.7	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1546	0.1669	0.0500	10.8	10.0	8.0	20.0
Acetone	Lin1		0.0864	0.0500	16.6	20.0	-17.0	20.0
Iodomethane	Ave	0.3433	0.3500		10.2	10.0	1.9	20.0
Carbon disulfide	Ave	0.7261	0.7265	0.1000	10.0	10.0	0.0	20.0
Acetonitrile	Ave	0.0346	0.0292		84.2	100	-15.8	20.0
Methyl acetate	Ave	0.2327	0.1967	0.1000	16.9	20.0	-15.5	20.0
Methylene Chloride	Lin1		0.3004	0.1000	9.58	10.0	-4.2	20.0
tert-Butyl alcohol	Ave	0.0189	0.0158		167	200	-16.6	20.0
Acrylonitrile	Ave	0.1114	0.0998		17.9	20.0	-10.5	20.0
Methyl tert-butyl ether	Ave	0.8402	0.7869	0.1000	9.36	10.0	-6.4	20.0
trans-1,2-Dichloroethene	Ave	0.2873	0.2775	0.1000	9.66	10.0	-3.4	20.0
Hexane	Ave	0.0529	0.0551		10.4	10.0	4.1	20.0
1,1-Dichloroethane	Ave	0.5691	0.5381	0.1000	9.45	10.0	-5.5	20.0
Vinyl acetate	Ave	0.0505	0.0473		9.37	10.0	-6.3	20.0
2-Butanone	Ave	0.1356	0.1228	0.0500	18.1	20.0	-9.5	20.0
cis-1,2-Dichloroethene	Ave	0.3087	0.2944	0.1000	9.54	10.0	-4.6	20.0
2,2-Dichloropropane	Ave	0.2932	0.3012		10.3	10.0	2.7	20.0
Bromochloromethane	Ave	0.1283	0.1246		9.71	10.0	-2.9	20.0
Tetrahydrofuran	Ave	0.0828	0.0713		8.61	10.0	-13.9	20.0
Chloroform	Ave	0.5296	0.5127	0.2000	9.68	10.0	-3.2	20.0
1,1,1-Trichloroethane	Ave	0.3678	0.3764	0.1000	10.2	10.0	2.3	20.0
Cyclohexane	Ave	0.4605	0.4777	0.1000	10.4	10.0	3.7	20.0
1,1-Dichloropropene	Ave	0.4264	0.4061		9.53	10.0	-4.7	20.0
Carbon tetrachloride	Ave	0.2770	0.2871	0.1000	10.4	10.0	3.7	20.0
1,2-Dichloroethane	Ave	0.4694	0.4390	0.1000	9.35	10.0	-6.5	20.0
Benzene	Ave	1.251	1.173	0.5000	9.38	10.0	-6.2	20.0
Trichloroethene	Ave	0.2698	0.2578	0.2000	9.56	10.0	-4.4	20.0
1,2-Dichloropropane	Ave	0.3083	0.2961	0.1000	9.61	10.0	-3.9	20.0
Methylcyclohexane	Ave	0.3477	0.3809	0.1000	11.0	10.0	9.5	20.0
Dibromomethane	Ave	0.1606	0.1478		9.20	10.0	-8.0	20.0
1,4-Dioxane	Ave	0.0024	0.0019		403	500	-19.5	20.0
Bromodichloromethane	Ave	0.3092	0.3153	0.1000	10.2	10.0	2.0	20.0

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **June 26, 2012**

FROM: **MEGAN CARSON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- SELECT TOTAL AND DISSOLVED METALS**
LOCKHEED-MSA
SDG 240-10670-1

SAMPLES: 3/Waters/
MT-MW01S-042512 MT-MW03S-042512
MT-MW05S-042512

Overview

The sample set for Lockheed MSA, SDG 240-10670-1, consists of three (3) aqueous environmental samples and one trip blank. This SDG contained no field duplicate pairs.

All samples were analyzed for total and dissolved metals. The samples were collected by Tetra Tech on April 25th, 2012 and analyzed by TestAmerica. Metals analyses were conducted using method 6020A. Mercury analyses were conducted using method 7470A.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, MS tuning, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, ICP internal standard recoveries, laboratory control sample recoveries, matrix spike recoveries, laboratory duplicate results, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems-

- None.

Minor Problems-

- The following contaminants were detected in preparation and calibration blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Mercury (1)	0.18 ug/L	0.9 ug/L
Barium (2)	1.21 ug/L	6.05 ug/L
Copper (2)	0.90 ug/L	4.5 ug/L
Lead (2)	0.35 ug/L	1.75 ug/L
Silver (2)	0.33 ug/L	1.65 ug/L
Zinc (2)	18.0 ug/L	90 ug/L
Molybdenum (3)	0.45 ug/L	2.25 ug/L
Thallium (3)	0.58 ug/L	2.9 ug/L
Tungsten (3)	0.68 ug/L	3.4 ug/L

(1) Maximum concentration found in a preparation blank affecting sample in 41887.
(2) Maximum concentration found in a preparation blank affecting sample in 41956.
(3) Maximum concentration found in a calibration blank affecting samples analyzed on 4/28/12.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level were qualified (B) for blank contamination.

- The CRDL standard analyzed on 4/29/12 had a percent recovery > 110% for arsenic, copper, nickel, silver, and thallium. All samples were affected. Positive arsenic and nickel results < 2X CRDL were qualified as either biased high (K) or estimated (J) due to conflicting directional bias. No other validation action was warranted as sample results were either > 2X CRDL or qualified for blank contamination.

Notes

Positive results greater than method detection limit (MDL) but less than the reporting limit (RL) were qualified as estimated (J).

Executive Summary

Laboratory Performance: Preparation and calibration blank contamination resulted on the qualification of sample results.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993).

Tetra Tech
Megan Carson
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's r < 0.995
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient r < 0.995
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512		
SDG: 240-10670-1	LAB_ID	240-10670-3			240-10670-4			240-10670-2		
FRACTION: M	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.13	U		0.21	J	P	0.13	U	
ARSENIC		4.7	J	CP	1.9	J	CP	1	J	CP
BARIUM		110			26			20		
BERYLLIUM		0.59	J	P	0.41	J	P	36		
CADMIUM		0.13	U		0.13	U		0.85	J	P
CHROMIUM		0.71	U		5.3			0.71	U	
COBALT		140			2.3			430		
COPPER		0.6	B	A	7.3			32		
LEAD		0.26	B	A	2.6			1.3	B	A
MERCURY		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		0.57	B	A	1.7	B	A	0.093	U	
NICKEL		67			5.9			870		
SELENIUM		0.57	U		0.57	U		0.74	J	P
SILVER		0.08	U		0.13	B	A	0.08	U	
THALLIUM		0.14	U		0.14	U		0.34	B	A
TUNGSTEN		0.37	U		0.37	U		0.37	U	
VANADIUM		0.94	J	P	6	J	P	0.44	U	
ZINC		12	B	A	640			2500		

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512		
SDG: 240-10670-1	LAB_ID	240-10670-3			240-10670-4			240-10670-2		
FRACTION: MF	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.13	U		0.13	U		0.13	U	
ARSENIC		5	K	C	0.86	J	CP	1.2	J	CP
BARIUM		120			20			20		
BERYLLIUM		0.36	J	P	0.2	U		36		
CADMIUM		0.13	U		0.13	U		0.9	J	P
CHROMIUM		0.71	U		0.71	U		0.71	U	
COBALT		120			1.1			430		
COPPER		0.4	B	A	0.29	U		35		
LEAD		0.18	U		0.18	U		1.3	B	A
MERCURY		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		0.71	B	A	0.99	B	A	0.093	U	
NICKEL		55			1.7	J	CP	870		
SELENIUM		0.57	U		0.57	U		0.57	U	
SILVER		0.08	U		0.08	U		0.08	U	
THALLIUM		0.14	U		0.14	U		0.32	B	A
TUNGSTEN		0.37	U		0.37	U		0.37	U	
VANADIUM		0.65	J	P	0.44	U		0.44	U	
ZINC		8.3	B	A	860			2500		

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW01S-042512 Lab Sample ID: 240-10670-3

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 13:35

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	4.7	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	110	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	0.59	1.0	0.20	ug/L	J		1	6020
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	140	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	0.60	2.0	0.29	ug/L	J	B	1	6020
7439-92-1	Lead	0.26	1.0	0.18	ug/L	J	B	1	6020
7439-98-7	Molybdenum	0.57	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	67	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.14	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7440-62-2	Vanadium	0.94	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	12	20	2.3	ug/L	J	B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW03S-042512 Lab Sample ID: 240-10670-4

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.: .

Matrix: Water Date Sampled: 04/25/2012 14:50

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.21	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	1.9	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	26	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	0.41	1.0	0.20	ug/L	J		1	6020
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020
7440-47-3	Chromium	5.3	2.0	0.71	ug/L			1	6020
7440-48-4	Cobalt	2.3	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	7.3	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	2.6	1.0	0.18	ug/L		B	1	6020
7439-98-7	Molybdenum	1.7	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	5.9	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	0.13	1.0	0.080	ug/L	J	B	1	6020
7440-28-0	Thallium	2.0	2.0	0.14	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7440-62-2	Vanadium	6.0	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	640	20	2.3	ug/L		B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW05S-042512 Lab Sample ID: 240-10670-2

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 10:51

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	1.0	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	20	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	36	1.0	0.20	ug/L			1	6020
7440-43-9	Cadmium	0.85	1.0	0.13	ug/L	J		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	430	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	32	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	1.3	1.0	0.18	ug/L		B	1	6020
7439-98-7	Molybdenum	10	10	0.093	ug/L	U		1	6020
7440-02-0	Nickel	870	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	0.74	5.0	0.57	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.34	2.0	0.14	ug/L	J	B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	2500	20	2.3	ug/L		B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW01S-042512 Lab Sample ID: 240-10670-3

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 13:35

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	5.0	5.0	0.40	ug/L			1	6020
7440-39-3	Barium	120	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	0.36	1.0	0.20	ug/L	J		1	6020
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	120	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	0.40	2.0	0.29	ug/L	J	B	1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	0.71	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	55	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.14	ug/L	U		1	6020
7440-62-2	Vanadium	0.65	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	8.3	20	2.3	ug/L	J	B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW03S-042512 Lab Sample ID: 240-10670-4

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 14:50

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	0.86	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	20	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	1.0	1.0	0.20	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	1.1	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	2.0	2.0	0.29	ug/L	U		1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	0.99	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.7	2.0	0.20	ug/L	J		1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.14	ug/L	U		1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	860	20	2.3	ug/L		B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW05S-042512 Lab Sample ID: 240-10670-2

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 10:51

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	1.2	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	20	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	36	1.0	0.20	ug/L			1	6020
7440-43-9	Cadmium	0.90	1.0	0.13	ug/L	J		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	430	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	35	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	1.3	1.0	0.18	ug/L		B	1	6020
7439-98-7	Molybdenum	10	10	0.093	ug/L	U		1	6020
7440-02-0	Nickel	870	2.0	0.20	ug/L			1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.32	2.0	0.14	ug/L	J	B	1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	2500	20	2.3	ug/L		B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW01S-042512 Lab Sample ID: 240-10670-3

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 13:35

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW03S-042512 Lab Sample ID: 240-10670-4

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 14:50

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW05S-042512 Lab Sample ID: 240-10670-2

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG ID.:

Matrix: Water Date Sampled: 04/25/2012 10:51

Reporting Basis: WET Date Received: 04/26/2012 09:15

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

APPENDIX C

SUPPORT DOCUMENTATION

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech INC.	Client Project Manager: Tony Aparavasse	Site Contact: Walt Payer	Lab Contact: Pat O'meara	COC No:
Address: 20251 Century Blvd.	Telephone: 301 528-3021	Telephone: 301 991-3914	Telephone: 330 497-9396	1 of 1 COCs
City/State/Zip: Germantown MD 20874	Email:	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 301 528-3021		TAT if different from below: ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client: ☐ Lab pickup: ☐ Lab sampling: ☐ Job/SDG No.:
Project Name: MSB-Ground Water Sampling	Method of Shipment/Carrier: Fed Ex			
Project Number: 112TC04021-02	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	VOCs	Total PPM	Diss PPM	1,4 Dioxane	DRO	GRO	Perchlorate	Sample Specific Notes / Special Instructions:
TB-042512	4-25-12	—		X						2					N	G	X							
MT-MW05s-042512		1051		X					2	5			5				X	X	X	X	X	X	X	
MT-MW01s-042512		1335		X					2	5			5				X	X	X	X	X	X	X	
MT-MW03s-042512		1450		X					2	5			5				X	X	X	X	X	X	X	

Loc: 240
10670
US

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

	Company	Date/Time		Company	Date/Time
Relinquished by: Walt Payer	TT INC.	4-25-12 / 1520	Received by: Paul Hayford	TestAmerica	4/25/12 / 1520
Relinquished by: Paul Hayford	TestAmerica	4/25/12 / 1725	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAWC	Date/Time: 4/26/12 9:15

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TAL-0018 (1008)

CASE NARRATIVE

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Project: MSA Groundwater Sampling

Report Number: 240-10670-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The Perchlorate analysis was performed at the TestAmerica West Sacramento Laboratory.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 04/26/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.4 and 0.5 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples TB-042512 (240-10670-1), MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 04/30/2012.

1,2,3-Trichlorobenzene was detected in method blank MB 240-42171/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS/MSD of sample 240-10350-5 in batch 240-42171. tert-Butyl alcohol exceeded the rpd limit.

Refer to the QC report for details.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 05/01/2012 and analyzed on 05/04/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

2,4,6-Tribromophenol (Surr), 2-Fluorophenol (Surr) and Phenol-d5 (Surr) failed the surrogate recovery criteria low for MT-MW05S-042512 (240-10670-2). Refer to the QC report for details.

Acid surrogates were out of control limits in sample MT-MW05S-042512 (240-10670-2). Since only Base Neutral compounds were requested no corrective action was necessary.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 04/28/2012.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-42055/7 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the GRO analyses. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 04/27/2012 and analyzed on 04/30/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

Total Petroleum Hydrocarbons (C10-C32) was detected in method blank MB 240-41890/15-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the DRO analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/27/2012 and analyzed on 04/28/2012.

No difficulties were encountered during the metals analyses. All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)

Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/27/2012 and analyzed on 04/28/2012.

Several analytes were detected in method blank MB 240-41956/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY

Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/27/2012 and analyzed on 04/28/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples MT-MW05S-042512 (240-10670-2), MT-MW01S-042512 (240-10670-3) and MT-MW03S-042512 (240-10670-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/27/2012 and analyzed on 04/28/2012.

Mercury was detected in method blank MB 240-41887/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the mercury analyses. All other quality control parameters were within the acceptance limits.

MT-MW05S-042512

240-10670-h-2-b, 4/28/2012 17:44:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B
		ppb	ppb	ppb
x		73.789%	36.460	30.850
%RSD		4.570	2.497	1.207
Run	Time	23Na	25Mg	27Al
		ppb	ppb	ppb
x		T 60270.000	12510.000	M 1341.000
%RSD		T 1.318	0.876	M 0.534
Run	Time	35Cl	39K	43Ca
		ppb	ppb	ppb
x		T 0.000	T 6654.000	9271.000
%RSD		T 0.000	T 0.526	0.231
Run	Time	45Sc	45Sc	47Ti
		ppb	ppb	ppb
x		T 72.082%	74.364%	0.358
%RSD		T 0.996	1.101	40.800
Run	Time	51V	52Cr	53Cr,O
		ppb	ppb	ppb
x		-0.043	-0.189	0.575
%RSD		332.400	5.402	58.540
Run	Time	55Mn	56Fe	59Co
		ppb	ppb	ppb
x		TM 5930.000	394.100	M 429.900
%RSD		TM 0.833	0.746	M 0.703
Run	Time	60Ni	65Cu	66Zn
		ppb	ppb	ppb
x		M 871.400	32.210	M 2470.000
%RSD		M 0.782	1.084	M 0.860
Run	Time	72Ge	75As	77Ar,Cl
		ppb	ppb	ppb
x		73.139%	1.038	0.346
%RSD		0.675	6.202	11.450
Run	Time	78Se	88Sr	95Mo
		ppb	ppb	ppb
x		0.739	68.850	-0.096
%RSD		31.840	1.203	23.110
Run	Time	105Pd	107Ag	108Mo,O
		ppb	ppb	ppb
x		0.000	0.002	-3.729
%RSD		0.000	53.560	137.700
Run	Time	111Cd	115In	118Sn
		ppb	ppb	ppb
x		0.849	73.875%	0.070
%RSD		8.657	0.540	18.800
Run	Time	121Sb	137Ba	159Tb
		ppb	ppb	ppb
x		-0.002	20.390	0.000
%RSD		847.200	1.664	0.000
Run	Time	165Ho	182W	205Tl
		ppb	ppb	ppb
x		78.565%	-0.226	0.339
%RSD		0.912	0.871	0.991
Run	Time	208Pb	209Bi	
		ppb	ppb	
x		1.317	0.000	
%RSD		0.426	0.000	

2470ug/L reported as 2500ug/L

TestAmerica North Canton Sample Receipt Form/Narrative Login # : 10640

Client Tetra Tech Site Name _____ By: _____ (Signature)

Cooler Received on 4/26/12 Opened on 4/26/12

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF -2°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C
IR GUN# 4G	(CF -1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C
IR GUN# 5G	(CF -1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C
IR GUN# 6Y	(CF -2°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C

~~Multiple~~ on Back

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 — Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? — Yes No NA
   -Were custody seals on the bottle(s)? — Yes No
3. Shippers' packing slip attached to the cooler(s)? — Yes No
4. Did custody papers accompany the sample(s)? — Yes No
5. Were the custody papers relinquished & signed in the appropriate place? — Yes No
6. Did all bottles arrive in good condition (Unbroken)? — Yes No
7. Could all bottle labels be reconciled with the COC? — Yes No
8. Were correct bottle(s) used for the test(s) indicated? — Yes No
9. Sufficient quantity received to perform indicated analyses? — Yes No
10. Were sample(s) at the correct pH upon receipt? — Yes No NA
11. Were VOAs on the COC? — Yes No
12. Were air bubbles >6 mm in any VOA vials? — Yes No NA
13. Was a trip blank present in the cooler(s)? — Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
MW05S	<2<2	4/26/12	[illegible]
MW01S	<2<2		
MW03S	<2<2		

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
Client Cooler	1.4	0.4	SG	ICE
	1.5	0.5		

Login Sample Receipt Checklist

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10670-1

Login Number: 10670

List Source: TestAmerica Canton

List Number: 1

Creator: Sutek, Nick

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

HOLDTIME

SDG 240-10670-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HG	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HG	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
M	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
M	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
M	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HGF	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HGF	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
HGF	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
MF	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
MF	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
MF	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/28/2012	2	1	3
PCL	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	5/7/2012	5/15/2012	12	8	20
PCL	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	5/7/2012	5/15/2012	12	8	20
PCL	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	5/7/2012	5/15/2012	12	8	20

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	5/1/2012	5/4/2012	6	3	9
OS	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	5/1/2012	5/4/2012	6	3	9
OS	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	5/1/2012	5/4/2012	6	3	9
OV	UG/L	TB-042512	240-10670-1	NM	4/25/2012	4/30/2012	4/30/2012	5	0	5
OV	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/30/2012	4/30/2012	5	0	5
OV	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/30/2012	4/30/2012	5	0	5
OV	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/30/2012	4/30/2012	5	0	5
OV	UG/L	TB-042512	240-10670-1	TB	4/25/2012	4/30/2012	4/30/2012	5	0	5
DRO	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/27/2012	4/30/2012	2	3	5
DRO	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/27/2012	4/30/2012	2	3	5
DRO	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/27/2012	4/30/2012	2	3	5
GRO	UG/L	MT-MW05S-042512	240-10670-2	NM	4/25/2012	4/28/2012	4/28/2012	3	0	3
GRO	UG/L	MT-MW03S-042512	240-10670-4	NM	4/25/2012	4/28/2012	4/28/2012	3	0	3
GRO	UG/L	MT-MW01S-042512	240-10670-3	NM	4/25/2012	4/28/2012	4/28/2012	3	0	3

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-10670-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-10670-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 XMDL Date: 02/09/2010 15:53

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10670-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10670-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 XMDL Date: 02/09/2010 15:53

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-10670-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-10670-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10670-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10670-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-10670-1

SDG No.:

Instrument ID: I8 Date: 07/05/2011 09:44

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		1000	6020
Arsenic		10000	6020
Barium		10000	6020
Beryllium		10000	6020
Cadmium		10000	6020
Chromium		10000	6020
Cobalt		10000	6020
Copper		10000	6020
Lead		10000	6020
Molybdenum		2000	6020
Nickel		10000	6020
Selenium		10000	6020
Silver		1000	6020
Thallium		10000	6020
Vanadium		10000	6020
Tungsten		2000	6020
Zinc		10000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-10670-1

SDG No.:

Instrument ID: H4 Date: 04/01/2011 10:50

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-41887/1-A	04/27/2012 12:40	41887		100	100
LCS 240-41887/2-A	04/27/2012 12:40	41887		100	100
240-10552-L-17-B MS	04/27/2012 12:40	41887		100	100
240-10552-L-17-C MSD	04/27/2012 12:40	41887		100	100
240-10670-2	04/27/2012 12:40	41887		100	100
240-10670-2	04/27/2012 12:40	41887		100	100
240-10670-3	04/27/2012 12:40	41887		100	100
240-10670-3	04/27/2012 12:40	41887		100	100
240-10670-4	04/27/2012 12:40	41887		100	100
240-10670-4	04/27/2012 12:40	41887		100	100

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-41887/1-A

Instrument Code: H4 Batch No.: 42155

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.179	J		7470A

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-10552-L-17-B MS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.938		0.20	U	1.00	94	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-10552-L-17-C MSD

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.924	1.00	92	69-134	2	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-41887/2-A

Lab Name: TestAmerica Canton Job No.: 240-10670-1

Sample Matrix: Water LCS Source: MTHGICVW_00284

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.54		91	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-41956/1-A	04/27/2012 13:42	41956		50	50
LCS 240-41956/3-A	04/27/2012 13:42	41956		50	50
240-10623-K-4-E MS	04/27/2012 13:42	41956		50	50
240-10623-K-4-F MSD	04/27/2012 13:42	41956		50	50
240-10670-2	04/27/2012 13:42	41956		50	50
240-10670-2	04/27/2012 13:42	41956		50	50
240-10670-3	04/27/2012 13:42	41956		50	50
240-10670-3	04/27/2012 13:42	41956		50	50
240-10670-4	04/27/2012 13:42	41956		50	50
240-10670-4	04/27/2012 13:42	41956		50	50

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-41956/1-A

Instrument Code: I8 Batch No.: 42093

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	1.21	J		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	2.0	U		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	0.904	J		6020
7439-92-1	Lead	0.350	J		6020
7439-98-7	Molybdenum	10	U		6020
7440-02-0	Nickel	2.0	U		6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	0.336	J		6020
7440-28-0	Thallium	0.161	J		6020
7440-62-2	Vanadium	20	U		6020
7440-33-7	Tungsten	10	U		6020
7440-66-6	Zinc	18.0	J		6020

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-10623-K-4-E MS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	104		0.18	J	100	104	44-153		6020
Arsenic	1130		1.9	J	1000	112	82-123		6020
Barium	1170		70		1000	110	45-144		6020
Beryllium	1040		1.0	U	1000	104	77-124		6020
Cadmium	1060		0.14	J	1000	106	78-117		6020
Chromium	1080		0.94	J	1000	108	72-110		6020
Cobalt	1080		0.49	J	1000	108	67-114		6020
Copper	1060		1.1	J	1000	106	60-123		6020
Lead	1130		0.23	J	1000	113	73-115		6020
Molybdenum	110		0.68	J	100	110	80-110		6020
Nickel	1070		0.92	J	1000	107	72-111		6020
Selenium	1130		5.0	U	1000	113	72-148		6020
Silver	104		1.0	U	100	104	10-139		6020
Thallium	290		0.86	J	250	115	69-117		6020
Vanadium	1080		2.9	J	1000	108	70-112		6020
Tungsten	105		0.66	J	100	104	43-133		6020
Zinc	1060		20	U	1000	106	49-156		6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-10623-K-4-F MSD

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	102	100	102	44-153	2	20		6020
Arsenic	1120	1000	112	82-123	1	20		6020
Barium	1150	1000	108	45-144	2	20		6020
Beryllium	1030	1000	103	77-124	1	20		6020
Cadmium	1050	1000	104	78-117	2	20		6020
Chromium	1070	1000	107	72-110	2	20		6020
Cobalt	1060	1000	106	67-114	1	20		6020
Copper	1040	1000	104	60-123	1	20		6020
Lead	1120	1000	112	73-115	1	20		6020
Molybdenum	110	100	110	80-110	0	20		6020
Nickel	1060	1000	105	72-111	2	20		6020
Selenium	1120	1000	112	72-148	1	20		6020
Silver	103	100	103	10-139	1	20		6020
Thallium	287	250	115	69-117	1	20		6020
Vanadium	1070	1000	107	70-112	1	20		6020
Tungsten	104	100	103	43-133	1	20		6020
Zinc	1040	1000	104	49-156	1	20		6020

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-41956/3-A

Lab Name: TestAmerica Canton Job No.: 240-10670-1

Sample Matrix: Water LCS Source: MTICPMSB_00006

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	102		102	80	120		6020
Arsenic	1000	1050		105	80	120		6020
Barium	1000	1060		106	80	120		6020
Beryllium	1000	1140		114	80	120		6020
Cadmium	1000	1060		106	80	120		6020
Chromium	1000	1060		106	80	120		6020
Cobalt	1000	1060		106	80	120		6020
Copper	1000	1110		111	80	120		6020
Lead	1000	1170		117	80	120		6020
Molybdenum	100	102		102	80	120		6020
Nickel	1000	1080		108	80	120		6020
Selenium	1000	1090		109	80	120		6020
Silver	100	109		109	80	120		6020
Thallium	250	290		116	80	120		6020
Vanadium	1000	1030		103	80	120		6020
Tungsten	100	99.5		100	80	120		6020
Zinc	1000	1110		111	80	120		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-10623-K-4-B SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-10670-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.18	J	10	U	NC		6020
Arsenic	1.9	J	2.77	J	NC		6020
Barium	70		70.4		NC	0.570K	6020
Beryllium	1.0	U	5.0	U	NC		6020
Cadmium	0.14	J	5.0	U	NC		6020
Chromium	0.94	J	10	U	NC		6020
Cobalt	0.49	J	0.485	J	NC		6020
Copper	1.1	J	10	U	NC		6020
Lead	0.23	J	5.0	U	NC		6020
Molybdenum	0.68	J	0.555	J	NC		6020
Nickel	0.92	J	10	U	NC		6020
Selenium	5.0	U	25	U	NC		6020
Silver	1.0	U	5.0	U	NC		6020
Thallium	0.86	J	1.92	J	NC		6020
Vanadium	2.9	J	3.48	J	NC		6020
Tungsten	0.66	J	50	U	NC		6020
Zinc	20	U	100	U	NC		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/28/2012 10:06 End Date: 04/28/2012 15:00

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-41879/1-A			10:06	X																				
IC 240-41879/2-A			10:08	X																				
IC 240-41879/3-A			10:10	X																				
IC 240-41879/4-A			10:13	X																				
IC 240-41879/5-A			10:15	X																				
IC 240-41879/6-A			10:17	X																				
ICV 240-41879/7-A	1		10:19	X																				
ICB 240-41879/8-A	1		10:22	X																				
CRA 240-41879/9-A	1		10:24	X																				
CCVL 240-41879/10-A	1		10:26	X																				
CCB 240-41879/11-A			10:28																					
ZZZZZZ			10:30																					
ZZZZZZ			10:32																					
ZZZZZZ			10:34																					
ZZZZZZ			10:36																					
ZZZZZZ			10:38																					
ZZZZZZ			10:40																					
ZZZZZZ			10:42																					
ZZZZZZ			10:44																					
ZZZZZZ			10:46																					
ZZZZZZ			10:49																					
CCV 240-41879/12-A			10:52																					
CCB 240-41879/11-A			10:55																					
ZZZZZZ			10:57																					
ZZZZZZ			10:59																					
ZZZZZZ			11:01																					
ZZZZZZ			11:03																					
ZZZZZZ			11:05																					
ZZZZZZ			11:07																					
ZZZZZZ			11:08																					
ZZZZZZ			11:11																					
ZZZZZZ			11:13																					
ZZZZZZ			11:15																					
CCV 240-41879/12-A			11:17																					
CCB 240-41879/11-A			11:19																					
ZZZZZZ			11:22																					
ZZZZZZ			11:24																					
ZZZZZZ			11:26																					
ZZZZZZ			11:28																					
CCV 240-41879/12-A			11:31																					
CCB 240-41879/11-A			11:33																					
ZZZZZZ			11:35																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/28/2012 10:06 End Date: 04/28/2012 15:00

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			11:37																				
ZZZZZZ			11:38																				
ZZZZZZ			11:40																				
ZZZZZZ			11:44																				
ZZZZZZ			11:45																				
ZZZZZZ			11:48																				
ZZZZZZ			11:49																				
ZZZZZZ			11:51																				
ZZZZZZ			11:53																				
CCV 240-41879/12-A			11:55																				
CCB 240-41879/11-A			11:59																				
ZZZZZZ			12:01																				
ZZZZZZ			12:03																				
ZZZZZZ			12:05																				
ZZZZZZ			12:06																				
ZZZZZZ			12:08																				
ZZZZZZ			12:11																				
ZZZZZZ			12:13																				
ZZZZZZ			12:15																				
ZZZZZZ			12:16																				
ZZZZZZ			12:18																				
CCV 240-41879/12-A			12:20																				
CCB 240-41879/11-A			12:22																				
ZZZZZZ			12:24																				
ZZZZZZ			12:26																				
ZZZZZZ			12:28																				
ZZZZZZ			12:30																				
ZZZZZZ			12:32																				
ZZZZZZ			12:34																				
ZZZZZZ			12:36																				
ZZZZZZ			12:37																				
ZZZZZZ			12:39																				
ZZZZZZ			12:41																				
CCV 240-41879/12-A	1		12:43	X																			
CCB 240-41879/11-A	1		12:45	X																			
ZZZZZZ			12:47																				
ZZZZZZ			12:50																				
ZZZZZZ			12:52																				
ZZZZZZ			12:54																				
MB 240-41887/1-A	1	T	12:56	X																			
LCS 240-41887/2-A	1	T	12:58	X																			
ZZZZZZ			13:00																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/28/2012 10:06 End Date: 04/28/2012 15:00

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			13:03																				
ZZZZZZ			13:05																				
ZZZZZZ			13:07																				
CCV 240-41879/12-A	1		13:09	X																			
CCB 240-41879/11-A	1		13:11	X																			
240-10552-L-17-B MS	1	T	13:13	X																			
240-10552-L-17-C MSD	1	T	13:15	X																			
ZZZZZZ			13:17																				
ZZZZZZ			13:19																				
ZZZZZZ			13:21																				
ZZZZZZ			13:23																				
ZZZZZZ			13:25																				
ZZZZZZ			13:27																				
ZZZZZZ			13:29																				
ZZZZZZ			13:31																				
CCV 240-41879/12-A	1		13:33	X																			
CCB 240-41879/11-A	1		13:35	X																			
ZZZZZZ			13:37																				
ZZZZZZ			13:39																				
ZZZZZZ			13:41																				
ZZZZZZ			13:42																				
240-10670-2	1	T	13:44	X																			
240-10670-2	1	D	13:47	X																			
240-10670-3	1	T	13:49	X																			
240-10670-3	1	D	13:51	X																			
240-10670-4	1	T	13:53	X																			
240-10670-4	1	D	13:55	X																			
CCV 240-41879/12-A	1		13:57	X																			
CCB 240-41879/11-A	1		13:59	X																			
ZZZZZZ			14:00																				
ZZZZZZ			14:03																				
ZZZZZZ			14:05																				
ZZZZZZ			14:07																				
ZZZZZZ			14:09																				
ZZZZZZ			14:11																				
ZZZZZZ			14:13																				
ZZZZZZ			14:15																				
ZZZZZZ			14:17																				
ZZZZZZ			14:19																				
CCV 240-41879/12-A			14:22																				
CCB 240-41879/11-A			14:24																				
ZZZZZZ			14:26																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 04/28/2012 10:06 End Date: 04/28/2012 15:00

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			14:28																				
ZZZZZZ			14:29																				
ZZZZZZ			14:32																				
ZZZZZZ			14:34																				
ZZZZZZ			14:36																				
ZZZZZZ			14:38																				
ZZZZZZ			14:40																				
ZZZZZZ			14:42																				
ZZZZZZ			14:44																				
CCV 240-41879/12-A			14:46																				
CCB 240-41879/11-A			14:48																				
ZZZZZZ			14:50																				
ZZZZZZ			14:52																				
ZZZZZZ			14:54																				
ZZZZZZ			14:56																				
CCV 240-41879/12-A			14:58																				
CCB 240-41879/11-A			15:00																				

Prep Types

D = Dissolved

T = Total/NA

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

ICV Source: MTHGICVW_00284 Concentration Units: ug/L

CCV Source: MTHGCALW_00185

Analyte	ICV 240-41879/7-A 04/28/2012 10:19				CCVL 240-41879/10-A 04/28/2012 10:26				CCV 240-41879/12-A 04/28/2012 12:43			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.40		2.50	96	5.07		5.00	101	5.12		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

ICV Source: MTHGICVW_00284 Concentration Units: ug/L

CCV Source: MTHGCALW_00185

Analyte	CCV 240-41879/12-A 04/28/2012 13:09				CCV 240-41879/12-A 04/28/2012 13:33				CCV 240-41879/12-A 04/28/2012 13:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.15		5.00	103	5.15		5.00	103	5.14		5.00	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Method: 7470A Instrument ID: H4

Lab Sample ID: CRA 240-41879/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00185

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.215		107	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-41879/8-A 04/28/2012 10:22		CCB 240-41879/11-A 04/28/2012 12:45		CCB 240-41879/11-A 04/28/2012 13:11		CCB 240-41879/11-A 04/28/2012 13:35	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-41879/11-A 04/28/2012 13:59							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ICIS 240-42093/1			08:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD2 240-42093/2 IC	1		08:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD3 240-42093/3 IC	1		08:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD4 240-42093/4 IC	1		08:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICV 240-42093/5	1		08:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB 240-42093/6	1		08:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CRI 240-42093/7	1		08:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CRI 240-42093/8			08:48																				
ICSA 240-42093/9	1		08:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB 240-42093/10	1		08:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-42093/11			09:06																				
CCB 240-42093/12			09:13																				
ZZZZZZ			09:19																				
ZZZZZZ			09:24																				
ZZZZZZ			09:31																				
ZZZZZZ			09:37																				
ZZZZZZ			09:42																				
ZZZZZZ			09:49																				
ZZZZZZ			09:56																				
ZZZZZZ			10:02																				
ZZZZZZ			10:09																				
ZZZZZZ			10:16																				
CCV 240-42093/23			10:21																				
CCB 240-42093/24			10:28																				
ZZZZZZ			10:34																				
ZZZZZZ			10:39																				
ZZZZZZ			10:44																				
ZZZZZZ			10:50																				
ZZZZZZ			10:55																				
ZZZZZZ			11:00																				
ZZZZZZ			11:06																				
ZZZZZZ			11:11																				
CRI 240-42093/33			11:17																				
CCV 240-42093/34			11:22																				
CCB 240-42093/35			11:29																				
ZZZZZZ			11:35																				
ZZZZZZ			11:40																				
ZZZZZZ			11:46																				
ZZZZZZ			11:51																				
ZZZZZZ			11:56																				
ZZZZZZ			12:02																				
ZZZZZZ			12:07																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			12:13																				
ZZZZZZ			12:18																				
ZZZZZZ			12:23																				
CCV 240-42093/46			12:29																				
CCB 240-42093/47			12:36																				
ZZZZZZ			12:41																				
ZZZZZZ			12:47																				
ZZZZZZ			12:52																				
ZZZZZZ			12:58																				
ZZZZZZ			13:03																				
ZZZZZZ			13:10																				
ZZZZZZ			13:16																				
ZZZZZZ			13:21																				
ZZZZZZ			13:28																				
ZZZZZZ			13:35																				
CCV 240-42093/58			13:41																				
CCB 240-42093/59			13:48																				
ZZZZZZ			13:53																				
ZZZZZZ			14:00																				
ZZZZZZ			14:07																				
ZZZZZZ			14:13																				
ZZZZZZ			14:18																				
ZZZZZZ			14:24																				
ZZZZZZ			14:29																				
ZZZZZZ			14:35																				
ZZZZZZ			14:40																				
ZZZZZZ			14:46																				
CCV 240-42093/70			14:51																				
CCB 240-42093/71			14:58																				
ZZZZZZ			15:04																				
ZZZZZZ			15:09																				
ZZZZZZ			15:14																				
ZZZZZZ			15:20																				
ZZZZZZ			15:25																				
ZZZZZZ			15:31																				
ZZZZZZ			15:36																				
ZZZZZZ			15:41																				
ZZZZZZ			15:47																				
ZZZZZZ			15:52																				
CCV 240-42093/82	1		15:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB 240-42093/83	1		16:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
MB 240-41956/1-A	1	R	16:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
LCS 240-41956/3-A	1	R	16:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			16:23																				
240-10623-K-4-B SD ^5	5	R	16:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10623-K-4-E MS	1	R	16:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10623-K-4-F MSD	1	R	16:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			16:48																				
ZZZZZZ			16:54																				
ZZZZZZ			16:59																				
ZZZZZZ			17:04																				
CCV 240-42093/94	1		17:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42093/95	1		17:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			17:22																				
ZZZZZZ			17:28																				
ZZZZZZ			17:33																				
ZZZZZZ			17:39																				
240-10670-2	1	R	17:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10670-2	1	D	17:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10670-3	1	R	17:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10670-3	1	D	18:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10670-4	1	R	18:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10670-4	1	D	18:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-42093/106	1		18:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42093/107	1		18:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			18:29																				
ZZZZZZ			18:35																				
ZZZZZZ			18:42																				
ZZZZZZ			18:47																				
ZZZZZZ			18:53																				
ZZZZZZ			18:58																				
ZZZZZZ			19:05																				
ZZZZZZ			19:12																				
ZZZZZZ			19:18																				
ZZZZZZ			19:23																				
CCV 240-42093/118			19:29																				
CCB 240-42093/119			19:36																				
ICSA 240-42093/120			19:41																				
ICSAB 240-42093/121			19:47																				
CCV 240-42093/122			19:54																				
CCB 240-42093/123			20:01																				
ZZZZZZ			20:07																				
ZZZZZZ			20:12																				
ZZZZZZ			20:18																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			20:23																				
ZZZZZZ			20:28																				
ZZZZZZ			20:34																				
ZZZZZZ			20:39																				
ZZZZZZ			20:45																				
ZZZZZZ			20:50																				
ZZZZZZ			20:56																				
CCV 240-42093/134			21:01																				
CCB 240-42093/135			21:08																				
ZZZZZZ			21:14																				
ZZZZZZ			21:19																				
ZZZZZZ			21:25																				
ZZZZZZ			21:30																				
ZZZZZZ			21:36																				
ZZZZZZ			21:41																				
ZZZZZZ			21:48																				
ZZZZZZ			21:54																				
ZZZZZZ			21:59																				
ZZZZZZ			22:06																				
CCV 240-42093/146			22:14																				
CCB 240-42093/147			22:21																				
ZZZZZZ			22:26																				
ZZZZZZ			22:32																				
ZZZZZZ			22:37																				
ZZZZZZ			22:43																				
ZZZZZZ			22:48																				
ZZZZZZ			22:53																				
ZZZZZZ			22:59																				
ZZZZZZ			23:04																				
ZZZZZZ			23:10																				
ZZZZZZ			23:15																				
CCV 240-42093/158			23:21																				
CCB 240-42093/159			23:28																				
ZZZZZZ			23:34																				
ZZZZZZ			23:39																				
ZZZZZZ			23:44																				
ZZZZZZ			23:50																				
ZZZZZZ			23:55																				
ZZZZZZ			00:01																				
ZZZZZZ			00:06																				
ZZZZZZ			00:12																				
ZZZZZZ			00:17																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 04/28/2012 08:05 End Date: 04/29/2012 03:22

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			00:23																					
CCV 240-42093/170			00:28																					
CCB 240-42093/171			00:35																					
ZZZZZZ			00:40																					
ZZZZZZ			00:48																					
ZZZZZZ			00:53																					
ZZZZZZ			01:00																					
ZZZZZZ			01:07																					
ZZZZZZ			01:13																					
ZZZZZZ			01:18																					
ZZZZZZ			01:24																					
ZZZZZZ			01:29																					
ZZZZZZ			01:35																					
CCV 240-42093/182			01:40																					
CCB 240-42093/183			01:47																					
ZZZZZZ			01:53																					
ZZZZZZ			01:58																					
ZZZZZZ			02:03																					
ZZZZZZ			02:09																					
ZZZZZZ			02:14																					
ZZZZZZ			02:20																					
ZZZZZZ			02:25																					
ZZZZZZ			02:31																					
ZZZZZZ			02:36																					
ZZZZZZ			02:42																					
CCV 240-42093/194			02:47																					
CCB 240-42093/195			02:54																					
ZZZZZZ			02:59																					
ZZZZZZ			03:04																					
ZZZZZZ			03:10																					
CCV 240-42093/199			03:15																					
CCB 240-42093/200			03:22																					

Prep Types
D = Dissolved
R = Total Recoverable

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

ICV Source: MTMSICVW_00014 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00039

Analyte	ICV 240-42093/5 04/28/2012 08:30				CCV 240-42093/82 04/28/2012 15:58				CCV 240-42093/94 04/28/2012 17:10			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	82.3		80.0	103	98.9		100	99	99.6		100	100
Arsenic	81.8		80.0	102	103		100	103	104		100	104
Barium	81.1		80.0	101	100		100	100	101		100	101
Beryllium	79.4		80.0	99	105		100	105	102		100	102
Cadmium	82.4		80.0	103	102		100	102	103		100	103
Chromium	80.8		80.0	101	102		100	102	103		100	103
Cobalt	81.5		80.0	102	102		100	102	103		100	103
Copper	83.5		80.0	104	106		100	106	106		100	106
Lead	83.1		80.0	104	104		100	104	105		100	105
Molybdenum	82.6		80.0	103	104		100	104	105		100	105
Nickel	82.9		80.0	104	103		100	103	104		100	104
Selenium	82.2		80.0	103	105		100	105	105		100	105
Silver	83.9		80.0	105	104		100	104	104		100	104
Thallium	81.6		80.0	102	104		100	104	106		100	106
Tungsten	81.3		80.0	102	103		100	103	104		100	104
Vanadium	80.6		80.0	101	101		100	101	102		100	102
Zinc	83.5		80.0	104	105		100	105	105		100	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

ICV Source: MTMSICVW_00014 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00039

Analyte	CCV 240-42093/106 04/28/2012 18:17											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	99.6		100	100								
Arsenic	104		100	104								
Barium	101		100	101								
Beryllium	103		100	103								
Cadmium	102		100	102								
Chromium	103		100	103								
Cobalt	103		100	103								
Copper	105		100	105								
Lead	105		100	105								
Molybdenum	104		100	104								
Nickel	103		100	103								
Selenium	106		100	106								
Silver	103		100	103								
Thallium	105		100	105								
Tungsten	104		100	104								
Vanadium	103		100	103								
Zinc	105		100	105								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Method: 6020 Instrument ID: I8

Lab Sample ID: CRI 240-42093/7 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRIW_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.07		104	50-150
Arsenic	2.00	2.23	J	112	50-150
Barium	1.00	1.03	J	103	50-150
Beryllium	1.00	1.04		104	50-150
Cadmium	0.500	0.551	J	110	50-150
Chromium	2.00	1.85	J	93	50-150
Cobalt	1.00	1.04		104	50-150
Copper	2.00	2.47		124	50-150
Lead	1.00	1.10		110	50-150
Molybdenum	10.0	10.1		101	50-150
Nickel	2.00	2.85		143	50-150
Selenium	2.00	1.93	J	97	50-150
Silver	0.500	0.599	J	120	50-150
Thallium	1.00	1.25	J	125	50-150
Vanadium	5.00	5.04	J	101	50-150
Tungsten	10.0	9.61	J	96	50-150
Zinc	10.0	9.76	J	98	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-42093/6 04/28/2012 08:37		CCB 240-42093/83 04/28/2012 16:05		CCB 240-42093/95 04/28/2012 17:17		CCB 240-42093/107 04/28/2012 18:24	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Molybdenum	10	0.453	J	0.289	J	0.295	J	0.321	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	2.0	0.475	J	0.454	J	0.585	J	0.441	J
Tungsten	10	0.681	J	0.391	J	0.425	J	10	U
Vanadium	20	20	U	20	U	20	U	20	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICSA 240-42093/9 Instrument ID: I8

Lab File ID: I8042812A.csv ICS Source: MTMSICSAW_00014

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.170**	
Arsenic		**0.431**	
Barium		**0.184**	
Beryllium		**0.0370**	
Cadmium		**-0.527**	
Chromium		**0.373**	
Cobalt		**0.0960**	
Copper		**0.485**	
Lead		**0.0670**	
Molybdenum	**1000**	**1042**	**104**
Nickel		**0.710**	
Selenium		**-0.199**	
Silver		**0.0400**	
Thallium		**0.0950**	
Tungsten		**0.145**	
Vanadium		**0.0690**	
Zinc		**4.99**	
Aluminum	*50000*	*51080*	*102*
Boron		*0.169*	
Calcium	*50000*	*51270*	*103*
Iron	*50000*	*52480*	*105*
Magnesium	*50000*	*51630*	*103*
Manganese		*0.552*	
Potassium	*50000*	*51090*	*102*
Sodium	*50000*	*51920*	*104*
Strontium		*0.338*	
Tin		*0.0850*	
Titanium	*1000*	*1073*	*107*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

Lab Sample ID: ICSAB 240-42093/10 Instrument ID: I8

Lab File ID: I8042812A.csv ICS Source: MTMSICSABW_00014

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Antimony	**100**	**102**	**102**
Arsenic	**100**	**102**	**102**
Barium	**100**	**104**	**104**
Beryllium	**100**	**93.8**	**94**
Cadmium	**100**	**102**	**102**
Chromium	**100**	**110**	**110**
Cobalt	**100**	**103**	**103**
Copper	**100**	**103**	**103**
Lead	**100**	**110**	**110**
Molybdenum	**1100**	**1163**	**106**
Nickel	**100**	**107**	**107**
Selenium	**100**	**105**	**105**
Silver	**100**	**104**	**104**
Thallium	**100**	**108**	**108**
Tungsten	**100**	**103**	**103**
Vanadium	**100**	**103**	**103**
Zinc	**100**	**106**	**106**
Aluminum	*50000*	*50810*	*102*
Boron	*100*	*90.9*	*91*
Calcium	*50000*	*51580*	*103*
Iron	*50000*	*52740*	*105*
Magnesium	*50000*	*51780*	*104*
Manganese	*100*	*105*	*105*
Potassium	*50000*	*50640*	*101*
Sodium	*50000*	*51680*	*103*
Strontium	*100*	*97.6*	*98*
Tin	*100*	*101*	*101*
Titanium	*1100*	*1153*	*105*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 04/28/2012 End Date: 04/28/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
STD2 240-42093/2 IC	08:11	78		88		93		91		93	
STD3 240-42093/3 IC	08:18	72		82		86		83		87	
STD4 240-42093/4 IC	08:25	92		99		99		99		98	
ICV 240-42093/5	08:30	79		89		92		90		92	
ICB 240-42093/6	08:37	93		98		99		98		98	
CRI 240-42093/7	08:43	90		97		98		97		97	
ICSA 240-42093/9	08:53	66		78		79		80		84	
ICSAB 240-42093/10	08:59	57		69		74		76		81	
CCV 240-42093/82	15:58	70		69		74		70		73	
CCB 240-42093/83	16:05	92		80		81		80		80	
MB 240-41956/1-A	16:10	90		81		82		80		81	
LCS 240-41956/3-A	16:16	84		77		80		78		79	
240-10623-K-4-B SD	16:28	81		73		77		73		75	
240-10623-K-4-E MS	16:34	61		67		69		65		70	
240-10623-K-4-F MSD	16:41	62		67		69		65		70	
CCV 240-42093/94	17:10	69		70		73		70		72	
CCB 240-42093/95	17:17	89		79		81		79		79	
240-10670-2	17:44	74		72		74		73		74	
240-10670-2	17:49	72		70		73		72		73	
240-10670-3	17:55	71		71		74		73		74	
240-10670-3	18:00	69		69		73		72		74	
240-10670-4	18:06	74		71		75		75		76	
240-10670-4	18:11	73		70		74		73		75	
CCV 240-42093/106	18:17	65		66		70		68		70	
CCB 240-42093/107	18:24	88		76		78		77		78	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-10670-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 04/28/2012 End Date: 04/28/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD2 240-42093/2 IC	08:11			96							
STD3 240-42093/3 IC	08:18			91							
STD4 240-42093/4 IC	08:25			99							
ICV 240-42093/5	08:30			95							
ICB 240-42093/6	08:37			98							
CRI 240-42093/7	08:43			97							
ICSA 240-42093/9	08:53			86							
ICSAB 240-42093/10	08:59			85							
CCV 240-42093/82	15:58			76							
CCB 240-42093/83	16:05			81							
MB 240-41956/1-A	16:10			81							
LCS 240-41956/3-A	16:16			81							
240-10623-K-4-B SD	16:28			78							
240-10623-K-4-E MS	16:34			75							
240-10623-K-4-F MSD	16:41			75							
CCV 240-42093/94	17:10			76							
CCB 240-42093/95	17:17			80							
240-10670-2	17:44			79							
240-10670-2	17:49			78							
240-10670-3	17:55			78							
240-10670-3	18:00			78							
240-10670-4	18:06			79							
240-10670-4	18:11			78							
CCV 240-42093/106	18:17			74							
CCB 240-42093/107	18:24			78							

Tetra Tech, Inc. **INTERNAL CORRESPONDENCE**

TO: **A. APANAVAGE** **DATE:** **JUNE 21, 2012**

FROM: **MICHELLE L. ALLEN** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC/1,4-DIOXANE/DRO/GRO**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
SDG 240-10808-1

SAMPLES: 4/Aqueous/VOC

GSP-MW5-043012 GSP-MW6-043012 MT-MW02S-043012
TB-043012

3/Aqueous/1,4-DIOXANE/DRO/GRO

GSP-MW5-043012 GSP-MW6-043012 MT-MW02S-043012

Overview

The sample set for LMC-MSA, SDG 240-10808-1 consisted of three (3) aqueous environmental samples and one (1) trip blank. All four (4) aqueous samples were analyzed for volatile organic compounds (VOC). The three (3) aqueous environmental samples were analyzed for the semi-volatile organic compound (SVOC), 1,4-dioxane, diesel range organics (DRO) and gasoline range organics (GRO). No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on April 30, 2012 and analyzed by Test America, Inc. All analyses were conducted in accordance with SW-846 Methods 8260C, 8270C, and 8015B analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, trip blank results, surrogate spike recoveries, blank spike results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- The initial and continuing calibrations performed on instrument A3UX16 in the VOC fraction had Relative Response Factors (RRFs) for tert-butyl alcohol and vinyl acetate below the 0.050 minimum response criterion. All samples were affected. The non-detected results reported for these compounds in the affected samples were qualified as rejected, (UR).

- Tentatively identified compounds (TICs) identified as silanol compounds were qualified as rejected (R), because these are indicative of column bleed.

Minor

- The following contaminants were detected in the laboratory method blanks at the following

maximum concentrations:

Compound	Maximum Concentration (µg/L)	Action Level (µg/L)
1,2,3-Trichlorobenzene [(1)]	0.372	1.86
1,2,4-Trichlorobenzene [(1)]	0.247	1.24
Hexachlorobutadiene [(1)]	0.462	2.31
GRO (C6-C10) [(2)]	28	140

[1] Maximum concentration detected in the laboratory method blank, MB 240-43549/5, affecting all samples.
[2] Maximum concentration detected in the laboratory method blank, MB 240-42995/7, affecting all samples.

An action level of 5X the maximum concentration was used to evaluate for blank contamination. Sample aliquot and dilution factor, if applicable, were taken into consideration when evaluating for blank contamination. Positive results for GRO reported below the established action level were qualified as non-detected, (B). No action was necessary for the remaining compounds because no positive results were reported for these compounds in the affected samples.

- Positive results reported below the Reporting Limit (RL) limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).
- Tentatively identified compounds (TICs) were qualified as estimated presumptively present, (NJ).

Notes

The VOC compounds, 2-chloroethyl vinyl ether and 2-butanone, were not recovered in the Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses. No action was taken because the sample for the MS/MSD analyses was not from this SDG and the blank spike sample had acceptable %Rs for these compounds.

Sample MT-MW02S-043012 was diluted 5X prior to analysis in the VOC fraction. The RLs of the non-detected results were elevated.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: Initial and continuing calibration RRFs for tert-butyl alcohol and vinyl acetate were below the quality control criterion resulting in the rejection of the non-detected results. Laboratory method blank contamination was noted in the VOC and GRO fractions.

Other Factors Affecting Data Quality: One sample required a dilution for the VOC fraction.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994) and SW-846 Methods 8260C, 8270C, and 8015B analytical and reporting protocols. The text of this report has been formulated to address only those problem areas affecting data quality.

for

Tetra Tech, Inc.
Michelle L. Allen
Chemist/Data Validator

Tetra Tech, Inc.
Joseph A. Samchuck
Quality Assurance Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	GSP-MW5-043012			GSP-MW6-043012			MT-MW02S-043012			TB-043012		
SDG: 240-10808-1	LAB_ID	240-10808-2			240-10808-3			240-10808-4			240-10808-1		
FRACTION: OV	SAMP_DATE	4/30/2012			4/30/2012			4/30/2012			4/30/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		1.2	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		1.1	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.9	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		1.4	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.75	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.95	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.65	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.85	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		2.2	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		2.4	J	P	0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.75	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		9.2			0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		3.4	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		1.2	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.65	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		3.8	J	P	0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.9	U		0.18	U	
1,3,5-TRIMETHYLBENZENE								47					
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.7	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.8	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.65	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.65	U		0.13	U	
2,4-PENTANEDIONE, 3-METHYL-								7.8	NJ	Z1			
2-BUTANONE		0.57	U		0.57	U		2.9	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		5	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.55	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		2.1	U		0.41	U	
3-PENTANOL, 2,2-DIMETHYL-								6.5	NJ	Z1			
3-PENTANONE, 2,4-DIMETHYL-								12	NJ	Z1			
4-CHLOROTOLUENE		0.18	U		0.18	U		0.9	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		1.6	J	P	0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		2.5	J	P	0.32	U	
ACETONE		1.1	U		1.1	U		90			1.1	U	
BENZENE		0.13	U		0.13	U		87			0.13	U	
BENZENE, 1-ETHYL-2-METHYL-								7.3	NJ	Z1			

PROJ_NO: 04021	NSAMPLE	GSP-MW5-043012			GSP-MW6-043012			MT-MW02S-043012			TB-043012		
SDG: 240-10808-1	LAB_ID	240-10808-2			240-10808-3			240-10808-4			240-10808-1		
FRACTION: OV	SAMP_DATE	4/30/2012			4/30/2012			4/30/2012			4/30/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZENE, 1-ETHYL-3-METHYL-							10	NJ	Z1			
BROMOBENZENE	0.13	U		0.13	U		0.65	U		0.13	U	
BROMOCHLOROMETHANE	0.29	U		0.29	U		1.5	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.15	U		0.75	U		0.15	U	
BROMOFORM	0.64	U		0.64	U		3.2	U		0.64	U	
BROMOMETHANE	0.41	U		0.41	U		2.1	U		0.41	U	
CARBON DISULFIDE	0.13	J	P	0.13	U		0.65	U		0.13	U	
CARBON TETRACHLORIDE	1.9			0.13	U		0.65	U		0.13	U	
CHLOROBENZENE	0.15	U		0.15	U		0.75	U		0.15	U	
CHLORODIBROMOMETHANE	0.18	U		0.18	U		0.9	U		0.18	U	
CHLOROETHANE	0.29	U		0.29	U		1.5	U		0.29	U	
CHLOROFORM	0.68	J	P	0.16	U		0.8	U		0.16	U	
CHLOROMETHANE	0.3	U		0.3	U		1.5	U		0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U		0.17	U		4.8	J	P	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U		0.14	U		0.7	U		0.14	U	
CYCLOBUTANE, METHYL-							9.8	NJ	Z1			
CYCLOHEXANE							45					
CYCLOPENTANE, METHYL-							19	NJ	Z1			
DIBROMOMETHANE	0.28	U		0.28	U		1.4	U		0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U		0.31	U		1.6	U		0.31	U	
DIISOPROPYL ETHER	1.5	U		1.5	U		7.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U		0.11	U		0.55	U		0.11	U	
ETHYLBENZENE	0.17	U		0.17	U		180			0.17	U	
HEXACHLOROBUTADIENE	0.3	U		0.3	U		1.5	U		0.3	U	
INDANE							8.1	NJ	Z1			
ISOPROPYLBENZENE	0.13	U		0.13	U		31			0.13	U	
M+P-XYLENES	0.24	U		0.24	U		50			0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U		0.17	U		0.85	U		0.17	U	
METHYLENE CHLORIDE	0.33	U		0.33	U		1.7	U		0.33	U	
NAPHTHALENE	0.24	U		0.24	U		1.2	U		0.24	U	
N-BUTYLBENZENE	0.12	U		0.12	U		0.6	U		0.12	U	
N-PROPYLBENZENE	0.14	U		0.14	U		9.7			0.14	U	
O-XYLENE	0.14	U		0.14	U		22			0.14	U	
SEC-BUTYLBENZENE	0.13	U		0.13	U		0.75	J	P	0.13	U	
SILANOL, TRIMETHYL-	3.5	R	Z2	1.2	R	Z2				2.1	R	Z2

PROJ_NO: 04021	NSAMPLE	GSP-MW5-043012			GSP-MW6-043012			MT-MW02S-043012			TB-043012		
SDG: 240-10808-1	LAB_ID	240-10808-2			240-10808-3			240-10808-4			240-10808-1		
FRACTION: OV	SAMP_DATE	4/30/2012			4/30/2012			4/30/2012			4/30/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
STYRENE		0.11	U		0.11	U		0.55	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.34	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.65	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C	20	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		1.5	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.65	U		0.13	U	
TOTAL XYLENES		0.28	U		0.28	U		72			0.28	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.95	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.95	U		0.19	U	
TRICHLOROETHENE		0.17	U		0.17	U		0.85	U		0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		1.1	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.95	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		1.1	U		0.22	U	

PROJ_NO: 04021	NSAMPLE	GSP-MW5-043012			GSP-MW6-043012			MT-MW02S-043012		
SDG: 240-10808-1	LAB_ID	240-10808-2			240-10808-3			240-10808-4		
FRACTION: OS	SAMP_DATE	4/30/2012			4/30/2012			4/30/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,4-DIOXANE		0.47	U		0.47	U		0.49	U	

PROJ_NO: 04021	NSAMPLE	GSP-MW5-043012			GSP-MW6-043012			MT-MW02S-043012		
SDG: 240-10808-1	LAB_ID	240-10808-2			240-10808-3			240-10808-4		
FRACTION: PET	SAMP_DATE	4/30/2012			4/30/2012			4/30/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		37	B	A	41	B	A	1400		
TPH (C10-C32)		1200			490			3700		

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW5-043012 | Lab Sample ID: 240-10808-2

Matrix: Water | Lab File ID: UXM5697.D

Analysis Method: 8260C | Date Collected: 04/30/2012 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 12:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.13	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.9		1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW5-043012 | Lab Sample ID: 240-10808-2

Matrix: Water | Lab File ID: UXM5697.D

Analysis Method: 8260C | Date Collected: 04/30/2012 10:30

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 12:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.68	J	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW5-043012 Lab Sample ID: 240-10808-2

Matrix: Water Lab File ID: UXM5697.D

Analysis Method: 8260C Date Collected: 04/30/2012 10:30

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 12:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		63-129
460-00-4	4-Bromofluorobenzene (Surr)	98		66-117
2037-26-5	Toluene-d8 (Surr)	95		74-115
1868-53-7	Dibromofluoromethane (Surr)	102		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW5-043012 Lab Sample ID: 240-10808-2

Matrix: Water Lab File ID: UXM5697.D

Analysis Method: 8260C Date Collected: 04/30/2012 10:30

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 12:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

Number TICs Found: 1 TIC Result Total: 3.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.60	3.5	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW6-043012 | Lab Sample ID: 240-10808-3

Matrix: Water | Lab File ID: UXM5698.D

Analysis Method: 8260C | Date Collected: 04/30/2012 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 13:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW6-043012 | Lab Sample ID: 240-10808-3

Matrix: Water | Lab File ID: UXM5698.D

Analysis Method: 8260C | Date Collected: 04/30/2012 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 13:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW6-043012 Lab Sample ID: 240-10808-3

Matrix: Water Lab File ID: UXM5698.D

Analysis Method: 8260C Date Collected: 04/30/2012 11:45

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 13:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	100		66-117
2037-26-5	Toluene-d8 (Surr)	98		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW6-043012 | Lab Sample ID: 240-10808-3

Matrix: Water | Lab File ID: UXM5698.D

Analysis Method: 8260C | Date Collected: 04/30/2012 11:45

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 13:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 1.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.60	1.2	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: MT-MW02S-043012 | Lab Sample ID: 240-10808-4

Matrix: Water | Lab File ID: UXM5699.D

Analysis Method: 8260C | Date Collected: 04/30/2012 13:05

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 13:33

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	1.2
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	1.1
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.90
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	5.0	U	5.0	1.4
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.75
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.95
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.65
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.85
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	2.2
526-73-8	1,2,3-Trimethylbenzene	2.4	J	25	0.030
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.75
95-63-6	1,2,4-Trimethylbenzene	9.2		5.0	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	3.4
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.65
107-06-2	1,2-Dichloroethane	3.8	J	5.0	1.1
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.90
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.70
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.80
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.65
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.65
110-75-8	2-Chloroethyl vinyl ether	50	U	50	5.0
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.55
591-78-6	2-Hexanone	50	U	50	2.1
108-86-1	Bromobenzene	5.0	U	5.0	0.65
74-97-5	Bromochloromethane	5.0	U	5.0	1.5
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.90
99-87-6	p-Isopropyltoluene	1.6	J	5.0	0.60
67-64-1	Acetone	90		50	5.5
71-43-2	Benzene	87		5.0	0.65
75-25-2	Bromoform	5.0	U	5.0	3.2
74-83-9	Bromomethane	5.0	U	5.0	2.1
75-15-0	Carbon disulfide	5.0	U	5.0	0.65
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.65
108-90-7	Chlorobenzene	5.0	U	5.0	0.75
75-00-3	Chloroethane	5.0	U	5.0	1.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: MT-MW02S-043012 | Lab Sample ID: 240-10808-4

Matrix: Water | Lab File ID: UXM5699.D

Analysis Method: 8260C | Date Collected: 04/30/2012 13:05

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 13:33

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	5.0	U	5.0	0.80
74-87-3	Chloromethane	5.0	U	5.0	1.5
156-59-2	cis-1,2-Dichloroethene	4.8	J	5.0	0.85
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.70
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.5
74-95-3	Dibromomethane	5.0	U	5.0	1.4
75-27-4	Bromodichloromethane	5.0	U	5.0	0.75
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	1.6
100-41-4	Ethylbenzene	180		5.0	0.85
106-93-4	1,2-Dibromoethane	5.0	U	5.0	1.2
108-20-3	Diisopropyl ether	50	U	50	7.5
91-20-3	Naphthalene	5.0	U	5.0	1.2
179601-23-1	m-Xylene & p-Xylene	50		10	1.2
104-51-8	n-Butylbenzene	5.0	U	5.0	0.60
98-82-8	Isopropylbenzene	31		5.0	0.65
103-65-1	n-Propylbenzene	9.7		5.0	0.70
78-93-3	2-Butanone	50	U	50	2.9
108-10-1	4-Methyl-2-pentanone	2.5	J	50	1.6
135-98-8	sec-Butylbenzene	0.75	J	5.0	0.65
1634-04-4	Methyl tert-butyl ether	25	U	25	0.85
994-05-8	Tert-amyl-methyl ether (TAME)	25	U	25	0.34
75-09-2	Methylene Chloride	5.0	U	5.0	1.7
95-47-6	o-Xylene	22		5.0	0.70
100-42-5	Styrene	5.0	U	5.0	0.55
637-92-3	Ethyl-t-butyl ether (ETBE)	25	U	25	0.55
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.65
127-18-4	Tetrachloroethene	5.0	U	5.0	1.5
108-88-3	Toluene	5.0	U	5.0	0.65
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.95
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.95
79-01-6	Trichloroethene	5.0	U	5.0	0.85
75-69-4	Trichlorofluoromethane	5.0	U	5.0	1.1
108-05-4	Vinyl acetate	10	U	10	0.95
75-01-4	Vinyl chloride	5.0	U	5.0	1.1
75-65-0	tert-Butyl alcohol	250	U	250	20
1330-20-7	Xylenes, Total	72		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: MT-MW02S-043012 Lab Sample ID: 240-10808-4

Matrix: Water Lab File ID: UXM5699.D

Analysis Method: 8260C Date Collected: 04/30/2012 13:05

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 13:33

Soil Aliquot Vol: Dilution Factor: 5

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	5.0	U	5.0	0.90

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	105		66-117
2037-26-5	Toluene-d8 (Surr)	95		74-115
1868-53-7	Dibromofluoromethane (Surr)	100		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: MT-MW02S-043012 | Lab Sample ID: 240-10808-4

Matrix: Water | Lab File ID: UXM5699.D

Analysis Method: 8260C | Date Collected: 04/30/2012 13:05

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 13:33

Soil Aliquot Vol: | Dilution Factor: 5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

Number TICs Found: 10 | TIC Result Total: 172.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
598-61-8	Cyclobutane, methyl-	3.67	9.8	T J N
96-37-7	Cyclopentane, methyl-	4.63	19	T J N
110-82-7	Cyclohexane	5.22	45	
565-80-0	3-Pentanone, 2,4-dimethyl-	7.67	12	T J N
3970-62-5	3-Pentanol, 2,2-dimethyl-	8.11	6.5	T J N
815-57-6	2,4-Pentanedione, 3-methyl-	8.23	7.8	T J N
620-14-4	Benzene, 1-ethyl-3-methyl-	9.84	10	T J N
108-67-8	1,3,5-Trimethylbenzene	9.92	47	
611-14-3	Benzene, 1-ethyl-2-methyl-	10.13	7.3	T J N
496-11-7	Indane	10.91	8.1	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: TB-043012 | Lab Sample ID: 240-10808-1

Matrix: Water | Lab File ID: UXM5696.D

Analysis Method: 8260C | Date Collected: 04/30/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 12:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: TB-043012 Lab Sample ID: 240-10808-1

Matrix: Water Lab File ID: UXM5696.D

Analysis Method: 8260C Date Collected: 04/30/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 12:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: TB-043012 | Lab Sample ID: 240-10808-1

Matrix: Water | Lab File ID: UXM5696.D

Analysis Method: 8260C | Date Collected: 04/30/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 12:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
2037-26-5	Toluene-d8 (Surr)	96		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: TB-043012 | Lab Sample ID: 240-10808-1

Matrix: Water | Lab File ID: UXM5696.D

Analysis Method: 8260C | Date Collected: 04/30/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 05/10/2012 12:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 43549 | Units: ug/L

Number TICs Found: 1 | TIC Result Total: 2.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q
1066-40-6	Silanol, trimethyl-	4.60	2.1	T J N

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW5-043012 | Lab Sample ID: 240-10808-2

Matrix: Water | Lab File ID: 20508035.D

Analysis Method: 8270C | Date Collected: 04/30/2012 10:30

Extract. Method: 3520C | Date Extracted: 05/05/2012 09:23

Sample wt/vol: 1050(mL) | Date Analyzed: 05/08/2012 19:16

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 43126 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	57		28-110
367-12-4	2-Fluorophenol (Surr)	57		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	82		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	52		27-111
4165-62-2	Phenol-d5 (Surr)	60		10-110
1718-51-0	Terphenyl-d14 (Surr)	66		37-119

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW6-043012 | Lab Sample ID: 240-10808-3

Matrix: Water | Lab File ID: 20508036.D

Analysis Method: 8270C | Date Collected: 04/30/2012 11:45

Extract. Method: 3520C | Date Extracted: 05/05/2012 09:23

Sample wt/vol: 1050(mL) | Date Analyzed: 05/08/2012 19:35

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 43126 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	56		28-110
367-12-4	2-Fluorophenol (Surr)	48		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	84		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	50		27-111
4165-62-2	Phenol-d5 (Surr)	60		10-110
1718-51-0	Terphenyl-d14 (Surr)	64		37-119

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: MT-MW02S-043012 | Lab Sample ID: 240-10808-4

Matrix: Water | Lab File ID: 20508037.D

Analysis Method: 8270C | Date Collected: 04/30/2012 13:05

Extract. Method: 3520C | Date Extracted: 05/05/2012 09:23

Sample wt/vol: 1010(mL) | Date Analyzed: 05/08/2012 19:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 43126 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.99	U	0.99	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	51		28-110
367-12-4	2-Fluorophenol (Surr)	56		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	77		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	64		27-111
4165-62-2	Phenol-d5 (Surr)	64		10-110
1718-51-0	Terphenyl-d14 (Surr)	59		37-119

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW5-043012 Lab Sample ID: 240-10808-2

Matrix: Water Lab File ID: YF050708.D

Analysis Method: 8015B Date Collected: 04/30/2012 10:30

Sample wt/vol: 5(mL) Date Analyzed: 05/07/2012 14:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42995 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	37	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	60		10-150

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW6-043012 Lab Sample ID: 240-10808-3

Matrix: Water Lab File ID: YF050711.D

Analysis Method: 8015B Date Collected: 04/30/2012 11:45

Sample wt/vol: 5(mL) Date Analyzed: 05/07/2012 16:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42995 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	41	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	56		10-150

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: MT-MW02S-043012 | Lab Sample ID: 240-10808-4

Matrix: Water | Lab File ID: YF050712.D

Analysis Method: 8015B | Date Collected: 04/30/2012 13:05

Sample wt/vol: 5(mL) | Date Analyzed: 05/07/2012 17:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 42995 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	1400	B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	94		10-150

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW5-043012 Lab Sample ID: 240-10808-2

Matrix: Water Lab File ID: P5F05075.D

Analysis Method: 8015B Date Collected: 04/30/2012 10:30

Extraction Method: 3510C Date Extracted: 05/04/2012 12:16

Sample wt/vol: 1050(mL) Date Analyzed: 05/07/2012 10:16

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 42964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	1200		480	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	69		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: GSP-MW6-043012 Lab Sample ID: 240-10808-3

Matrix: Water Lab File ID: P5F05076.D

Analysis Method: 8015B Date Collected: 04/30/2012 11:45

Extraction Method: 3510C Date Extracted: 05/04/2012 12:16

Sample wt/vol: 1050(mL) Date Analyzed: 05/07/2012 10:46

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 42964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	490		480	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	67		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: MT-MW02S-043012 | Lab Sample ID: 240-10808-4

Matrix: Water | Lab File ID: P5F05077.D

Analysis Method: 8015B | Date Collected: 04/30/2012 13:05

Extraction Method: 3510C | Date Extracted: 05/04/2012 12:16

Sample wt/vol: 1050(mL) | Date Analyzed: 05/07/2012 11:16

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 42964 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	3700		480	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	57		10-110

Appendix C

Support Documentation

MARTIN STATE AIRPORT - GROUNDWATER
SDG 240-10808-1

SAMPLE IDENTIFICATION	MT-MW02S-043012
COMPOUND	ETHYLBENZENE
COMPOUND AREA	2379121
INTERNAL STANDARD AMOUNT (ng)	50
VOLUME WATER PURGED (ml)	5
DILUTION FACTOR	5
INTERNAL STANDARD AREA	1154735
AVERAGE RRF	0.5579
ml to µl	1000
ng to µg	1000

= 184.6 µg/L

2379121 x 50 ng x 5 x 1000ml x 1µg /1154735 x 0.5579 x 5ml x 1L x 1000ng

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX16\20120510-9837.b\UXM5699.D		
Lims ID:	240-10808-A-4	Client ID:	MT-MW02S-043012
Inject. Date:	10-May-2012 13:33:30	Dil. Factor:	5.0000
Sample Type:	Client		
Sample ID:	240-0009837-009		
Misc. Info.:	M20510A,8260LLUX16,,1644		
Operator:	1644	Instrument ID:	A3UX16
Vol. Injected:	1.0000	ALS Bottle#:	8
Lims Batch ID:	43549	Lims Sample ID:	9
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX16\20120510-9837.b\8260_16.m		
Last Update:	11-May-2012 10:46:30	Calib Date:	09-May-2012 18:43:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX16\20120509-9809.b\UXM5665.D		
Limit Group:	MSV 8260DOD ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-15		
First Level Reviewer: williamsla		Date:	10-May-2012 14:02:51

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 141 1-Chlorooctane	1		0.000					
* 1 Fluorobenzene	96	5.702	5.702	0.0	98	1490431	10.0	
* 2 Chlorobenzene-d5	117	8.393	8.393	0.0	89	1154735	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.635	10.635	0.0	96	657198	10.0	
$ 5 Dibromofluoromethane (Surr)	113	5.109	5.109	0.0	58	384323	10.2	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.405	5.405	0.0	0	477366	10.0	
$ 7 Toluene-d8 (Surr)	98	7.077	7.077	0.0	95	1502646	9.67	
$ 131 4-Bromofluorobenzene (Surr)	95	9.508	9.508	0.0	89	639651	10.7	
12 Dichlorodifluoromethane	85		1.670					
13 Chloromethane	50		1.824					
14 Vinyl chloride	62		1.942					
15 Bromomethane	94		2.286					
16 Chloroethane	64		2.393					
18 Trichlorofluoromethane	101		2.654					
21 1,1-Dichloroethene	96		3.140					
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.164					
22 Acetone	43	3.176	3.176	0.0	99	288453	17.9	
26 Carbon disulfide	76		3.354					
30 Methylene Chloride	84		3.579					
31 2-Methyl-2-propanol	59		3.674					
34 Methyl tert-butyl ether	73		3.840					
33 trans-1,2-Dichloroethene	96		3.840					
36 1,1-Dichloroethane	63		4.207					
37 Vinyl acetate	86		4.243					
38 Isopropyl ether	87	4.267	4.267	0.0	93	10018	0.2422	
40 Tert-butyl ethyl ether	59		4.587					
41 2-Butanone (MEK)	43		4.706					
42 cis-1,2-Dichloroethene	96	4.705	4.706	-0.001	69	49677	0.9550	
43 2,2-Dichloropropane	77		4.717					
47 Chlorobromomethane	128		4.907					
49 Chloroform	83		4.978					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
50 1,1,1-Trichloroethane	97		5.156					
52 1,1-Dichloropropene	75		5.287					
53 Carbon tetrachloride	117		5.298					
56 1,2-Dichloroethane	62	5.476	5.464	0.012	29	48692	0.7646	
55 Benzene	78	5.476	5.476	0.0	97	3022378	17.4	
57 Tert-amyl methyl ether	73		5.559					
60 Trichloroethene	130		6.022					
62 1,2-Dichloropropane	63		6.212					
65 Dibromomethane	93		6.306					
67 Dichlorobromomethane	83		6.437					
69 2-Chloroethyl vinyl ether	63		6.686					
70 cis-1,3-Dichloropropene	75		6.828					
71 4-Methyl-2-pentanone (MIBK)	43	6.947	6.947	0.0	70	21915	0.5062	
72 Toluene	91		7.137					
73 trans-1,3-Dichloropropene	75		7.314					
76 1,3-Dichloropropane	76		7.635					
77 Tetrachloroethene	164		7.646					
78 2-Hexanone	43		7.694					
79 Chlorodibromomethane	129		7.848					
123 Ethylene Dibromide	107		7.967					
82 Chlorobenzene	112		8.429					
83 1,1,1,2-Tetrachloroethane	131		8.488					
84 Ethylbenzene	106	8.524	8.524	0.0	98	2379121	36.9	
10 m-Xylene & p-Xylene	106	8.631	8.631	0.0	97	804959	9.94	
85 o-Xylene	106	9.010	9.010	0.0	98	350770	4.36	
86 Styrene	104		9.010					
87 Bromoform	173		9.188					
88 Isopropylbenzene	105	9.354	9.354	0.0	96	1180910	6.16	
90 1,1,2,2-Tetrachloroethane	83		9.615					
91 Bromobenzene	156		9.662					
92 1,2,3-Trichloropropane	110		9.674					
94 N-Propylbenzene	120	9.757	9.757	0.0	98	97182	1.94	
95 2-Chlorotoluene	126		9.840					
104 4-Chlorotoluene	126		9.947					
97 tert-Butylbenzene	119		10.243					
98 1,2,4-Trimethylbenzene	105	10.291	10.291	0.0	97	291669	1.83	
99 sec-Butylbenzene	105	10.457	10.457	0.0	60	25068	0.1499	
100 1,3-Dichlorobenzene	146		10.575					
101 4-Isopropyltoluene	119	10.599	10.599	0.0	86	44914	0.3130	
102 1,4-Dichlorobenzene	146		10.658					
103 1,2,3-Trimethylbenzene	105	10.706	10.706	0.0	87	95991	0.4898	
105 n-Butylbenzene	91		11.002					
106 1,2-Dichlorobenzene	146		11.026					
107 1,2-Dibromo-3-Chloropropane	157		11.797					
109 1,2,4-Trichlorobenzene	180		12.639					
110 Hexachlorobutadiene	225		12.817					
111 Naphthalene	128	12.888	12.888	0.0	62	19213	0.1981	
112 1,2,3-Trichlorobenzene	180		13.149					
S 114 Xylenes, Total	106				0		14.3	

RRF = 0.5579

TestAmerica Laboratories
Tentatively Identified Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX16\20120510-9837.b\UXM5699.D		
Lims ID:	240-10808-A-4	Client ID:	MT-MW02S-043012
Inject. Date:	10-May-2012 13:33:30	Dil. Factor:	5.0000
Sample Type:	Client		
Sample ID:	240-0009837-009		
Misc. Info.:	M20510A,8260LLUX16,,1644		
Operator:	1644	Instrument ID:	A3UX16
Vol. Injected:	1.0000	ALS Bottle#:	8
Lims Batch ID:	43549	Lims Sample ID:	9
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX16\20120510-9837.b\8260_16.m		
Last Update:	11-May-2012 10:46:30	Calib Date:	09-May-2012 18:43:30
Tic RT Window:	1.600 -0.000	Response:	area
Quant By:	Nearest ISTD	Quant LOD:	10.00000
MS Library:	\\Ncchrom\ChromData\Database\NIST98.L		
Min. Match:	10		
Process Host:	CORP-CTX-15		
First Level Reviewer: williamsla		Date:	10-May-2012 14:02:51

Calibrated Tentative Identified Compound Results

Compound	RT	Response	Amount ug/l	Flags
Cyclohexane	5.215	878136	9.07	
1,3,5-Trimethylbenzene	9.923	1420029	9.31	

Tentative Identified Compound Results

RT	Response	Amount ug/l	Quant Cpnd	Qual	Lib Entry	Flags
598-61-8 Cyclobutane, methyl-						
3.674	644408	1.96	1	87	3261	
96-37-7 Cyclopentane, methyl-						
4.634	1220604	3.71	1	91	111861	
565-80-0 3-Pentanone, 2,4-dimethyl-						
7.670	996824	2.48	2	86	109868	
3970-62-5 3-Pentanol, 2,2-dimethyl-						
8.109	521792	1.30	2	64	113266	
815-57-6 2,4-Pentanedione, 3-methyl-						
8.227	622105	1.55	2	59	109965	
620-14-4 Benzene, 1-ethyl-3-methyl-						
9.840	877628	2.08	3	87	119287	
611-14-3 Benzene, 1-ethyl-2-methyl-						
10.125	611361	1.45	3	91	119281	
496-11-7 Indane						
10.907	677947	1.61	3	87	120526	

Report Date: 11-May-2012 10:46:33 Chrom Revision: 2.0 08-Feb-2012 11:07:54
Data File: \\Ncchrom\ChromData\A3UX16\20120510-9837.b\UXM5699.D
Quantitation Compounds

Compound	RT	Response	Amount ug/l
* 1 Fluorobenzene	5.702	3288690	10.0
* 2 Chlorobenzene-d5	8.393	4011431	10.0
* 3 1,4-Dichlorobenzene-d4	10.635	4220751	10.0

QC Flag Legend

Processing Flags

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A2HP5F\20120507-9715.b\P5F05077.D		
Lims ID:	240-10808-J-4-A	Client ID:	MT-MW02S-043012
Inject. Date:	07-May-2012 11:16:05	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0009715-007		
Misc. Info.:			
Operator:	2398	Instrument ID:	A2HP5F
Vol. Injected:	1.0000	ALS Bottle#:	7
Lims Batch ID:	42964	Lims Sample ID:	7
Detector:	GC FID1A		
Method:	\\Ncchrom\ChromData\A2HP5F\20120507-9715.b\TPH5F.m		
Last Update:	08-May-2012 07:46:28	Calib Date:	13-Apr-2012 15:06:59
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A2HP5F\20120413-9029.b\P5F04144.D		
Limit Group:	GC TPH DIESEL ICAL		
Integrator:	Falcon		
Process Host:	CORP-CTX-18		

RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Flags
$ 8 n-Nonane					
3.799	3.796	0.003	12262811	56.6	
A 15 Diesel					
9.247	4.909 -	13.585	139437375	740.6	
A 17 C10-C32					
9.946	4.909 -	14.983	144521858	767.6	

$\overline{CF} = 189272.909$

extraction = 1050ml / 5ml

$$\frac{144521858\ ng/\mu l}{189272.909} \times \frac{5ml}{1050ml} \times \frac{1\ mg}{1000ng} \times \frac{1000000\ \mu l}{1L}$$

$= 3655.3\ mg/L$

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech	Client Project Manager: Tony Aparicio	Site Contact: Stu Cameron	Lab Contact:	COC No: 006079
Address: 20251 Century Blvd Ste 200	Telephone: (301)528-5553	Telephone: (703)342-8389	Telephone:	1 of 1 COCs
City/State/Zip: Germantown MD, 20874	Email: Tony.Aparicio@tetratech.com	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only: Walk-in Client ☐ Lab picking ☐ Lab sampling ☐ Job/SDG No.
Phone: (301) 528-5552		TAT if different from below _____ ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: MSA GW Sampling	Method of Shipment/Carrier:			
Project Number: 112IC04021	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite C/Grab G	VOCs	Total Metals	Dissolved Metals	Perchlorate	1,4-Dioxane	TPH-GRO	TPH-DRO	Sample Specific Notes / Special Instructions:
TB-043012	—	—		X						2							X							
GSP-MW5-043012	4/30/12	1030		X					2	5			5			G	X	X	X	X	X	X	X	
GSP-MW6-043012	↓	1145		X					2	5			5			G	X	X	X	X	X	X	X	
MT-MW02S-043012	↓	1305		X					2	5			5			G	X	X	X	X	X	X	X	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by: Stu Cameron	Company: Tetra Tech	Date/Time: 4-30-12/1445	Received by: Paul Gaylord	Company: TestAmerica	Date/Time: 4/30/12 1446
Relinquished by:	Company: TestAmerica	Date/Time: 4-30-2012/1530	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 5-1-12 930

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05/29/2012

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CASE NARRATIVE

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Project: MSA Groundwater Sampling

Report Number: 240-10808-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 6850 Perchlorate analysis was performed at the TestAmerica West Sacramento Laboratory.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/01/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.9 and 3.2 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples TB-043012 (240-10808-1), GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 05/10/2012.

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene and Hexachlorobutadiene were detected in method blank MB 240-43549/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

2-Butanone and 2-Chloroethyl vinyl ether failed the recovery criteria low for the MS/MSD of sample 240-10837-5 in batch 240-43549. Refer to the QC report for details.

Sample MT-MW02S-043012 (240-10808-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 05/05/2012 and analyzed on 05/08/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

1,4-Dioxane failed the recovery criteria high for the MSD of sample 240-10837-5 in batch 240-43126.

1,4-Dioxane failed the recovery criteria low for the MSD of sample 240-10842-8 in batch 240-43665. 1,4-Dioxane exceeded the rpd limit.

Refer to the QC report for details.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 05/07/2012.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-42995/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the GRO analyses. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 05/04/2012 and analyzed on 05/07/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

No difficulties were encountered during the DRO analyses. All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 05/02/2012 and analyzed on 05/03/2012.

No difficulties were encountered during the metals analyses. All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)

Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 05/02/2012 and analyzed on 05/03/2012.

Several analytes were detected in method blank MB 240-42485/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 05/03/2012 and 05/07/2012 and analyzed on 05/04/2012 and 05/08/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 05/03/2012 and 05/07/2012 and analyzed on 05/04/2012 and 05/08/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10808-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-10808-1TB	TB-043012	Water	04/30/2012 0000	05/01/2012 0930
240-10808-2	GSP-MW5-043012	Water	04/30/2012 1030	05/01/2012 0930
240-10808-3	GSP-MW6-043012	Water	04/30/2012 1145	05/01/2012 0930
240-10808-4	MT-MW02S-043012	Water	04/30/2012 1305	05/01/2012 0930

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10808-1

Lab Section	Qualifier	Description
GC/MS VOA		
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	E	Result exceeded calibration range.
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	F	RPD of the MS and MSD exceeds the control limits
GC VOA		
	B	Compound was found in the blank and sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-043012	240-10808-1	91	97	96	97
GSP-MW5-043012	240-10808-2	102	102	95	98
GSP-MW6-043012	240-10808-3	95	96	98	100
MT-MW02S-043012	240-10808-4	100	98	95	105
	MB 240-43549/5	91	98	97	97
	LCS 240-43549/4	92	95	101	102
	240-10837-D-5 MS	97	100	101	102
	240-10837-E-5 MSD	94	93	95	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: STD8260 240-43409/4 Date Analyzed: 05/09/2012 17:35

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM5662.D Heated Purge: (Y/N) N

Calibration ID: 8614

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1744720	5.70	1311107	8.39	771411	10.64
UPPER LIMIT		3489440	6.20	2622214	8.89	1542822	11.14
LOWER LIMIT		872360	5.20	655554	7.89	385706	10.14
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-43409/8		1716805	5.70	1288543	8.39	755167	10.64
CCVIS 240-43549/2		1685929	5.70	1198706	8.39	696224	10.64

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: CCVIS 240-43549/2 Date Analyzed: 05/10/2012 10:53

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM5692.D Heated Purge: (Y/N) N

Calibration ID: 8614

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1685929	5.70	1198706	8.39	696224	10.64
UPPER LIMIT		3371858	6.20	2397412	8.89	1392448	11.14
LOWER LIMIT		842965	5.20	599353	7.89	348112	10.14
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-43549/3		1693016	5.70	1283426	8.39	677855	10.64
LCS 240-43549/4		1679901	5.70	1201426	8.39	713156	10.64
MB 240-43549/5		1644585	5.70	1222754	8.39	644299	10.64
240-10808-1	TB-043012	1646516	5.70	1246377	8.39	643038	10.64
240-10808-2	GSP-MW5-043012	1572318	5.70	1192812	8.39	652627	10.64
240-10808-3	GSP-MW6-043012	1587946	5.70	1173345	8.39	631759	10.64
240-10808-4	MT-MW02S-043012	1490431	5.70	1154735	8.39	657198	10.64
240-10837-D-5 MS		1587604	5.70	1149469	8.39	664336	10.64
240-10837-E-5 MSD		1579177	5.70	1228432	8.39	675357	10.64

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab File ID: BFB2914.D BFB Injection Date: 04/29/2012

Instrument ID: A3UX16 BFB Injection Time: 15:11

Analysis Batch No.: 42092

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.4	
75	30.0 - 60.0 % of mass 95	55.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.3	(0.4)1
174	50.0 - 120.00 % of mass 95	67.2	
175	5.0 - 9.0 % of mass 174	4.9	(7.4)1
176	95.0 - 101.0 % of mass 174	65.5	(97.4)1
177	5.0 - 9.0 % of mass 176	4.1	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD1 240-42092/8	UXM5245.D	04/29/2012	17:57
	STD2 240-42092/9	UXM5246.D	04/29/2012	18:20
	STD3 240-42092/10	UXM5247.D	04/29/2012	18:42
	STD4 240-42092/11	UXM5248.D	04/29/2012	19:05
	STD5 240-42092/12	UXM5249.D	04/29/2012	19:28
	STD6 240-42092/13	UXM5250.D	04/29/2012	19:50

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD6 240-42092/13	UXM5250.D
Level 2	STD5 240-42092/12	UXM5249.D
Level 3	STD4 240-42092/11	UXM5248.D
Level 4	STD3 240-42092/10	UXM5247.D
Level 5	STD2 240-42092/9	UXM5246.D
Level 6	STD1 240-42092/8	UXM5245.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4944 0.5457	0.5179	0.5366	0.5411	0.5388	Ave		0.5291				3.7		15.0			
Ethyl ether	0.2959 0.3118	0.3149	0.3299	0.3322	0.3247	Ave		0.3182				4.3		15.0			
3-Chloro-1-propene	0.1138 0.1626	0.1307	0.1332	0.1472	0.1572	Ave		0.1408				13.0		15.0			
Diisopropyl ether	0.2325 0.3039	0.2698	0.2820	0.2880	0.2888	Ave		0.2775				8.9		15.0			
2-Chloro-1,3-butadiene	0.4443 0.5618	0.4913	0.5190	0.5386	0.5385	Ave		0.5156				8.2		15.0			
Ethyl-t-butyl ether (ETBE)	0.7557 0.9819	0.8293	0.9029	0.9314	0.9383	Ave		0.8899				9.3		15.0			
Propionitrile	0.0349 0.0408	0.0346	0.0382	0.0420	0.0412	Ave		0.0386				8.5		15.0			
Ethyl acetate	0.2532 0.2900	0.2546	0.2741	0.2771	0.2824	Ave		0.2719				5.5		15.0			
Methacrylonitrile	0.1606 0.2023	0.1897	0.1949	0.2046	0.2003	Ave		0.1921				8.5		15.0			
Isobutyl alcohol	0.0077 0.0091	0.0077	0.0086	0.0094	0.0092	Ave		0.0086				8.8		15.0			
Tert-amyl-methyl ether (TAME)	0.5871 0.7972	0.6671	0.7241	0.7535	0.7651	Ave		0.7157				11.0		15.0			
n-Heptane	0.0338 0.0458	0.0359	0.0418	0.0425	0.0440	Ave		0.0406				12.0		15.0			
n-Butanol	0.0041 0.0069	0.0052	0.0059	0.0064	0.0070	Lin1	-0.068	0.0070							0.9990		0.9950
2-Nitropropane	0.0349 0.0534	0.0349	0.0424	0.0409	0.0453	Qua	0	0.0373	0.0002						1.0000		0.9900
Cyclohexanone	0.0676 0.1071	0.0696	0.0924	0.0940	0.1083	Lin1	-0.573	0.1077							0.9980		0.9950

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 42092

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/29/2012 17:57 Calibration End Date: 04/29/2012 19:50 Calibration ID: 8428

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trimethylbenzene	2.3062 3.3384	2.8522	3.0020	3.1126	3.2823	Ave		2.9823				13.0		15.0			
2-Methylnaphthalene	0.5487 0.8482	0.7229	0.8158	0.9225	1.0313	Qua	-2.422	1.2182	-0.004						0.9970		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab File ID: BFB2951.D BFB Injection Date: 05/09/2012

Instrument ID: A3UX16 BFB Injection Time: 16:26

Analysis Batch No.: 43409

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.5	
75	30.0 - 60.0 % of mass 95	47.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	79.3	
175	5.0 - 9.0 % of mass 174	5.7	(7.2)1
176	95.0 - 101.0 % of mass 174	78.8	(99.5)1
177	5.0 - 9.0 % of mass 176	4.7	(5.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-43409/2	UXM5660.D	05/09/2012	16:50
	STD8260 240-43409/3	UXM5661.D	05/09/2012	17:12
	STD8260 240-43409/4	UXM5662.D	05/09/2012	17:35
	STD8260 240-43409/5	UXM5663.D	05/09/2012	17:58
	STD8260 240-43409/6	UXM5664.D	05/09/2012	18:20
	STD8260 240-43409/7	UXM5665.D	05/09/2012	18:43
	ICV 240-43409/8	UXM5666.D	05/09/2012	19:06

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 43409

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2012 16:50 Calibration End Date: 05/09/2012 18:43 Calibration ID: 8614

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-43409/7	UXM5665.D
Level 2	STD8260 240-43409/6	UXM5664.D
Level 3	STD8260 240-43409/5	UXM5663.D
Level 4	STD8260 240-43409/4	UXM5662.D
Level 5	STD8260 240-43409/3	UXM5661.D
Level 6	STD8260 240-43409/2	UXM5660.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3032 0.3143	0.2539	0.2973	0.2657	0.3062	Ave		0.2901			0.1000	8.4		15.0			
Chloromethane	0.6852 0.6205	0.6371	0.6849	0.6156	0.6587	Ave		0.6503			0.1000	4.7		15.0			
Vinyl chloride	0.4547 0.4560	0.4270	0.4657	0.4279	0.4758	Ave		0.4512			0.1000	4.4		15.0			
Bromomethane	0.2084 0.1529	0.1821	0.1851	0.1563	0.1804	Ave		0.1775			0.0500	12.0		15.0			
Chloroethane	0.2573 0.2377	0.2580	0.2693	0.2344	0.2581	Ave		0.2524				5.4		15.0			
Trichlorofluoromethane	0.3101 0.3295	0.3079	0.3225	0.2997	0.3473	Ave		0.3195			0.1000	5.4		15.0			
Acrolein	0.0620 0.0594	0.0566	0.0598	0.0605	0.0630	Ave		0.0602				3.7		15.0			
1,1-Dichloroethene	0.2593 0.2847	0.2457	0.2768	0.2781	0.2948	Ave		0.2733			0.1000	6.5		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1558 0.2077	0.1678	0.1758	0.1970	0.2009	Ave		0.1842			0.0500	11.0		15.0			
Acetone	0.1950 0.0973	0.1448	0.1189	0.1063	0.1066	Lin1	0.1992	0.0970			0.0500				0.9990		0.9950
Iodomethane	0.4877 0.4873	0.4523	0.4923	0.4807	0.4978	Ave		0.4830				3.3		15.0			
Carbon disulfide	0.8203 0.9849	0.8078	0.8789	0.8856	0.9660	Ave		0.8906			0.1000	8.2		15.0			
Acetonitrile	0.0521 0.0408	0.0448	0.0457	0.0427	0.0442	Ave		0.0451				8.6		15.0			
Methyl acetate	0.2743 0.2474	0.2522	0.2631	0.2590	0.2628	Ave		0.2598			0.1000	3.6		15.0			
Methylene Chloride	0.5939 0.3427	0.4564	0.4050	0.3631	0.3666	Lin1	0.2534	0.3421			0.1000				0.9990		0.9950

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 43409

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2012 16:50 Calibration End Date: 05/09/2012 18:43 Calibration ID: 8614

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0181 0.0174	0.0168	0.0177	0.0177	0.0194	Ave		0.0178				4.7		15.0			
Acrylonitrile	0.1490 0.1387	0.1316	0.1465	0.1448	0.1465	Ave		0.1429				4.6		15.0			
Methyl tert-butyl ether	0.6991 0.7388	0.6445	0.7170	0.7045	0.7607	Ave		0.7108			0.1000	5.6		15.0			
trans-1,2-Dichloroethene	0.3247 0.3331	0.3115	0.3413	0.3269	0.3476	Ave		0.3309			0.1000	3.9		15.0			
Hexane	0.0397 0.0512	0.0343	0.0407	0.0432	0.0497	Ave		0.0431				15.0		15.0			
1,1-Dichloroethane	0.6254 0.6679	0.6197	0.6585	0.6494	0.6816	Ave		0.6504			0.1000	3.7		15.0			
Vinyl acetate	0.0327 0.0428	0.0332	0.0366	0.0381	0.0440	Ave		0.0379				12.0		15.0			
2-Butanone	0.1740 0.1347	0.1309	0.1420	0.1355	0.1436	Ave		0.1434			0.0500	11.0		15.0			
cis-1,2-Dichloroethene	0.3366 0.3461	0.3446	0.3556	0.3479	0.3633	Ave		0.3490			0.1000	2.7		15.0			
2,2-Dichloropropane	0.2222 0.2905	0.2280	0.2554	0.2602	0.2941	Ave		0.2584				12.0		15.0			
Bromochloromethane	0.1381 0.1470	0.1360	0.1474	0.1506	0.1535	Ave		0.1454				4.8		15.0			
Tetrahydrofuran	0.1117 0.0863	0.0970	0.0944	0.0842	0.0925	Ave		0.0944				10.0		15.0			
Chloroform	0.5276 0.5351	0.4911	0.5175	0.5152	0.5505	Ave		0.5228				3.9		15.0			
1,1,1-Trichloroethane	0.3487 0.4394	0.3554	0.3763	0.4020	0.4407	Ave		0.3937			0.1000	10.0		15.0			
Cyclohexane	0.5218 0.7519	0.5837	0.6294	0.6832	0.7258	Ave		0.6493			0.1000	14.0		15.0			
1,1-Dichloropropene	0.3364 0.3821	0.3547	0.3491	0.3627	0.3860	Ave		0.3618				5.3		15.0			
Carbon tetrachloride	0.2463 0.3514	0.2420	0.2831	0.3062	0.3407	Linl	-0.167	0.3472			0.1000				0.9970		0.9950
1,2-Dichloroethane	0.4421 0.4298	0.4100	0.4186	0.4137	0.4494	Ave		0.4273			0.1000	3.7		15.0			
Benzene	1.1834 1.2032	1.1025	1.1381	1.1389	1.2065	Ave		1.1621			0.5000	3.6		15.0			
Trichloroethene	0.2725 0.2825	0.2714	0.2654	0.2626	0.2924	Ave		0.2745			0.2000	4.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 43409

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2012 16:50 Calibration End Date: 05/09/2012 18:43 Calibration ID: 8614

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2834 0.4163	0.2994	0.3340	0.3600	0.3897	Ave		0.3471			0.1000	15.0		15.0			
1,2-Dichloropropane	0.3163 0.3393	0.3026	0.3214	0.3206	0.3464	Ave		0.3244			0.1000	4.9		15.0			
Dibromomethane	0.1317 0.1397	0.1303	0.1368	0.1366	0.1460	Ave		0.1369				4.1		15.0			
1,4-Dioxane	0.0019 0.0018	0.0020	0.0021	0.0020	0.0021	Ave		0.0020				7.2		15.0			
Bromodichloromethane	0.2564 0.3265	0.2419	0.2713	0.2771	0.3245	Ave		0.2830			0.1000	12.0		15.0			
2-Chloroethyl vinyl ether	0.1506 0.1609	0.1383	0.1637	0.1582	0.1703	Ave		0.1570				7.1		15.0			
cis-1,3-Dichloropropene	0.2551 0.3710	0.2499	0.2985	0.3081	0.3650	Lin1	-0.188	0.3666			0.1500				0.9960		0.9950
4-Methyl-2-pentanone	0.2837 0.2990	0.2651	0.2929	0.2909	0.3111	Ave		0.2905			0.0500	5.3		15.0			
Toluene	1.6482 1.7043	1.5200	1.5382	1.5720	1.7039	Ave		1.6145			0.4000	5.1		15.0			
trans-1,3-Dichloropropene	0.2583 0.4170	0.2712	0.3095	0.3332	0.4003	Qua	-0.269	0.3783	0.0012		0.1000				0.9990		0.9900
Ethyl methacrylate	0.3360 0.4227	0.3466	0.3745	0.3996	0.4375	Ave		0.3861				11.0		15.0			
1,1,2-Trichloroethane	0.2835 0.2793	0.2694	0.2686	0.2750	0.2894	Ave		0.2775			0.1000	2.9		15.0			
1,3-Dichloropropane	0.5297 0.5095	0.5041	0.4977	0.5018	0.5376	Ave		0.5134				3.2		15.0			
Tetrachloroethene	0.2829 0.3018	0.2688	0.2694	0.2845	0.3065	Ave		0.2856			0.2000	5.5		15.0			
2-Hexanone	0.2570 0.2616	0.2458	0.2583	0.2602	0.2737	Ave		0.2594			0.0500	3.5		15.0			
Dibromochloromethane	0.1998 0.2905	0.1878	0.2173	0.2406	0.2828	Lin1	-0.158	0.2858							0.9950		0.9950
1,2-Dibromoethane	0.2771 0.2885	0.2414	0.2810	0.2689	0.2989	Ave		0.2760				7.2		15.0			
Chlorobenzene	1.0779 1.0958	1.0292	1.0419	1.0268	1.0997	Ave		1.0619			0.3000	3.1		15.0			
1,1,1,2-Tetrachloroethane	0.2890 0.3687	0.2701	0.3001	0.3244	0.3603	Ave		0.3188				12.0		15.0			
Ethylbenzene	0.5370 0.5872	0.5263	0.5398	0.5618	0.5955	Ave		0.5579				5.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 43409

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2012 16:50 Calibration End Date: 05/09/2012 18:43 Calibration ID: 8614

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6927 0.7473	0.6545	0.6868	0.6838	0.7439	Ave		0.7015				5.2		15.0			
o-Xylene	0.6585 0.7303	0.6697	0.6826	0.7022	0.7337	Ave		0.6962				4.5		15.0			
Styrene	1.0101 1.2393	1.0332	1.0826	1.1410	1.2330	Ave		1.1232			0.3000	8.8		15.0			
Bromoform	0.0997 0.1652	0.1002	0.1141	0.1314	0.1520	Qua	-0.092	0.1394	0.0007		0.1000				1.0000		0.9900
Isopropylbenzene	1.5686 1.8453	1.5081	1.5792	1.6843	1.7759	Ave		1.6603			0.1000	7.9		15.0			
1,1,2,2-Tetrachloroethane	0.6421 0.6392	0.5897	0.6508	0.6293	0.6884	Ave		0.6399			0.3000	5.0		15.0			
Bromobenzene	0.7124 0.8007	0.7229	0.7655	0.7154	0.8316	Ave		0.7581				6.6		15.0			
1,2,3-Trichloropropane	0.2331 0.2050	0.1899	0.2018	0.2064	0.2197	Ave		0.2093				7.2		15.0			
trans-1,4-Dichloro-2-butene	0.0972 0.1779	0.1139	0.1228	0.1331	0.1671	Qua	-0.117	0.1526	0.0007						0.9990		0.9900
n-Propylbenzene	0.7268 0.8204	0.6778	0.7587	0.7438	0.8378	Ave		0.7609				7.8		15.0			
2-Chlorotoluene	0.6703 0.7397	0.6758	0.6924	0.6931	0.7657	Ave		0.7061				5.4		15.0			
1,3,5-Trimethylbenzene	2.0828 2.5959	2.0405	2.3124	2.3306	2.5681	Ave		2.3217				10.0		15.0			
4-Chlorotoluene	0.7205 0.7747	0.6930	0.7396	0.7189	0.7965	Ave		0.7405				5.2		15.0			
tert-Butylbenzene	1.9330 2.3935	1.9972	1.9127	2.1455	2.3504	Ave		2.1221				9.9		15.0			
1,2,4-Trimethylbenzene	2.2784 2.6594	2.2133	2.3747	2.3863	2.6735	Ave		2.4310				8.0		15.0			
sec-Butylbenzene	2.3140 2.8409	2.3222	2.4938	2.5429	2.7579	Ave		2.5453				8.6		15.0			
1,3-Dichlorobenzene	1.3846 1.4804	1.3348	1.4061	1.3608	1.4933	Ave		1.4100			0.6000	4.6		15.0			
p-Isopropyltoluene	1.8496 2.5189	1.9566	2.1436	2.2002	2.4336	Ave		2.1837				12.0		15.0			
1,4-Dichlorobenzene	1.5343 1.5331	1.3976	1.4633	1.4252	1.5585	Ave		1.4853			0.5000	4.5		15.0			
n-Butylbenzene	1.5207 2.0613	1.5638	1.6967	1.7858	1.9861	Ave		1.7691				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 43409

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/09/2012 16:50 Calibration End Date: 05/09/2012 18:43 Calibration ID: 8614

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.3844 1.4205	1.3540	1.3870	1.3472	1.4582	Ave		1.3919			0.4000	3.0		15.0			
1,2-Dibromo-3-Chloropropane	0.0794 0.0870	0.0683	0.0814	0.0746	0.0883	Ave		0.0798			0.0500	9.5		15.0			
1,3,5-Trichlorobenzene	0.7539 0.8344	0.7656	0.7991	0.8104	0.8665	Ave		0.8050				5.2		15.0			
1,2,4-Trichlorobenzene	0.6479 0.6976	0.6519	0.6850	0.7123	0.7408	Ave		0.6892			0.2000	5.2		15.0			
Hexachlorobutadiene	0.2984 0.2880	0.3131	0.3156	0.3236	0.3074	Ave		0.3077				4.2		15.0			
Naphthalene	1.3167 1.5171	1.2964	1.5138	1.5269	1.6839	Ave		1.4758				9.9		15.0			
1,2,3-Trichlorobenzene	0.6093 0.5088	0.5775	0.5956	0.5994	0.6006	Ave		0.5819				6.4		15.0			
Dibromofluoromethane (Surr)	0.2449 0.2557	0.2414	0.2613	0.2511	0.2697	Ave		0.2540				4.1		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3352 0.3180	0.3022	0.3162	0.3092	0.3364	Ave		0.3195				4.3		15.0			
Toluene-d8 (Surr)	1.3399 1.4228	1.2843	1.2848	1.3063	1.4382	Ave		1.3460				5.1		15.0			
4-Bromofluorobenzene (Surr)	0.5239 0.5294	0.5089	0.5007	0.5033	0.5393	Ave		0.5176				3.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

ICV

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICV 240-43409/8 Calibration Date: 05/09/2012 19:06

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 17:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 19:50

Lab File ID: UXM5666.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3182	0.3514		11.0	10.0	10.4	20.0
Diisopropyl ether	Ave	0.2775	0.2746		9.89	10.0	-1.1	20.0
Isobutyl alcohol	Ave	0.0086	0.0089		517	500	3.5	20.0
Cyclohexanone	Lin1		0.0196		41.7	200	-79.2*	20.0
1,2,3-Trimethylbenzene	Ave	2.982	2.571		8.62	10.0	-13.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

ICV

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICV 240-43409/8 Calibration Date: 05/09/2012 19:06

Instrument ID: A3UX16 Calib Start Date: 05/09/2012 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/09/2012 18:43

Lab File ID: UXM5666.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2901	0.2045	0.1000	7.05	10.0	-29.5*	20.0
Chloromethane	Ave	0.6503	0.5741	0.1000	8.83	10.0	-11.7	20.0
Vinyl chloride	Ave	0.4512	0.4382	0.1000	9.71	10.0	-2.9	20.0
Bromomethane	Ave	0.1775	0.1621	0.0500	9.13	10.0	-8.7	20.0
Chloroethane	Ave	0.2524	0.2375	0.0500	9.41	10.0	-5.9	20.0
Trichlorofluoromethane	Ave	0.3195	0.3224	0.1000	10.1	10.0	0.9	20.0
Acrolein	Ave	0.0602	0.0316		15.7	30.0	-47.6*	20.0
1,1-Dichloroethene	Ave	0.2733	0.2968	0.1000	10.9	10.0	8.6	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1842	0.2129	0.0500	11.6	10.0	15.6	20.0
Acetone	Lin1		0.1000	0.0500	18.6	20.0	-7.0	20.0
Iodomethane	Ave	0.4830	0.4930		10.2	10.0	2.1	20.0
Carbon disulfide	Ave	0.8906	0.9121	0.1000	10.2	10.0	2.4	20.0
Acetonitrile	Ave	0.0451	0.0442		29.4	30.0	-2.0	20.0
Methyl acetate	Ave	0.2598	0.2961	0.1000	11.4	10.0	14.0	20.0
Methylene Chloride	Lin1		0.3698	0.1000	10.1	10.0	1.0	20.0
tert-Butyl alcohol	Ave	0.0178	0.0177		198	200	-1.0	20.0
Acrylonitrile	Ave	0.1429	0.1377		28.9	30.0	-3.6	20.0
Methyl tert-butyl ether	Ave	0.7108	0.7047	0.1000	9.91	10.0	-0.9	20.0
trans-1,2-Dichloroethene	Ave	0.3309	0.3422	0.1000	10.3	10.0	3.4	20.0
Hexane	Ave	0.0431	0.0478		11.1	10.0	10.8	20.0
1,1-Dichloroethane	Ave	0.6504	0.6789	0.1000	10.4	10.0	4.4	20.0
Vinyl acetate	Ave	0.0379	0.0349		9.19	10.0	-8.1	20.0
2-Butanone	Ave	0.1434	0.1319	0.0500	18.4	20.0	-8.1	20.0
2,2-Dichloropropane	Ave	0.2584	0.2680		10.4	10.0	3.7	20.0
cis-1,2-Dichloroethene	Ave	0.3490	0.3544	0.1000	10.2	10.0	1.5	20.0
Bromochloromethane	Ave	0.1454	0.1487		10.2	10.0	2.2	20.0
Tetrahydrofuran	Ave	0.0944	0.0879		9.32	10.0	-6.8	20.0
Chloroform	Ave	0.5228	0.5335	0.2000	10.2	10.0	2.0	20.0
1,1,1-Trichloroethane	Ave	0.3937	0.4102	0.1000	10.4	10.0	4.2	20.0
Cyclohexane	Ave	0.6493	0.6633	0.1000	10.2	10.0	2.2	20.0
1,1-Dichloropropene	Ave	0.3618	0.3695		10.2	10.0	2.1	20.0
Carbon tetrachloride	Lin1		0.3100	0.1000	9.41	10.0	-5.9	20.0
1,2-Dichloroethane	Ave	0.4273	0.4347	0.1000	10.2	10.0	1.7	20.0
Benzene	Ave	1.162	1.177	0.5000	10.1	10.0	1.2	20.0
Trichloroethene	Ave	0.2745	0.2806	0.2000	10.2	10.0	2.2	20.0
1,2-Dichloropropane	Ave	0.3244	0.3251	0.1000	10.0	10.0	0.2	20.0
Methylcyclohexane	Ave	0.3471	0.3473	0.1000	10.0	10.0	0.0	20.0
Dibromomethane	Ave	0.1369	0.1442		10.5	10.0	5.4	20.0
Bromodichloromethane	Ave	0.2830	0.2938	0.1000	10.4	10.0	3.8	20.0
2-Chloroethyl vinyl ether	Ave	0.1570	0.1413		9.00	10.0	-10.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

ICV

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICV 240-43409/8 Calibration Date: 05/09/2012 19:06

Instrument ID: A3UX16 Calib Start Date: 05/09/2012 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/09/2012 18:43

Lab File ID: UXM5666.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Linl		0.3014	0.1500	8.73	10.0	-12.7	20.0
4-Methyl-2-pentanone	Ave	0.2905	0.2896	0.0500	19.9	20.0	-0.3	20.0
Toluene	Ave	1.614	1.572	0.4000	9.74	10.0	-2.6	20.0
trans-1,3-Dichloropropene	Qua		0.3327	0.1000	9.24	10.0	-7.6	20.0
1,1,2-Trichloroethane	Ave	0.2775	0.2762	0.1000	9.95	10.0	-0.5	20.0
1,3-Dichloropropane	Ave	0.5134	0.4975		9.69	10.0	-3.1	20.0
Tetrachloroethene	Ave	0.2856	0.2813	0.2000	9.85	10.0	-1.5	20.0
2-Hexanone	Ave	0.2594	0.2452	0.0500	18.9	20.0	-5.5	20.0
Dibromochloromethane	Linl		0.2350		8.77	10.0	-12.3	20.0
1,2-Dibromoethane	Ave	0.2760	0.2737		9.92	10.0	-0.8	20.0
Chlorobenzene	Ave	1.062	1.051	0.3000	9.90	10.0	-1.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3188	0.3286		10.3	10.0	3.1	20.0
Ethylbenzene	Ave	0.5579	0.5654		10.1	10.0	1.3	20.0
m-Xylene & p-Xylene	Ave	0.7015	0.6978		19.9	20.0	-0.5	20.0
o-Xylene	Ave	0.6962	0.7046		10.1	10.0	1.2	20.0
Styrene	Ave	1.123	1.167	0.3000	10.4	10.0	3.9	20.0
Bromoform	Qua		0.1291	0.1000	9.47	10.0	-5.3	20.0
Isopropylbenzene	Ave	1.660	1.692	0.1000	10.2	10.0	1.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6399	0.6196	0.3000	9.68	10.0	-3.2	20.0
Bromobenzene	Ave	0.7581	0.7479		9.87	10.0	-1.3	20.0
1,2,3-Trichloropropane	Ave	0.2093	0.1984		9.48	10.0	-5.2	20.0
trans-1,4-Dichloro-2-butene	Qua		0.1324		16.8	20.0	-16.0	20.0
n-Propylbenzene	Ave	0.7609	0.7738		10.2	10.0	1.7	20.0
2-Chlorotoluene	Ave	0.7061	0.7155		10.1	10.0	1.3	20.0
1,3,5-Trimethylbenzene	Ave	2.322	2.338		10.1	10.0	0.7	20.0
4-Chlorotoluene	Ave	0.7405	0.7420		10.0	10.0	0.2	20.0
tert-Butylbenzene	Ave	2.122	2.147		10.1	10.0	1.2	20.0
1,2,4-Trimethylbenzene	Ave	2.431	2.470		10.2	10.0	1.6	20.0
sec-Butylbenzene	Ave	2.545	2.467		9.69	10.0	-3.1	20.0
1,3-Dichlorobenzene	Ave	1.410	1.419	0.6000	10.1	10.0	0.6	20.0
p-Isopropyltoluene	Ave	2.184	2.305		10.6	10.0	5.5	20.0
1,4-Dichlorobenzene	Ave	1.485	1.439	0.5000	9.69	10.0	-3.1	20.0
n-Butylbenzene	Ave	1.769	1.800		10.2	10.0	1.7	20.0
1,2-Dichlorobenzene	Ave	1.392	1.345	0.4000	9.66	10.0	-3.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0798	0.0779	0.0500	9.76	10.0	-2.4	20.0
1,2,4-Trichlorobenzene	Ave	0.6892	0.6576	0.2000	9.54	10.0	-4.6	20.0
Hexachlorobutadiene	Ave	0.3077	0.2672		8.69	10.0	-13.1	20.0
Naphthalene	Ave	1.476	1.471		9.97	10.0	-0.3	20.0
1,2,3-Trichlorobenzene	Ave	0.5819	0.5595		9.61	10.0	-3.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2540	0.2365		9.50	10.2	-6.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3195	0.2929		9.36	10.2	-8.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

ICV

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICV 240-43409/8 Calibration Date: 05/09/2012 19:06

Instrument ID: A3UX16 Calib Start Date: 05/09/2012 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/09/2012 18:43

Lab File ID: UXM5666.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.346	1.233		9.35	10.2	-8.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5176	0.4948		9.76	10.2	-4.4	20.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab File ID: BFB2952.D BFB Injection Date: 05/10/2012

Instrument ID: A3UX16 BFB Injection Time: 10:23

Analysis Batch No.: 43549

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	26.4	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	78.6	
175	5.0 - 9.0 % of mass 174	4.8	(6.1)1
176	95.0 - 101.0 % of mass 174	77.5	(98.6)1
177	5.0 - 9.0 % of mass 176	5.0	(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-43549/2	UXM5692.D	05/10/2012	10:53
	CCV 240-43549/3	UXM5693.D	05/10/2012	11:16
	LCS 240-43549/4	UXM5694.D	05/10/2012	11:39
	MB 240-43549/5	UXM5695.D	05/10/2012	12:02
TB-043012	240-10808-1	UXM5696.D	05/10/2012	12:25
GSP-MW5-043012	240-10808-2	UXM5697.D	05/10/2012	12:47
GSP-MW6-043012	240-10808-3	UXM5698.D	05/10/2012	13:10
MT-MW02S-043012	240-10808-4	UXM5699.D	05/10/2012	13:33
	240-10837-D-5 MS	UXM5716.D	05/10/2012	19:58
	240-10837-E-5 MSD	UXM5717.D	05/10/2012	20:21

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCVIS 240-43549/2 Calibration Date: 05/10/2012 10:53

Instrument ID: A3UX16 Calib Start Date: 05/09/2012 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/09/2012 18:43

Lab File ID: UXM5692.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2901	0.2790	0.1000	9.62	10.0	-3.8	20.0
Chloromethane	Ave	0.6503	0.6113	0.1000	9.40	10.0	-6.0	20.0
Vinyl chloride	Ave	0.4512	0.4262	0.1000	9.45	10.0	-5.5	20.0
Bromomethane	Ave	0.1775	0.1770	0.0500	9.97	10.0	-0.3	20.0
Chloroethane	Ave	0.2524	0.2504	0.0500	9.92	10.0	-0.8	20.0
Trichlorofluoromethane	Ave	0.3195	0.3217	0.1000	10.1	10.0	0.7	20.0
Acrolein	Ave	0.0602	0.0539		89.5	100	-10.5	20.0
1,1-Dichloroethene	Ave	0.2733	0.2791	0.1000	10.2	10.0	2.1	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.1842	0.2017	0.0500	11.0	10.0	9.5	20.0
Acetone	Lin1		0.0988	0.0500	18.3	20.0	-8.5	20.0
Iodomethane	Ave	0.4830	0.4722		9.78	10.0	-2.2	20.0
Carbon disulfide	Ave	0.8906	0.9826	0.1000	11.0	10.0	10.3	20.0
Acetonitrile	Ave	0.0451	0.0445		98.8	100	-1.2	20.0
Methyl acetate	Ave	0.2598	0.2519	0.1000	19.4	20.0	-3.0	20.0
Methylene Chloride	Lin1		0.3834	0.1000	10.5	10.0	5.0	20.0
tert-Butyl alcohol	Ave	0.0178	0.0166		186	200	-7.1	20.0
Acrylonitrile	Ave	0.1429	0.1377		19.3	20.0	-3.6	20.0
Methyl tert-butyl ether	Ave	0.7108	0.6763	0.1000	9.52	10.0	-4.8	20.0
trans-1,2-Dichloroethene	Ave	0.3309	0.3410	0.1000	10.3	10.0	3.1	20.0
Hexane	Ave	0.0431	0.0483	N.F.C.	11.2	10.0	12.1	20.0
1,1-Dichloroethane	Ave	0.6504	0.6517	0.1000	10.0	10.0	0.2	20.0
Vinyl acetate	Ave	0.0379	0.0403		10.6	10.0	6.2	20.0
2-Butanone	Ave	0.1434	0.1404	0.0500	19.6	20.0	-2.1	20.0
cis-1,2-Dichloroethene	Ave	0.3490	0.3372	0.1000	9.66	10.0	-3.4	20.0
2,2-Dichloropropane	Ave	0.2584	0.2768		10.7	10.0	7.1	20.0
Bromochloromethane	Ave	0.1454	0.1447		9.95	10.0	-0.5	20.0
Tetrahydrofuran	Ave	0.0944	0.0879		9.32	10.0	-6.8	20.0
Chloroform	Ave	0.5228	0.5315	0.2000	10.2	10.0	1.7	20.0
1,1,1-Trichloroethane	Ave	0.3937	0.4191	0.1000	10.6	10.0	6.4	20.0
Cyclohexane	Ave	0.6493	0.6985	0.1000	10.8	10.0	7.6	20.0
1,1-Dichloropropene	Ave	0.3618	0.3859		10.7	10.0	6.6	20.0
Carbon tetrachloride	Lin1		0.3255	0.1000	9.86	10.0	-1.4	20.0
1,2-Dichloroethane	Ave	0.4273	0.4578	0.1000	10.7	10.0	7.1	20.0
Benzene	Ave	1.162	1.187	0.5000	10.2	10.0	2.2	20.0
Trichloroethene	Ave	0.2745	0.2912	0.2000	10.6	10.0	6.1	20.0
Methylcyclohexane	Ave	0.3471	0.3832	0.1000	11.0	10.0	10.4	20.0
1,2-Dichloropropane	Ave	0.3244	0.3319	0.1000	10.2	10.0	2.3	20.0
Dibromomethane	Ave	0.1369	0.1455		10.6	10.0	6.3	20.0
1,4-Dioxane	Ave	0.0020	0.0018		457	500	-8.7	20.0
Bromodichloromethane	Ave	0.2830	0.3185	0.1000	11.3	10.0	12.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCVIS 240-43549/2 Calibration Date: 05/10/2012 10:53

Instrument ID: A3UX16 Calib Start Date: 05/09/2012 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/09/2012 18:43

Lab File ID: UXM5692.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1570	0.1558		19.9	20.0	-0.7	20.0
cis-1,3-Dichloropropene	Lin1		0.3284	0.1500	9.47	10.0	-5.3	20.0
4-Methyl-2-pentanone	Ave	0.2905	0.2951	0.0500	20.3	20.0	1.6	20.0
Toluene	Ave	1.614	1.737	0.4000	10.8	10.0	7.6	20.0
trans-1,3-Dichloropropene	Qua		0.3546	0.1000	9.79	10.0	-2.1	20.0
Ethyl methacrylate	Ave	0.3861	0.4404		11.4	10.0	14.1	20.0
1,1,2-Trichloroethane	Ave	0.2775	0.2924	0.1000	10.5	10.0	5.3	20.0
1,3-Dichloropropane	Ave	0.5134	0.5380		10.5	10.0	4.8	20.0
Tetrachloroethene	Ave	0.2856	0.3170	0.2000	11.1	10.0	11.0	20.0
2-Hexanone	Ave	0.2594	0.2762	0.0500	21.3	20.0	6.5	20.0
Dibromochloromethane	Lin1		0.2723		10.1	10.0	1.0	20.0
1,2-Dibromoethane	Ave	0.2760	0.2994		10.9	10.0	8.5	20.0
Chlorobenzene	Ave	1.062	1.117	0.3000	10.5	10.0	5.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3188	0.3682		11.5	10.0	15.5	20.0
Ethylbenzene	Ave	0.5579	0.6165		11.0	10.0	10.5	20.0
m-Xylene & p-Xylene	Ave	0.7015	0.7510		21.4	20.0	7.1	20.0
o-Xylene	Ave	0.6962	0.7534		10.8	10.0	8.2	20.0
Styrene	Ave	1.123	1.258	0.3000	11.2	10.0	12.0	20.0
Bromoform	Qua		0.1388	0.1000	10.1	10.0	1.0	20.0
Isopropylbenzene	Ave	1.660	1.794	0.1000	10.8	10.0	8.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6399	0.6643	0.3000	10.4	10.0	3.8	20.0
Bromobenzene	Ave	0.7581	0.7834		10.3	10.0	3.3	20.0
1,2,3-Trichloropropane	Ave	0.2093	0.2152		10.3	10.0	2.8	20.0
trans-1,4-Dichloro-2-butene	Qua		0.0543		4.24	10.0	-57.6*	20.0
n-Propylbenzene	Ave	0.7609	0.8162		10.7	10.0	7.3	20.0
2-Chlorotoluene	Ave	0.7061	0.7430		10.5	10.0	5.2	20.0
1,3,5-Trimethylbenzene	Ave	2.322	2.504		10.8	10.0	7.9	20.0
4-Chlorotoluene	Ave	0.7405	0.8068		10.9	10.0	8.9	20.0
tert-Butylbenzene	Ave	2.122	2.300		10.8	10.0	8.4	20.0
1,2,4-Trimethylbenzene	Ave	2.431	2.614		10.8	10.0	7.5	20.0
sec-Butylbenzene	Ave	2.545	2.730		10.7	10.0	7.3	20.0
1,3-Dichlorobenzene	Ave	1.410	1.472	0.6000	10.4	10.0	4.4	20.0
p-Isopropyltoluene	Ave	2.184	2.381		10.9	10.0	9.0	20.0
1,4-Dichlorobenzene	Ave	1.485	1.576	0.5000	10.6	10.0	6.1	20.0
n-Butylbenzene	Ave	1.769	1.900		10.7	10.0	7.4	20.0
1,2-Dichlorobenzene	Ave	1.392	1.409	0.4000	10.1	10.0	1.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0798	0.0780	0.0500	9.77	10.0	-2.3	20.0
1,3,5-Trichlorobenzene	Ave	0.8050	0.8184		10.2	10.0	1.7	20.0
1,2,4-Trichlorobenzene	Ave	0.6892	0.6691	0.2000	9.71	10.0	-2.9	20.0
Hexachlorobutadiene	Ave	0.3077	0.3034		9.86	10.0	-1.4	20.0
Naphthalene	Ave	1.476	1.368		9.27	10.0	-7.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCVIS 240-43549/2 Calibration Date: 05/10/2012 10:53

Instrument ID: A3UX16 Calib Start Date: 05/09/2012 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/09/2012 18:43

Lab File ID: UXM5692.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.5819	0.5411		9.30	10.0	-7.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2540	0.2445		9.83	10.2	-3.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3195	0.3043		9.72	10.2	-4.8	20.0
Toluene-d8 (Surr)	Ave	1.346	1.370		10.4	10.2	1.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5176	0.5247		10.3	10.2	1.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCV 240-43549/3 Calibration Date: 05/10/2012 11:16

Instrument ID: A3UX16 Calib Start Date: 04/29/2012 17:57

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/29/2012 19:50

Lab File ID: UXM5693.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.5291	0.4896		9.25	10.0	-7.5	20.0
Ethyl ether	Ave	0.3182	0.3276		10.3	10.0	2.9	20.0
3-Chloro-1-propene	Ave	0.1408	0.1484		10.5	10.0	5.4	20.0
Diisopropyl ether	Ave	0.2775	0.2850		51.4	50.0	2.7	20.0
2-Chloro-1,3-butadiene	Ave	0.5156	0.6754		13.1	10.0	31.0*	20.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8899	1.041		11.7	10.0	16.9	20.0
Propionitrile	Ave	0.0386	0.0464		24.0	20.0	20.1*	20.0
Ethyl acetate	Ave	0.2719	0.2669		19.6	20.0	-1.8	20.0
Methacrylonitrile	Ave	0.1921	0.1929		10.0	10.0	0.4	20.0
Isobutyl alcohol	Ave	0.0086	0.0091		210	200	5.0	20.0
Tert-amyl-methyl ether (TAME)	Ave	0.7157	0.6111		8.54	10.0	-14.6	20.0
n-Heptane	Ave	0.0406	0.0423		10.4	10.0	4.1	20.0
n-Butanol	Lin1		0.0066		197	200	-1.7	20.0
2-Nitropropane	Qua		0.0411		19.9	20.0	-0.5	20.0
Cyclohexanone	Lin1		0.0552		56.6	100	-43.4*	20.0
1,2,3-Trimethylbenzene	Ave	2.982	2.606		8.74	10.0	-12.6	20.0
2-Methylnaphthalene	Qua		0.3582		8.10	20.0	-59.5*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCV 240-43549/3 Calibration Date: 05/10/2012 11:16

Instrument ID: A3UX16 Calib Start Date: 05/09/2012 16:50

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 05/09/2012 18:43

Lab File ID: UXM5693.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2540	0.2276		9.15	10.2	-10.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3195	0.2873		9.18	10.2	-10.1	20.0
Toluene-d8 (Surr)	Ave	1.346	1.243		9.43	10.2	-7.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5176	0.4929		9.72	10.2	-4.8	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab File ID: UXM5695.D Lab Sample ID: MB 240-43549/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 05/10/2012 12:02

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-43549/4	UXM5694.D	05/10/2012 11:39
TB-043012	240-10808-1	UXM5696.D	05/10/2012 12:25
GSP-MW5-043012	240-10808-2	UXM5697.D	05/10/2012 12:47
GSP-MW6-043012	240-10808-3	UXM5698.D	05/10/2012 13:10
MT-MW02S-043012	240-10808-4	UXM5699.D	05/10/2012 13:33
	240-10837-D-5 MS	UXM5716.D	05/10/2012 19:58
	240-10837-E-5 MSD	UXM5717.D	05/10/2012 20:21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-43549/5

Matrix: Water Lab File ID: UXM5695.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 12:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	0.372	J	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	0.247	J	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-43549/5

Matrix: Water Lab File ID: UXM5695.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 12:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	0.462	J	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-43549/5

Matrix: Water Lab File ID: UXM5695.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 12:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
2037-26-5	Toluene-d8 (Surr)	97		74-115
1868-53-7	Dibromofluoromethane (Surr)	91		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-43549/5

Matrix: Water Lab File ID: UXM5695.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/10/2012 12:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 43549 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5694.D

Lab ID: LCS 240-43549/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.8	108	72-116	
1,1,1-Trichloroethane	10.0	10.1	101	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.44	94	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	11.7	117	74-151	
1,1-Dichloroethane	10.0	10.1	101	82-115	
1,1-Dichloroethene	10.0	10.8	108	78-131	
1,1-Dichloropropene	10.0	10.1	101	83-114	
1,2,3-Trichlorobenzene	10.0	8.98	90	54-126	
1,2,3-Trichloropropane	10.0	9.86	99	73-129	
1,2,3-Trimethylbenzene	10.0	8.55	86	70-130	
1,2,4-Trichlorobenzene	10.0	9.37	94	48-135	
1,2,4-Trimethylbenzene	10.0	10.2	102	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.58	96	42-136	
1,2-Dichlorobenzene	10.0	9.69	97	81-110	
1,2-Dichloroethane	10.0	10.4	104	71-127	
1,2-Dichloropropane	10.0	10.4	104	81-115	
1,3-Dichlorobenzene	10.0	9.93	99	80-110	
1,3-Dichloropropane	10.0	10.2	102	79-116	
1,4-Dichlorobenzene	10.0	9.91	99	82-110	
2,2-Dichloropropane	10.0	10.7	107	50-129	
2-Chloroethyl vinyl ether	10.0	9.48 J	95	52-131	
2-Chlorotoluene	10.0	9.87	99	76-116	
2-Hexanone	20.0	21.0	105	55-133	
Bromobenzene	10.0	10.1	101	76-115	
Bromochloromethane	10.0	9.77	98	77-120	
4-Chlorotoluene	10.0	10.1	101	77-115	
p-Isopropyltoluene	10.0	10.6	106	74-120	
Acetone	20.0	17.1	86	43-136	
Benzene	10.0	10.1	101	83-112	
Bromoform	10.0	8.83	88	40-131	
Bromomethane	10.0	8.94	89	11-185	
Carbon disulfide	10.0	10.4	104	62-142	
Carbon tetrachloride	10.0	9.42	94	66-128	
Chlorobenzene	10.0	10.1	101	85-110	
Chloroethane	10.0	8.97	90	25-153	
Chloroform	10.0	9.45	95	79-117	
Chloromethane	10.0	7.85	79	44-126	
cis-1,2-Dichloroethene	10.0	9.56	96	80-113	
cis-1,3-Dichloropropene	10.0	8.48	85	61-115	
Hexachlorobutadiene	10.0	9.10	91	36-134	
Dibromomethane	10.0	11.0	110	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5694.D

Lab ID: LCS 240-43549/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	10.9	109	72-121	
Dichlorodifluoromethane	10.0	6.12	61	19-129	
Ethylbenzene	10.0	10.5	105	83-112	
1,2-Dibromoethane	10.0	10.0	100	79-113	
Diisopropyl ether	10.0	9.77 J	98	77-118	
Naphthalene	10.0	9.33	93	32-141	
m-Xylene & p-Xylene	20.0	20.7	104	83-113	
n-Butylbenzene	10.0	10.4	104	66-125	
Isopropylbenzene	10.0	10.6	106	75-114	
n-Propylbenzene	10.0	10.3	103	74-121	
2-Butanone	20.0	18.8	94	60-126	
4-Methyl-2-pentanone	20.0	20.3	102	63-128	
sec-Butylbenzene	10.0	10.2	102	70-117	
Methyl tert-butyl ether	10.0	9.74	97	52-144	
Methylene Chloride	10.0	10.0	100	66-131	
o-Xylene	10.0	10.6	106	83-113	
Styrene	10.0	10.7	107	79-114	
tert-Butylbenzene	10.0	10.3	103	71-115	
Tetrachloroethene	10.0	10.6	106	79-114	
Toluene	10.0	10.4	104	84-111	
trans-1,2-Dichloroethene	10.0	9.89	99	83-117	
trans-1,3-Dichloropropene	10.0	9.26	93	58-117	
Trichloroethene	10.0	10.5	105	76-117	
Trichlorofluoromethane	10.0	10.5	105	49-157	
Vinyl acetate	10.0	9.55	96	46-161	
Vinyl chloride	10.0	8.64	86	53-127	
tert-Butyl alcohol	200	192	96	70-130	
Xylenes, Total	30.0	31.3	104	83-112	
Dibromochloromethane	10.0	9.32	93	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5716.D

Lab ID: 240-10837-D-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	400	40 U	416	104	64-118	
1,1,1-Trichloroethane	400	40 U	399	100	68-121	
1,1,2,2-Tetrachloroethane	400	40 U	394	99	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	400	40 U	412	103	70-152	
1,1-Dichloroethane	400	40 U	412	103	79-116	
1,1-Dichloroethene	400	16 J	428	103	74-135	
1,1-Dichloropropene	400	40 U	412	103	80-114	
1,2,3-Trichlorobenzene	400	40 U	363	91	45-129	
1,2,3-Trichloropropane	400	40 U	397	99	67-132	
1,2,3-Trimethylbenzene	400	200 U	333	83	70-130	
1,2,4-Trichlorobenzene	400	40 U	354	89	38-138	
1,2,4-Trimethylbenzene	400	40 U	388	97	67-124	
1,2-Dibromo-3-Chloropropane	400	80 U	381	95	32-139	
1,2-Dichlorobenzene	400	40 U	380	95	75-111	
1,2-Dichloroethane	400	40 U	432	108	68-129	
1,2-Dichloropropane	400	40 U	404	101	78-115	
1,3-Dichlorobenzene	400	40 U	387	97	73-110	
1,3-Dichloropropane	400	40 U	400	100	74-118	
1,4-Dichlorobenzene	400	40 U	379	95	75-110	
2,2-Dichloropropane	400	40 U	368	92	38-127	
2-Chloroethyl vinyl ether	400	400 U	400 U	0	10-150	F
2-Chlorotoluene	400	40 U	386	97	69-117	
2-Hexanone	800	400 U	828	104	47-139	
Bromobenzene	400	40 U	397	99	71-116	
Bromochloromethane	400	40 U	395	99	73-121	
4-Chlorotoluene	400	40 U	393	98	71-116	
p-Isopropyltoluene	400	40 U	393	98	64-122	
Acetone	800	400 U	756	95	33-145	
Benzene	400	12 J	416	101	72-121	
Bromoform	400	40 U	368	92	32-128	
Bromomethane	400	40 U	334	83	10-186	
Carbon disulfide	400	40 U	391	98	57-147	
Carbon tetrachloride	400	40 U	366	91	59-129	
Chlorobenzene	400	240	648	103	80-110	
Chloroethane	400	40 U	345	86	21-165	
Chloroform	400	40 U	397	99	76-118	
Chloromethane	400	40 U	306	77	33-132	
cis-1,2-Dichloroethene	400	1400	1820	108	70-120	E
cis-1,3-Dichloropropene	400	40 U	320	80	51-110	
Hexachlorobutadiene	400	40 U	311	78	27-132	
Dibromomethane	400	40 U	432	108	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5716.D

Lab ID: 240-10837-D-5 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	400	40 U	424	106	67-120	
Dichlorodifluoromethane	400	40 U	219	55	17-128	
Ethylbenzene	400	40 U	388	97	75-116	
1,2-Dibromoethane	400	40 U	399	100	74-113	
Diisopropyl ether	400	400 U	385 J	96	73-118	
Naphthalene	400	40 U	369	92	15-158	
m-Xylene & p-Xylene	800	80 U	788	99	75-117	
n-Butylbenzene	400	40 U	374	94	56-127	
Isopropylbenzene	400	40 U	384	96	68-116	
n-Propylbenzene	400	40 U	393	98	64-124	
2-Butanone	800	400 U	400 U	0	54-129	F
4-Methyl-2-pentanone	800	400 U	820	103	56-131	
sec-Butylbenzene	400	40 U	368	92	60-119	
Methyl tert-butyl ether	400	200 U	375	94	46-144	
Methylene Chloride	400	40 U	386	97	63-128	
o-Xylene	400	40 U	398	100	76-116	
Styrene	400	40 U	408	102	71-117	
tert-Butylbenzene	400	40 U	382	95	61-119	
Tetrachloroethene	400	40 U	389	97	70-117	
Toluene	400	6.0 J	404	100	78-114	
trans-1,2-Dichloroethene	400	14 J	404	98	80-119	
trans-1,3-Dichloropropene	400	40 U	355	89	46-116	
Trichloroethene	400	50	460	103	66-120	
Trichlorofluoromethane	400	40 U	384	96	46-157	
Vinyl acetate	400	80 U	376	94	43-157	
Vinyl chloride	400	910	1240	83	49-130	
tert-Butyl alcohol	8000	2000 U	7820	98	70-130	
Xylenes, Total	1200	80 U	1190	99	76-116	
Dibromochloromethane	400	40 U	359	90	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5717.D

Lab ID: 240-10837-E-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	400	391	98	6	30	64-118	
1,1,1-Trichloroethane	400	412	103	3	30	68-121	
1,1,2,2-Tetrachloroethane	400	408	102	3	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	400	424	106	3	30	70-152	
1,1-Dichloroethane	400	420	105	2	30	79-116	
1,1-Dichloroethene	400	440	106	3	30	74-135	
1,1-Dichloropropene	400	404	101	2	30	80-114	
1,2,3-Trichlorobenzene	400	386	97	6	30	45-129	
1,2,3-Trichloropropane	400	412	103	4	30	67-132	
1,2,3-Trimethylbenzene	400	345	86	4	30	70-130	
1,2,4-Trichlorobenzene	400	368	92	4	30	38-138	
1,2,4-Trimethylbenzene	400	408	102	5	30	67-124	
1,2-Dibromo-3-Chloropropane	400	362	91	5	30	32-139	
1,2-Dichlorobenzene	400	391	98	3	30	75-111	
1,2-Dichloroethane	400	424	106	2	30	68-129	
1,2-Dichloropropane	400	416	104	3	30	78-115	
1,3-Dichlorobenzene	400	392	98	1	30	73-110	
1,3-Dichloropropane	400	408	102	2	30	74-118	
1,4-Dichlorobenzene	400	389	97	3	30	75-110	
2,2-Dichloropropane	400	390	98	6	30	38-127	
2-Chloroethyl vinyl ether	400	400 U	0	NC	30	10-150	F
2-Chlorotoluene	400	400	100	4	30	69-117	
2-Hexanone	800	804	101	3	30	47-139	
Bromobenzene	400	408	102	3	30	71-116	
Bromochloromethane	400	412	103	4	30	73-121	
4-Chlorotoluene	400	404	101	3	30	71-116	
p-Isopropyltoluene	400	408	102	4	30	64-122	
Acetone	800	780	98	3	30	33-145	
Benzene	400	416	101	0	30	72-121	
Bromoform	400	363	91	1	30	32-128	
Bromomethane	400	350	88	5	30	10-186	
Carbon disulfide	400	398	100	2	30	57-147	
Carbon tetrachloride	400	378	95	3	30	59-129	
Chlorobenzene	400	640	101	1	30	80-110	
Chloroethane	400	364	91	5	30	21-165	
Chloroform	400	404	101	2	30	76-118	
Chloromethane	400	315	79	3	30	33-132	
cis-1,2-Dichloroethene	400	1790	102	1	30	70-120	E
cis-1,3-Dichloropropene	400	350	88	9	30	51-110	
Hexachlorobutadiene	400	338	85	8	30	27-132	
Dibromomethane	400	432	108	0	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM5717.D

Lab ID: 240-10837-E-5 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	400	420	105	1	30	67-120	
Dichlorodifluoromethane	400	214	54	2	30	17-128	
Ethylbenzene	400	400	100	3	30	75-116	
1,2-Dibromoethane	400	397	99	1	30	74-113	
Diisopropyl ether	400	395 J	99	2	30	73-118	
Naphthalene	400	392	98	6	30	15-158	
m-Xylene & p-Xylene	800	784	98	1	30	75-117	
n-Butylbenzene	400	388	97	4	30	56-127	
Isopropylbenzene	400	383	96	0	30	68-116	
n-Propylbenzene	400	408	102	4	30	64-124	
2-Butanone	800	400 U	0	NC	30	54-129	F
4-Methyl-2-pentanone	800	856	107	4	30	56-131	
sec-Butylbenzene	400	384	96	4	30	60-119	
Methyl tert-butyl ether	400	395	99	5	30	46-144	
Methylene Chloride	400	393	98	2	30	63-128	
o-Xylene	400	396	99	1	30	76-116	
Styrene	400	400	100	2	30	71-117	
tert-Butylbenzene	400	398	100	4	30	61-119	
Tetrachloroethene	400	381	95	2	30	70-117	
Toluene	400	397	98	2	30	78-114	
trans-1,2-Dichloroethene	400	416	101	3	30	80-119	
trans-1,3-Dichloropropene	400	363	91	2	30	46-116	
Trichloroethene	400	460	103	0	30	66-120	
Trichlorofluoromethane	400	400	100	4	30	46-157	
Vinyl acetate	400	390	98	4	30	43-157	
Vinyl chloride	400	1240	82	0	30	49-130	
tert-Butyl alcohol	8000	8060	101	3	30	70-130	
Xylenes, Total	1200	1180	98	1	30	76-116	
Dibromochloromethane	400	362	91	1	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
GSP-MW5-043012	240-10808-2	57	60	52	57	82	66
GSP-MW6-043012	240-10808-3	48	60	50	56	84	64
MT-MW02S-043012	240-10808-4	56	64	64	51	77	59
	MB 240-42901/22-A	66	67	62	59	76	79
	LCS 240-42901/23-A	69	71	65	67	95	78
	240-10842-O-8-A MS	62	66	58	56	83	64
	240-10837-Q-5-A MSD	69	71	65	66	95	77
	240-10842-R-8-A MSD	56	67	53	51	63	70

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	10-110
NBZ = Nitrobenzene-d5 (Surr)	27-111
FBP = 2-Fluorobiphenyl (Surr)	28-110
TBP = 2,4,6-Tribromophenol (Surr)	22-120
TPH = Terphenyl-d14 (Surr)	37-119

Column to be used to flag recovery values

FORM II 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: STD6 240-42463/10 Date Analyzed: 05/02/2012 12:54

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20502010.D Heated Purge: (Y/N) N

Calibration ID: 8490

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		203831	3.51	750748	4.40	449631	5.66
UPPER LIMIT		407662	4.01	1501496	4.90	899262	6.16
LOWER LIMIT		101916	3.01	375374	3.90	224816	5.16
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-42463/11		219450	3.51	793338	4.40	481824	5.66
CCV 240-43126/2 CCVIS		203268	3.39	807358	4.28	443644	5.54

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: STD6 240-42463/10 Date Analyzed: 05/02/2012 12:54

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20502010.D Heated Purge: (Y/N) N

Calibration ID: 8490

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		701859	6.74	609578	8.73	444154	10.12
UPPER LIMIT		1403718	7.24	1219156	9.23	888308	10.62
LOWER LIMIT		350930	6.24	304789	8.23	222077	9.62
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-42463/11		750463	6.74	697064	8.71	502891	10.10
CCV 240-43126/2 CCVIS		728055	6.61	667024	8.58	498151	9.89

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: CCV 240-43126/2 Date Analyzed: 05/08/2012 09:05

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20508002.D Heated Purge: (Y/N) N

Calibration ID: 8498

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		203268	3.39	807358	4.28	443644	5.54
UPPER LIMIT		406536	3.89	1614716	4.78	887288	6.04
LOWER LIMIT		101634	2.89	403679	3.78	221822	5.04
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-42901/22-A		215470	3.39	837951	4.28	473321	5.53
LCS 240-42901/23-A		211516	3.39	825101	4.28	475505	5.54
240-10837-Q-5-A MSD		209412	3.40	839319	4.28	485920	5.54
240-10808-2	GSP-MW5-043012	222949	3.39	924223	4.28	533114	5.54
240-10808-3	GSP-MW6-043012	219954	3.39	911722	4.28	536229	5.54
240-10808-4	MT-MW02S-043012	206091	3.39	873183	4.28	565534	5.55
240-10842-O-8-A MS		209225	3.40	835519	4.28	543280	5.54

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: CCV 240-43126/2 Date Analyzed: 05/08/2012 09:05

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20508002.D Heated Purge: (Y/N) N

Calibration ID: 8498

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		728055	6.61	667024	8.58	498151	9.89
UPPER LIMIT		1456110	7.11	1334048	9.08	996302	10.39
LOWER LIMIT		364028	6.11	333512	8.08	249076	9.39
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-42901/22-A		751385	6.61	713440	8.57	527924	9.87
LCS 240-42901/23-A		771734	6.61	721036	8.57	536929	9.87
240-10837-Q-5-A MSD		752567	6.61	706606	8.57	555213	9.87
240-10808-2	GSP-MW5-043012	853317	6.61	820134	8.57	633850	9.87
240-10808-3	GSP-MW6-043012	850410	6.61	804885	8.57	627018	9.87
240-10808-4	MT-MW02S-043012	805307	6.61	785402	8.57	599972	9.87
240-10842-O-8-A MS		811563	6.62	773792	8.57	591505	9.88

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: STD6 240-43665/10 Date Analyzed: 05/11/2012 11:47

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20511010.D Heated Purge: (Y/N) N

Calibration ID: 8680

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		437336	3.45	1550128	4.35	857737	5.61
UPPER LIMIT		874672	3.95	3100256	4.85	1715474	6.11
LOWER LIMIT		218668	2.95	775064	3.85	428869	5.11
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-43665/11		440902	3.45	1545336	4.35	858847	5.61
240-10842-R-8-A MSD		295486	3.45	1133322	4.35	755877	5.61

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: STD6 240-43665/10 Date Analyzed: 05/11/2012 11:47

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20511010.D Heated Purge: (Y/N) N

Calibration ID: 8680

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1328211	6.69	1262099	8.67	1119020	10.02
UPPER LIMIT		2656422	7.19	2524198	9.17	2238040	10.52
LOWER LIMIT		664106	6.19	631050	8.17	559510	9.52
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-43665/11		1301262	6.69	1208547	8.67	1044058	10.03
240-10842-R-8-A MSD		1034466	6.69	952330	8.66	891660	10.02

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab File ID: 20508011.D Lab Sample ID: MB 240-42901/22-A

Matrix: Water Date Extracted: 05/05/2012 09:23

Instrument ID: A4HP7 Date Analyzed: 05/08/2012 11:52

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-42901/23-A	20508012.D	05/08/2012 12:11
	240-10837-Q-5-A MSD	20508028.D	05/08/2012 17:06
GSP-MW5-043012	240-10808-2	20508035.D	05/08/2012 19:16
GSP-MW6-043012	240-10808-3	20508036.D	05/08/2012 19:35
MT-MW02S-043012	240-10808-4	20508037.D	05/08/2012 19:53
	240-10842-O-8-A MS	20508039.D	05/08/2012 20:30
	240-10842-R-8-A MSD	20511021.D	05/11/2012 15:14

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-10808-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-42901/22-A

Matrix: Water | Lab File ID: 20508011.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3520C | Date Extracted: 05/05/2012 09:23

Sample wt/vol: 1000(mL) | Date Analyzed: 05/08/2012 11:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 43126 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	59		28-110
367-12-4	2-Fluorophenol (Surr)	66		10-110
118-79-6	2,4,6-Tribromophenol (Surr)	76		22-120
4165-60-0	Nitrobenzene-d5 (Surr)	62		27-111
4165-62-2	Phenol-d5 (Surr)	67		10-110
1718-51-0	Terphenyl-d14 (Surr)	79		37-119

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20508012.D

Lab ID: LCS 240-42901/23-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	20.0	11.1	56	10-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20508039.D

Lab ID: 240-10842-O-8-A MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	19.0	14	22.9	44	10-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20508028.D

Lab ID: 240-10837-Q-5-A MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	19.0	82.3	112	7	30	10-110	F

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20511021.D

Lab ID: 240-10842-R-8-A MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	19.0	15.0	3	41	30	10-110	F

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab File ID: 20502001.D DFTPP Injection Date: 05/02/2012

Instrument ID: A4HP7 DFTPP Injection Time: 10:03

Analysis Batch No.: 42463

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	60.2	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	45.5	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	25.0 - 75.0% of mass 198	50.3	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0- 30.0% of mass 198	23.2	
365	Greater than 0.75% of mass 198	2.0	
441	Present, but less than mass 443	7.0	
442	40.0 - 110.0% of mass 198	44.8	
443	15.0 - 24.0% of mass 442	8.8	(19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-42463/2	20502002.D	05/02/2012	10:23
	STD4 240-42463/3	20502003.D	05/02/2012	10:42
	STD3 240-42463/4	20502004.D	05/02/2012	11:01
	STD2 240-42463/5	20502005.D	05/02/2012	11:19
	STD1 240-42463/6	20502006.D	05/02/2012	11:38
	STD9 240-42463/7	20502007.D	05/02/2012	11:57
	STD8 240-42463/8	20502008.D	05/02/2012	12:16
	STD7 240-42463/9	20502009.D	05/02/2012	12:35
	STD6 240-42463/10	20502010.D	05/02/2012	12:54
	ICV 240-42463/11	20502011.D	05/02/2012	13:13

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 42463

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2012 10:23 Calibration End Date: 05/02/2012 12:54 Calibration ID: 8490

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-42463/6	20502006.D
Level 2	STD2 240-42463/5	20502005.D
Level 3	STD3 240-42463/4	20502004.D
Level 4	STD4 240-42463/3	20502003.D
Level 5	STD5 240-42463/2	20502002.D
Level 6	STD6 240-42463/10	20502010.D
Level 7	STD7 240-42463/9	20502009.D
Level 8	STD8 240-42463/8	20502008.D
Level 9	STD9 240-42463/7	20502007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5797	0.7266 0.5728	0.4617 0.6094	0.5087 0.5684	0.4851	Ave		0.5640				15.0		15.0			
N-Nitrosodimethylamine	0.8841	0.7933 0.8811	0.7168 0.9316	0.7448 0.9112	0.7452	Ave		0.8260				10.0		15.0			
Pyridine	1.5075	1.3258 1.5146	1.1707 1.6776	1.1870 1.6034	1.1707	Ave		1.3947				15.0		15.0			
Ethyl methacrylate	1.1731	0.9728 1.1757	1.0484 1.2864	1.0037 1.2062	1.0290	Ave		1.1119				10.0		15.0			
Benzaldehyde	1.3735 0.7433	1.0441 +++++	1.0548 +++++	1.0867 +++++	0.9578	Ave		1.0434				20.0	*	15.0			
3-Chloropropionitrile	1.0012	0.9519 1.0222	0.9033 1.1093	0.8667 1.0492	0.8718	Ave		0.9719				9.1		15.0			
Malononitrile	1.5032	1.4102 1.2671	1.3756 1.2102	1.4463 1.0266	1.4564	Ave		1.3370				12.0		15.0			
Benzoic acid	0.2334	+++++ 0.2441	+++++ 0.2610	0.1647 0.2825	0.2322	Qua	0.0075	0.1951	0.0017						0.9990		0.9900
Phenol	1.7085	1.5885 1.7359	1.4815 1.9095	1.5782 1.8649	1.5731	Ave		1.6800				9.0		15.0			
Aniline	2.1278	1.9210 2.1146	1.8743 2.3821	2.0349 2.3349	1.9327	Ave		2.0903				9.0		15.0			
Bis(2-chloroethyl)ether	1.2927	1.2120 1.4453	1.3088 1.4464	1.1722 1.4211	1.1887	Ave		1.3109				8.8		15.0			
2-Chlorophenol	1.5020	1.3476 1.5269	1.3800 1.6760	1.4496 1.6251	1.4098	Ave		1.4896				7.8		15.0			
1,3-Dichlorobenzene	1.6350	1.3701 1.6113	1.5553 1.7820	1.5792 1.6988	1.5113	Ave		1.5929				7.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

ICV

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICV 240-42463/11 Calibration Date: 05/02/2012 13:13

Instrument ID: A4HP7 Calib Start Date: 05/02/2012 10:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/02/2012 12:54

Lab File ID: 20502011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5640	0.5264		9.33	10.0	-6.7	50.0
N-Nitrosodimethylamine	Ave	0.8260	0.8251		9.99	10.0	-0.1	50.0
Pyridine	Ave	1.395	1.479		10.6	10.0	6.0	50.0
Ethyl methacrylate	Ave	1.112	1.109		9.97	10.0	-0.3	50.0
3-Chloropropionitrile	Ave	0.9719	0.9803		10.1	10.0	0.9	50.0
Malononitrile	Ave	1.337	1.496		11.2	10.0	11.9	50.0
Benzaldehyde	Ave	1.043	0.6145		5.89	10.0	-41.1	50.0
Phenol	Ave	1.680	1.722		10.2	10.0	2.5	20.0
Aniline	Ave	2.090	2.144		10.3	10.0	2.6	50.0
Bis(2-chloroethyl)ether	Ave	1.311	1.327		10.1	10.0	1.2	50.0
2-Chlorophenol	Ave	1.490	1.506		10.1	10.0	1.1	50.0
1,3-Dichlorobenzene	Ave	1.593	1.567		9.84	10.0	-1.6	50.0
1,4-Dichlorobenzene	Ave	1.646	1.623		9.86	10.0	-1.4	20.0
Benzyl alcohol	Ave	0.8859	0.8898		10.0	10.0	0.4	50.0
1,2-Dichlorobenzene	Ave	1.544	1.517		9.83	10.0	-1.7	50.0
2-Methylphenol	Ave	1.290	1.293		10.0	10.0	0.2	50.0
bis (2-chloroisopropyl) ether	Ave	1.740	1.616		9.29	10.0	-7.1	50.0
3 & 4 Methylphenol	Ave	1.324	1.366		10.3	10.0	3.2	50.0
N-Nitrosodi-n-propylamine	Ave	0.8988	0.8701	0.0500	9.68	10.0	-3.2	50.0
Acetophenone	Ave	1.873	1.869		9.98	10.0	-0.2	50.0
Hexachloroethane	Ave	0.5453	0.5299		9.72	10.0	-2.8	50.0
Nitrobenzene	Ave	0.3636	0.3573		9.83	10.0	-1.7	50.0
Isophorone	Ave	0.6461	0.6605		10.2	10.0	2.2	50.0
2,4-Dimethylphenol	Ave	0.3785	0.3876		10.2	10.0	2.4	50.0
2-Nitrophenol	Ave	0.2067	0.2181		10.5	10.0	5.5	20.0
1,3,5-Trichlorobenzene	Ave	0.3633	0.3733		10.3	10.0	2.8	50.0
Bis(2-chloroethoxy)methane	Ave	0.3739	0.3789		10.1	10.0	1.3	50.0
Benzoic acid	Qua		0.2340		20.3	20.0	1.5	50.0
2,4-Dichlorophenol	Ave	0.3173	0.3295		10.4	10.0	3.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3480	0.3617		10.4	10.0	3.9	50.0
Naphthalene	Ave	1.144	1.159		10.1	10.0	1.3	50.0
4-Chloroaniline	Ave	0.4747	0.4591		9.67	10.0	-3.3	50.0
Hexachlorobutadiene	Ave	0.1832	0.1824		9.96	10.0	-0.4	20.0
1,2,3-Trichlorobenzene	Ave	0.3305	0.3260		9.86	10.0	-1.4	50.0
Caprolactam	Qua		0.1203		10.5	10.0	5.0	50.0
4-Chloro-3-methylphenol	Ave	0.3023	0.3207		10.6	10.0	6.1	20.0
2-Methylnaphthalene	Ave	0.7358	0.7408		10.1	10.0	0.7	50.0
1-Methylnaphthalene	Ave	0.7008	0.7068		10.1	10.0	0.8	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5580	0.5505		9.87	10.0	-1.3	50.0
Hexachlorocyclopentadiene	Ave	0.3259	0.3366	0.0500	10.3	10.0	3.3	50.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab File ID: 20508001.D DFTPP Injection Date: 05/08/2012

Instrument ID: A4HP7 DFTPP Injection Time: 08:46

Analysis Batch No.: 43126

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	61.2	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	58.2	
70	Less than 2.0% of mass 69	0.3	(0.5)1
127	25.0 - 75.0% of mass 198	61.8	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0- 30.0% of mass 198	26.3	
365	Greater than 0.75% of mass 198	2.9	
441	Present, but less than mass 443	11.9	
442	40.0 - 110.0% of mass 198	74.4	
443	15.0 - 24.0% of mass 442	14.6	(19.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-43126/2	20508002.D	05/08/2012	09:05
	MB 240-42901/22-A	20508011.D	05/08/2012	11:52
	LCS 240-42901/23-A	20508012.D	05/08/2012	12:11
	240-10837-Q-5-A MSD	20508028.D	05/08/2012	17:06
GSP-MW5-043012	240-10808-2	20508035.D	05/08/2012	19:16
GSP-MW6-043012	240-10808-3	20508036.D	05/08/2012	19:35
MT-MW02S-043012	240-10808-4	20508037.D	05/08/2012	19:53
	240-10842-O-8-A MS	20508039.D	05/08/2012	20:30

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCV 240-43126/2 Calibration Date: 05/08/2012 09:05

Instrument ID: A4HP7 Calib Start Date: 05/02/2012 10:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/02/2012 12:54

Lab File ID: 20508002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5640	0.5272		9.35	10.0	-6.5	50.0
N-Nitrosodimethylamine	Ave	0.8260	0.7907		9.57	10.0	-4.3	50.0
Pyridine	Ave	1.395	1.390		9.97	10.0	-0.3	50.0
Ethyl methacrylate	Ave	1.112	1.104		9.92	10.0	-0.8	50.0
3-Chloropropionitrile	Ave	0.9719	0.8004		8.24	10.0	-17.6	50.0
Malononitrile	Ave	1.337	1.340		10.0	10.0	0.2	50.0
Benzaldehyde	Ave	1.043	0.7144		6.85	10.0	-31.5	50.0
Phenol	Ave	1.680	1.721		10.2	10.0	2.4	20.0
Aniline	Ave	2.090	2.189		10.5	10.0	4.7	50.0
Bis(2-chloroethyl)ether	Ave	1.311	1.311		10.0	10.0	0.0	50.0
2-Chlorophenol	Ave	1.490	1.473		9.89	10.0	-1.1	50.0
1,3-Dichlorobenzene	Ave	1.593	1.599		10.0	10.0	0.4	50.0
1,4-Dichlorobenzene	Ave	1.646	1.662		10.1	10.0	1.0	50.0
Benzyl alcohol	Ave	0.8859	0.8606		9.71	10.0	-2.9	50.0
1,2-Dichlorobenzene	Ave	1.544	1.529		9.91	10.0	-0.9	50.0
2-Methylphenol	Ave	1.290	1.300		10.1	10.0	0.7	50.0
bis (2-chloroisopropyl) ether	Ave	1.740	1.634		9.39	10.0	-6.1	50.0
3 & 4 Methylphenol	Ave	1.324	1.360		10.3	10.0	2.7	50.0
N-Nitrosodi-n-propylamine	Ave	0.8988	0.9308	0.0500	10.4	10.0	3.6	50.0
Acetophenone	Ave	1.873	1.935		10.3	10.0	3.3	50.0
Hexachloroethane	Ave	0.5453	0.5619		10.3	10.0	3.0	50.0
Nitrobenzene	Ave	0.3636	0.3688		10.1	10.0	1.4	50.0
Isophorone	Ave	0.6461	0.6574		10.2	10.0	1.7	50.0
2-Nitrophenol	Ave	0.2067	0.2114		10.2	10.0	2.3	20.0
2,4-Dimethylphenol	Ave	0.3785	0.3801		10.0	10.0	0.4	50.0
1,3,5-Trichlorobenzene	Ave	0.3633	0.3290		9.06	10.0	-9.4	50.0
Bis(2-chloroethoxy)methane	Ave	0.3739	0.3772		10.1	10.0	0.9	50.0
Benzoic acid	Qua		0.1909		17.0	20.0	-15.0	50.0
2,4-Dichlorophenol	Ave	0.3173	0.2887		9.10	10.0	-9.0	20.0
1,2,4-Trichlorobenzene	Ave	0.3480	0.3214		9.23	10.0	-7.7	50.0
Naphthalene	Ave	1.144	1.081		9.45	10.0	-5.5	50.0
4-Chloroaniline	Ave	0.4747	0.4497		9.48	10.0	-5.2	50.0
Hexachlorobutadiene	Ave	0.1832	0.1595		8.71	10.0	-12.9	20.0
1,2,3-Trichlorobenzene	Ave	0.3305	0.2901		8.78	10.0	-12.2	50.0
Caprolactam	Qua		0.1216		10.6	10.0	6.0	50.0
4-Chloro-3-methylphenol	Ave	0.3023	0.3096		10.2	10.0	2.4	20.0
2-Methylnaphthalene	Ave	0.7358	0.7177		9.75	10.0	-2.5	50.0
1-Methylnaphthalene	Ave	0.7008	0.6679		9.53	10.0	-4.7	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5580	0.5324		9.54	10.0	-4.6	50.0
Hexachlorocyclopentadiene	Ave	0.3259	0.3328	0.0500	10.2	10.0	2.1	50.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab File ID: 20511001.D DFTPP Injection Date: 05/11/2012

Instrument ID: A4HP7 DFTPP Injection Time: 08:59

Analysis Batch No.: 43665

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	47.8	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	36.2	
70	Less than 2.0% of mass 69	0.1	(0.4)1
127	25.0 - 75.0% of mass 198	47.8	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.6	
275	10.0- 30.0% of mass 198	24.5	
365	Greater than 0.75% of mass 198	2.9	
441	Present, but less than mass 443	6.8	
442	40.0 - 110.0% of mass 198	85.6	
443	15.0 - 24.0% of mass 442	16.2	(18.9)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-43665/2	20511002.D	05/11/2012	09:17
	STD4 240-43665/3	20511003.D	05/11/2012	09:36
	STD3 240-43665/4	20511004.D	05/11/2012	09:54
	STD2 240-43665/5	20511005.D	05/11/2012	10:13
	STD1 240-43665/6	20511006.D	05/11/2012	10:32
	STD9 240-43665/7	20511007.D	05/11/2012	10:50
	STD8 240-43665/8	20511008.D	05/11/2012	11:09
	STD7 240-43665/9	20511009.D	05/11/2012	11:28
	STD6 240-43665/10	20511010.D	05/11/2012	11:47
	ICV 240-43665/11	20511011.D	05/11/2012	12:06
	240-10842-R-8-A MSD	20511021.D	05/11/2012	15:14

ND samples

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 43665

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2012 09:17 Calibration End Date: 05/11/2012 11:47 Calibration ID: 8680

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-43665/6	20511006.D
Level 2	STD2 240-43665/5	20511005.D
Level 3	STD3 240-43665/4	20511004.D
Level 4	STD4 240-43665/3	20511003.D
Level 5	STD5 240-43665/2	20511002.D
Level 6	STD6 240-43665/10	20511010.D
Level 7	STD7 240-43665/9	20511009.D
Level 8	STD8 240-43665/8	20511008.D
Level 9	STD9 240-43665/7	20511007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.8214	0.7424 0.8345	0.8429 0.7791	0.7470 0.8123	0.6817	Ave		0.7827				7.1		15.0			
N-Nitrosodimethylamine	1.3517	1.1966 1.3430	1.1696 1.3633	1.2470 1.2652	1.0985	Ave		1.2544				7.6		15.0			
Pyridine	2.2974	1.9328 2.3707	1.9078 2.3286	1.9502 2.3534	1.8306	Ave		2.1214				11.0		15.0			
Ethyl methacrylate	1.6866	1.3892 1.6940	1.4486 1.6548	1.5423 1.6320	1.3388	Ave		1.5483				9.1		15.0			
Benzaldehyde	1.5333 0.8741	1.2294 +++++	1.1836 +++++	1.2281 +++++	1.1826	Ave		1.2052				17.0	*	15.0			
3-Chloropropionitrile	1.4897	1.2595 1.4622	1.3006 1.4937	1.3044 1.3859	1.2124	Ave		1.3636				8.0		15.0			
Malononitrile	2.2448	1.9935 1.8577	2.0845 1.6532	2.1475 1.3326	2.0596	Qua	-0.921	2.8087	-0.057						0.9970		0.9900
Phenol	1.8841	1.8281 1.8717	1.6617 1.9458	1.8052 1.8512	1.7580	Ave		1.8257				4.7		15.0			
Aniline	2.4151	2.2639 2.3911	2.0794 2.6720	2.3016 2.4648	2.2573	Ave		2.3556				7.4		15.0			
Bis(2-chloroethyl)ether	1.6894	1.5295 1.6002	1.6300 1.6117	1.5935 1.5697	1.4387	Ave		1.5829				4.7		15.0			
2-Chlorophenol	1.5079	1.4241 1.4922	1.3577 1.5327	1.4941 1.4601	1.4438	Ave		1.4641				3.8		15.0			
1,3-Dichlorobenzene	1.5599	1.5840 1.5209	1.5347 1.5599	1.5653 1.5199	1.4890	Ave		1.5417				2.0		15.0			
1,4-Dichlorobenzene	1.5862	1.5357 1.5490	1.5652 1.6083	1.5720 1.5963	1.5055	Ave		1.5648				2.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

ICV

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICV 240-43665/11 Calibration Date: 05/11/2012 12:06

Instrument ID: A4HP7 Calib Start Date: 05/11/2012 09:17

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/11/2012 11:47

Lab File ID: 20511011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.7827	1.792		22.9	10.0	128.9*	50.0
N-Nitrosodimethylamine	Ave	1.254	1.385		11.0	10.0	10.4	50.0
Pyridine	Ave	2.121	2.312		10.9	10.0	9.0	50.0
Ethyl methacrylate	Ave	1.548	1.663		10.7	10.0	7.4	50.0
3-Chloropropionitrile	Ave	1.364	1.513		11.1	10.0	11.0	50.0
Malononitrile	Qua		2.271		10.8	10.0	8.0	50.0
Benzaldehyde	Ave	1.205	0.7368		6.11	10.0	-38.9	50.0
Phenol	Ave	1.826	1.912		10.5	10.0	4.7	20.0
Aniline	Ave	2.356	2.457		10.4	10.0	4.3	50.0
Bis(2-chloroethyl)ether	Ave	1.583	1.667		10.5	10.0	5.3	50.0
2-Chlorophenol	Ave	1.464	1.525		10.4	10.0	4.2	50.0
1,3-Dichlorobenzene	Ave	1.542	1.553		10.1	10.0	0.7	50.0
1,4-Dichlorobenzene	Ave	1.565	1.585		10.1	10.0	1.3	20.0
Benzyl alcohol	Ave	0.9081	0.9464		10.4	10.0	4.2	50.0
1,2-Dichlorobenzene	Ave	1.430	1.443		10.1	10.0	0.9	50.0
2-Methylphenol	Ave	1.285	1.318		10.3	10.0	2.6	50.0
bis (2-chloroisopropyl) ether	Ave	2.393	2.451		10.2	10.0	2.4	50.0
3 & 4 Methylphenol	Ave	1.345	1.375		10.2	10.0	2.3	50.0
N-Nitrosodi-n-propylamine	Ave	0.9738	1.018	0.0500	10.5	10.0	4.6	50.0
Acetophenone	Ave	1.885	1.946		10.3	10.0	3.2	50.0
Hexachloroethane	Ave	0.5545	0.5753		10.4	10.0	3.7	50.0
Nitrobenzene	Ave	0.4062	0.4273		10.5	10.0	5.2	50.0
Isophorone	Ave	0.7209	0.7540		10.5	10.0	4.6	50.0
2,4-Dimethylphenol	Ave	0.3697	0.3794		10.3	10.0	2.6	50.0
2-Nitrophenol	Ave	0.1894	0.1968		10.4	10.0	3.9	20.0
1,3,5-Trichlorobenzene	Ave	0.3433	0.3404		9.92	10.0	-0.8	50.0
Bis(2-chloroethoxy)methane	Ave	0.4323	0.4458		10.3	10.0	3.1	50.0
Benzoic acid	Qua		0.2483		21.0	20.0	5.0	50.0
2,4-Dichlorophenol	Ave	0.3052	0.3155		10.3	10.0	3.4	20.0
1,2,4-Trichlorobenzene	Ave	0.3316	0.3285		9.91	10.0	-0.9	50.0
Naphthalene	Ave	1.108	1.114		10.1	10.0	0.5	50.0
4-Chloroaniline	Ave	0.4507	0.4746		10.5	10.0	5.3	50.0
Hexachlorobutadiene	Ave	0.1695	0.1692		9.98	10.0	-0.2	20.0
1,2,3-Trichlorobenzene	Ave	0.3021	0.3048		10.1	10.0	0.9	50.0
Caprolactam	Ave	0.1145	0.1256		11.0	10.0	9.6	50.0
4-Chloro-3-methylphenol	Ave	0.2919	0.3026		10.4	10.0	3.7	20.0
2-Methylnaphthalene	Ave	0.6841	0.6838		10.0	10.0	-0.0	50.0
1-Methylnaphthalene	Ave	0.6531	0.6428		9.84	10.0	-1.6	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5500	0.5470		9.94	10.0	-0.6	50.0
Hexachlorocyclopentadiene	Ave	0.3241	0.3370	0.0500	10.4	10.0	4.0	50.0

FORM II
GASOLINE RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
GSP-MW5-043012	240-10808-2	60
GSP-MW6-043012	240-10808-3	56
MT-MW02S-043012	240-10808-4	94
	MB 240-42995/6	58
	LCS 240-42995/7	70
GSP-MW5-043012 MS	240-10808-2 MS	73
GSP-MW5-043012 MSD	240-10808-2 MSD	71

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015B

FORM IV
GASOLINE RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: MB 240-42995/6

Matrix: Water Date Extracted: 05/07/2012 13:20

Lab File ID:(1) YF050706.D Lab File ID:(2)

Date Analyzed:(1) 05/07/2012 13:20 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-42995/7	05/07/2012 14:00	
GSP-MW5-043012	240-10808-2	05/07/2012 14:40	
GSP-MW5-043012 MS	240-10808-2 MS	05/07/2012 15:20	
GSP-MW5-043012 MSD	240-10808-2 MSD	05/07/2012 16:00	
GSP-MW6-043012	240-10808-3	05/07/2012 16:42	
MT-MW02S-043012	240-10808-4	05/07/2012 17:23	

FORM I
GASOLINE RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-42995/6

Matrix: Water Lab File ID: YF050706.D

Analysis Method: 8015B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 05/07/2012 13:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 42995 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	28.0	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	58		10-150

FORM III
GASOLINE RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF050707.D

Lab ID: LCS 240-42995/7 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	942	118	72-140	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF050709.D

Lab ID: 240-10808-2 MS Client ID: GSP-MW5-043012 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	37 J	962	116	63-143	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM III
GASOLINE RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: YF050710.D

Lab ID: 240-10808-2 MSD Client ID: GSP-MW5-043012 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	953	115	1	20	63-143	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM VIII
GASOLINE RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: CCV 240-42995/5 Date Analyzed: 05/07/2012 12:40

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF050705.D Heated Purge: (Y/N) N

Calibration ID: 6924

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.76		
UPPER LIMIT				9.86		
LOWER LIMIT				9.66		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-42995/5 CCVRT		05/07/2012 12:40	YF050705.D	9.76		
MB 240-42995/6		05/07/2012 13:20	YF050706.D	9.75		
LCS 240-42995/7		05/07/2012 14:00	YF050707.D	9.75		
240-10808-2	GSP-MW5-043012	05/07/2012 14:40	YF050708.D	9.76		
240-10808-2 MS	GSP-MW5-043012 MS	05/07/2012 15:20	YF050709.D	9.76		
240-10808-2 MSD	GSP-MW5-043012 MSD	05/07/2012 16:00	YF050710.D	9.76		
240-10808-3	GSP-MW6-043012	05/07/2012 16:42	YF050711.D	9.75		
240-10808-4	MT-MW02S-043012	05/07/2012 17:23	YF050712.D	9.76		
CCV 240-42995/16		05/07/2012 20:05	YF050716.D	9.76		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015B

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: YPID Start Date: 02/10/2012 10:35

Analysis Batch Number: 33435 End Date: 02/10/2012 23:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		02/10/2012 10:35	1		RTX-VRX 0.45(mm)
STD1 240-33435/12 IC		02/10/2012 16:17	1	YF021012.D	RTX-VRX 0.45(mm)
STD2 240-33435/13 IC		02/10/2012 16:55	1	YF021013.D	RTX-VRX 0.45(mm)
STD3 240-33435/14 IC		02/10/2012 17:32	1	YF021014.D	RTX-VRX 0.45(mm)
STD4 240-33435/15 ICRT		02/10/2012 18:11	1	YF021015.D	RTX-VRX 0.45(mm)
STD5 240-33435/16 IC		02/10/2012 18:49	1	YF021016.D	RTX-VRX 0.45(mm)
STD6 240-33435/17 IC		02/10/2012 19:27	1	YF021017.D	RTX-VRX 0.45(mm)
ICV 240-33435/18		02/10/2012 20:05	1	YF021018.D	RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 20:43	1		RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 21:21	1		RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 21:59	10		RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 22:37	10		RTX-VRX 0.45(mm)
ZZZZZ		02/10/2012 23:15	10		RTX-VRX 0.45(mm)
CCV 240-33435/24		02/10/2012 23:53	1		RTX-VRX 0.45(mm)

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 33435

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/10/2012 16:17 Calibration End Date: 02/10/2012 19:27 Calibration ID: 6924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-33435/12	YF021012.D
Level 2	STD2 240-33435/13	YF021013.D
Level 3	STD3 240-33435/14	YF021014.D
Level 4	STD4 240-33435/15	YF021015.D
Level 5	STD5 240-33435/16	YF021016.D
Level 6	STD6 240-33435/17	YF021017.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.810	11.810	11.810	11.810	11.810	11.810					4.817 - 18.802	11.810
C6-C12	13.469	13.469	13.469	13.469	13.469	13.469					4.917 - 22.022	13.469
Trifluorotoluene (Surr)	9.768	9.772	9.769	9.772	9.771	9.774					9.522 - 10.022	9.771

FORM VI
GASOLINE RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 33435

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/10/2012 16:17 Calibration End Date: 02/10/2012 19:27 Calibration ID: 6924

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-33435/12	YF021012.D
Level 2	STD2 240-33435/13	YF021013.D
Level 3	STD3 240-33435/14	YF021014.D
Level 4	STD4 240-33435/15	YF021015.D
Level 5	STD5 240-33435/16	YF021016.D
Level 6	STD6 240-33435/17	YF021017.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	318103 289067	320460 294590	282575	294457	Ave		299875.299				5.2		20.0			
C6-C12	375472 318195	363940 323226	316555	324196	Ave		336930.834				7.7		20.0			
Trifluorotoluene (Surr)	384133 460736	375012 483108	395882	424093	Ave		420494.083				10.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICV 240-33435/18 Calibration Date: 02/10/2012 20:05

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF021018.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	333932		891	800	11.4	20.0
C6-C12	Ave	336931	375679		892	800	11.5	20.0
Trifluorotoluene (Surr)	Ave	420494	416828		9.91	10.0	-0.9	20.0

GASOLINE RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: YPID Start Date: 05/07/2012 11:20

Analysis Batch Number: 42995 End Date: 05/07/2012 21:23

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		05/07/2012 11:20	1		RTX-VRX 0.45(mm)
CCV 240-42995/5 CCVRT		05/07/2012 12:40	1	YF050705.D	RTX-VRX 0.45(mm)
MB 240-42995/6		05/07/2012 13:20	1	YF050706.D	RTX-VRX 0.45(mm)
LCS 240-42995/7		05/07/2012 14:00	1	YF050707.D	RTX-VRX 0.45(mm)
240-10808-2	GSP-MW5-043012	05/07/2012 14:40	1	YF050708.D	RTX-VRX 0.45(mm)
240-10808-2 MS	GSP-MW5-043012 MS	05/07/2012 15:20	1	YF050709.D	RTX-VRX 0.45(mm)
240-10808-2 MSD	GSP-MW5-043012 MSD	05/07/2012 16:00	1	YF050710.D	RTX-VRX 0.45(mm)
240-10808-3	GSP-MW6-043012	05/07/2012 16:42	1	YF050711.D	RTX-VRX 0.45(mm)
240-10808-4	MT-MW02S-043012	05/07/2012 17:23	1	YF050712.D	RTX-VRX 0.45(mm)
ZZZZZ		05/07/2012 18:04	1		RTX-VRX 0.45(mm)
ZZZZZ		05/07/2012 18:45	1		RTX-VRX 0.45(mm)
ZZZZZ		05/07/2012 19:26	1		RTX-VRX 0.45(mm)
CCV 240-42995/16		05/07/2012 20:05	1	YF050716.D	RTX-VRX 0.45(mm)
ZZZZZ		05/07/2012 20:45	1		RTX-VRX 0.45(mm)
CCV 240-42995/18		05/07/2012 21:23	1		RTX-VRX 0.45(mm)

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCV 240-42995/5 Calibration Date: 05/07/2012 12:40

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF050705.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	319991		854	800	6.7	15.0
C6-C12	Ave	336931	352680		837	800	4.7	15.0
Trifluorotoluene (Surr)	Ave	420494	308604		7.34	10.0	-26.6*	15.0

FORM VII
GASOLINE RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCV 240-42995/16 Calibration Date: 05/07/2012 20:05

Instrument ID: YPID Calib Start Date: 02/10/2012 16:17

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 02/10/2012 19:27

Lab File ID: YF050716.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	299875	325536		869	800	8.6	15.0
C6-C12	Ave	336931	359447		854	800	6.7	15.0
Trifluorotoluene (Surr)	Ave	420494	291877		6.94	10.0	-30.6*	15.0

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ID:

Client Sample ID	Lab Sample ID	C91 #
GSP-MW5-043012	240-10808-2	69
GSP-MW6-043012	240-10808-3	67
MT-MW02S-043012	240-10808-4	57
	MB 240-42831/9-A	64
	LCS 240-42831/10-A	74

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015B

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: MB 240-42831/9-A

Matrix: Water Date Extracted: 05/04/2012 12:16

Lab File ID:(1) P5F05083.D Lab File ID:(2)

Date Analyzed:(1) 05/07/2012 14:15 Date Analyzed:(2)

Instrument ID:(1) A2HP5F Instrument ID:(2)

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
GSP-MW5-043012	240-10808-2	05/07/2012 10:16	
GSP-MW6-043012	240-10808-3	05/07/2012 10:46	
MT-MW02S-043012	240-10808-4	05/07/2012 11:16	
	LCS 240-42831/10-A	05/07/2012 14:45	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-42831/9-A

Matrix: Water Lab File ID: P5F05083.D

Analysis Method: 8015B Date Collected:

Extraction Method: 3510C Date Extracted: 05/04/2012 12:16

Sample wt/vol: 1000(mL) Date Analyzed: 05/07/2012 14:15

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 42964 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	500	U	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	64		10-110

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P5F05084.D

Lab ID: LCS 240-42831/10-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2500	2230	89	36-124	

Column to be used to flag recovery and RPD values

FORM III 8015B

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Sample No.: CCVRT 240-42964/4 Date Analyzed: 05/07/2012 09:46

Instrument ID: A2HP5F GC Column: ID: ()

Lab File ID (Standard): P5F05074.D Heated Purge: (Y/N) N

Calibration ID: 8059

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				3.80		
UPPER LIMIT				3.90		
LOWER LIMIT				3.70		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-42964/4		05/07/2012 09:46	P5F05074.D	3.80		
240-10808-2	GSP-MW5-043012	05/07/2012 10:16	P5F05075.D	3.80		
240-10808-3	GSP-MW6-043012	05/07/2012 10:46	P5F05076.D	3.80		
240-10808-4	MT-MW02S-043012	05/07/2012 11:16	P5F05077.D	3.80		
MB 240-42831/9-A		05/07/2012 14:15	P5F05083.D	3.80		
LCS 240-42831/10-A		05/07/2012 14:45	P5F05084.D	3.80		
CCV 240-42964/15		05/07/2012 15:15	P5F05085.D	3.80		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015B

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: A2HP5F Start Date: 04/13/2012 10:08

Analysis Batch Number: 40180 End Date: 04/13/2012 15:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-40180/4 IC		04/13/2012 10:08	1	P5F04134.D	
STD2 240-40180/5 IC		04/13/2012 10:38	1	P5F04135.D	
STD3 240-40180/6 IC		04/13/2012 11:08	1	P5F04136.D	
STD4 240-40180/7 IC		04/13/2012 11:38	1	P5F04137.D	
STD5 240-40180/8 IC		04/13/2012 12:08	1	P5F04138.D	
ICV 240-40180/9		04/13/2012 12:38	1	P5F04139.D	
STD1 240-40180/10 IC		04/13/2012 13:08	1		
STD2 240-40180/11 IC		04/13/2012 13:38	1		
STD3 240-40180/12 IC		04/13/2012 14:08	1		
STD4 240-40180/13 IC		04/13/2012 14:37	1		
STD5 240-40180/14 IC		04/13/2012 15:06	1		
ICV 240-40180/15		04/13/2012 15:36	1		

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 40180

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/13/2012 10:08 Calibration End Date: 04/13/2012 12:08 Calibration ID: 8059

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-40180/4	P5F04134.D
Level 2	STD2 240-40180/5	P5F04135.D
Level 3	STD3 240-40180/6	P5F04136.D
Level 4	STD4 240-40180/7	P5F04137.D
Level 5	STD5 240-40180/8	P5F04138.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	9.179	9.179	9.179	9.179	9.179						4.893 - 13.468	9.179
n-Nonane	3.798	3.796	3.795	3.799	3.802						3.728 - 3.868	3.798

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-10808-1 Analy Batch No.: 40180

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/13/2012 10:08 Calibration End Date: 04/13/2012 12:08 Calibration ID: 8059

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-40180/4	P5F04134.D
Level 2	STD2 240-40180/5	P5F04135.D
Level 3	STD3 240-40180/6	P5F04136.D
Level 4	STD4 240-40180/7	P5F04137.D
Level 5	STD5 240-40180/8	P5F04138.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	197527 183497	194334	179644	186362	Ave		188272.909				4.0		20.0			
n-Nonane	222434 217668	222225	205767	214296	Ave		216478.041				3.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICV 240-40180/9 Calibration Date: 04/13/2012 12:38

Instrument ID: A2HP5F Calib Start Date: 04/13/2012 10:08

GC Column: ID: Calib End Date: 04/13/2012 12:08

Lab File ID: P5F04139.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	188273	191992		510	500	2.0	20.0

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: A2HP5F Start Date: 05/07/2012 09:46

Analysis Batch Number: 42964 End Date: 05/07/2012 15:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-42964/4		05/07/2012 09:46	1	P5F05074.D	
240-10808-2	GSP-MW5-043012	05/07/2012 10:16	1	P5F05075.D	
240-10808-3	GSP-MW6-043012	05/07/2012 10:46	1	P5F05076.D	
240-10808-4	MT-MW02S-043012	05/07/2012 11:16	1	P5F05077.D	
ZZZZZ		05/07/2012 11:45	1		
ZZZZZ		05/07/2012 12:15	1		
ZZZZZ		05/07/2012 12:45	1		
ZZZZZ		05/07/2012 13:15	1		
ZZZZZ		05/07/2012 13:45	1		
MB 240-42831/9-A		05/07/2012 14:15	1	P5F05083.D	
LCS 240-42831/10-A		05/07/2012 14:45	1	P5F05084.D	
CCV 240-42964/15		05/07/2012 15:15	1	P5F05085.D	

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCVRT 240-42964/4 Calibration Date: 05/07/2012 09:46

Instrument ID: A2HP5F Calib Start Date: 04/13/2012 10:08

GC Column: ID: Calib End Date: 04/13/2012 12:08

Lab File ID: P5F05074.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	188273	195069		518	500	3.6	15.0
n-Nonane	Ave	216478	235449		54.4	50.0	8.8	15.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: CCV 240-42964/15 Calibration Date: 05/07/2012 15:15

Instrument ID: A2HP5F Calib Start Date: 04/13/2012 10:08

GC Column: ID: Calib End Date: 04/13/2012 12:08

Lab File ID: P5F05085.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	188273	207212		550	500	10.1	15.0
n-Nonane	Ave	216478	240161		55.5	50.0	10.9	15.0

HOLDTIME

SDG 240-10808-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/3/2012	5/4/2012	3	1	4
HG	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/7/2012	5/8/2012	7	1	8
HG	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/7/2012	5/8/2012	7	1	8
M	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
M	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
M	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
HGF	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/7/2012	5/8/2012	7	1	8
HGF	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/3/2012	5/4/2012	3	1	4
HGF	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/7/2012	5/8/2012	7	1	8
MF	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
MF	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
MF	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
PCL	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/7/2012	5/15/2012	7	8	15
PCL	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/7/2012	5/15/2012	7	8	15
PCL	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/7/2012	5/15/2012	7	8	15

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/5/2012	5/8/2012	5	3	8
OS	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/5/2012	5/8/2012	5	3	8
OS	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/5/2012	5/8/2012	5	3	8
OV	UG/L	TB-043012	240-10808-1	NM	4/30/2012	5/10/2012	5/10/2012	10	0	10
OV	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/10/2012	5/10/2012	10	0	10
OV	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/10/2012	5/10/2012	10	0	10
OV	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/10/2012	5/10/2012	10	0	10
OV	UG/L	TB-043012	240-10808-1	TB	4/30/2012	5/10/2012	5/10/2012	10	0	10
DRO	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/4/2012	5/7/2012	4	3	7
DRO	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/4/2012	5/7/2012	4	3	7
DRO	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/4/2012	5/7/2012	4	3	7
GRO	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/7/2012	5/7/2012	7	0	7
GRO	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/7/2012	5/7/2012	7	0	7
GRO	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/7/2012	5/7/2012	7	0	7

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE: JUNE 29, 2012**

FROM: **TERRI L. SOLOMON** **COPIES: DV FILE**

SUBJECT: **ORGANIC / INORGANIC DATA VALIDATION – SELECT METALS, PERCHLORATE**
MARTIN STATE AIRPORT – GROUNDWATER
SAMPLE DELIVERY GROUP (SDG) – 240-10808-1

SAMPLES: 3/Aqueous/

GSP-MW5-043012 GSP-MW6-043012
MT-MW02S-043012

Overview

The sample set for Martin State Airport - Groundwater, SDG 240-10808-1, consists of three (3) aqueous environmental samples. No field duplicate pairs were included within this SDG.

All samples were analyzed for perchlorate and select total and dissolved metals including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, tungsten, vanadium and zinc. The samples were collected by Tetra Tech on April 30, 2012 and analyzed by TestAmerica. Metals analyses were conducted using SW-846 method 6020. Mercury analyses were conducted using SW-846 method 7470A. Perchlorate analyses were conducted using SW-846 method 6850.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, laboratory control sample recoveries, matrix spike/matrix spike duplicate recoveries, ICP serial dilution results, internal standard recoveries, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems

None.

Minor Problems

- The contract required detection limit (CRDL) percent recoveries for cadmium, cobalt, lead and nickel were > 110% quality control limit affecting all samples. Positive results < 2X CRDL for cadmium, cobalt, lead and nickel were qualified as either biased high, "K" or estimated, "J", as a result of conflicting noncompliances.

- The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Antimony[(1)]	0.138 ug/L	0.69 ug/L
Cobalt[(1)]	0.0610 ug/L	0.305 ug/L
Molybdenum[(1)]	0.678 ug/L	3.39 ug/L
Thallium[(1)]	0.554 ug/L	2.77 ug/L
Tungsten[(1)]	0.868 ug/L	4.34 ug/L
Barium[(2)]	0.541 ug/L	2.705 ug/L
Copper[(2)]	0.388 ug/L	1.94 ug/L
Zinc[(2)]	4.57 ug/L	22.85 ug/L

  [(1)] Maximum concentration present in a method blank affecting all samples.
  [(2)] Maximum concentration present in a preparation blank affecting all samples.

  An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level reported for copper, molybdenum and thallium were qualified "B" as a result of laboratory blank contamination.

- Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated, "J".

Notes

Nondetected results are reported to the method detection limits.

The contract required detection limit (CRDL) percent recoveries for barium, copper, silver and thallium were > 110% quality control limit affecting all samples. However, no validation actions were required as all sample results were either > 2X CRDL, nondetects or were qualified as a result of blank contamination.

Executive Summary

Laboratory Performance: Several contaminants were present in the laboratory method / preparation blanks. The CRDL percent recovery for several analytes was > 110% quality control limit affecting all samples.

Other Factors Affecting Data Quality: Positive results reported below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to Region III modifications to the "National Functional Guidelines for Inorganic Data Validation", April 1993 and the Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994).

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Terri L. Solomon
Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	GSP-MW5-043012			GSP-MW6-043012			MT-MW02S-043012		
SDG: 240-10808-1	LAB_ID	240-10808-2			240-10808-3			240-10808-4		
FRACTION: M	SAMP_DATE	4/30/2012			4/30/2012			4/30/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.13	U		0.92	J	P	0.13	U	
ARSENIC		3.4	J	P	4	J	P	2.3	J	P
BARIUM		21			42			120		
BERYLLIUM		1.3			0.2	U		0.74	J	P
CADMIUM		0.32	J	CP	0.13	U		0.13	U	
CHROMIUM		2.2			0.71	U		0.71	U	
COBALT		26			0.56	J	CP	30		
COPPER		4.9			5			1.4	B	A
LEAD		0.39	J	CP	0.18	U		1.3	K	C
MERCURY		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		0.34	B	A	2.7	B	A	0.093	U	
NICKEL		17			1.3	J	CP	48		
SELENIUM		2.2	J	P	14			0.57	U	
SILVER		0.08	U		0.08	U		0.08	U	
THALLIUM		0.14	U		0.25	B	A	0.15	B	A
TUNGSTEN		0.37	U		0.37	U		0.37	U	
VANADIUM		4.4	J	P	8.5	J	P	0.44	U	
ZINC		28			530			100		

PROJ_NO: 04021	NSAMPLE	GSP-MW5-043012			GSP-MW6-043012			MT-MW02S-043012		
SDG: 240-10808-1	LAB_ID	240-10808-2			240-10808-3			240-10808-4		
FRACTION: MF	SAMP_DATE	4/30/2012			4/30/2012			4/30/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.13	U		0.76	J	P	0.13	U	
ARSENIC		3.5	J	P	2.1	J	P	1.7	J	P
BARIUM		21			40			110		
BERYLLIUM		1.4			0.2	U		0.68	J	P
CADMIUM		0.31	J	CP	0.13	U		0.13	U	
CHROMIUM		0.78	J	P	0.71	U		0.71	U	
COBALT		29			0.45	J	CP	23		
COPPER		0.34	B	A	4.1			0.62	B	A
LEAD		0.18	U		0.18	U		1	K	C
MERCURY		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		0.35	B	A	2.2	B	A	0.093	U	
NICKEL		19			1.2	J	CP	39		
SELENIUM		2.7	J	P	13			0.57	U	
SILVER		0.08	U		0.08	U		0.08	U	
THALLIUM		0.26	B	A	0.2	B	A	0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U	
VANADIUM		1.8	J	P	6.5	J	P	0.44	U	
ZINC		25			460			57		

PROJ_NO: 04021	NSAMPLE	GSP-MW5-043012			GSP-MW6-043012			MT-MW02S-043012		
SDG: 240-10808-1	LAB_ID	240-10808-2			240-10808-3			240-10808-4		
FRACTION: MISC	SAMP_DATE	4/30/2012			4/30/2012			4/30/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
PERCHLORATE		0.16	J	P	0.082	U		0.082	U	

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: GSP-MW5-043012 Lab Sample ID: 240-10808-2

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 10:30

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	3.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	21	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	1.3	1.0	0.20	ug/L			1	6020
7440-43-9	Cadmium	0.32	1.0	0.13	ug/L	J		1	6020
7440-47-3	Chromium	2.2	2.0	0.71	ug/L			1	6020
7440-48-4	Cobalt	26	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	4.9	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	0.39	1.0	0.18	ug/L	J		1	6020
7439-98-7	Molybdenum	0.34	10	0.093	ug/L	J	B	1	6020
7440-02-0	Nickel	17	2.0	0.20	ug/L		^	1	6020
7782-49-2	Selenium	2.2	5.0	0.57	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.14	ug/L	U		1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7440-62-2	Vanadium	4.4	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	28	20	2.3	ug/L		B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: GSP-MW5-043012 Lab Sample ID: 240-10808-2

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 10:30

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: GSP-MW6-043012 Lab Sample ID: 240-10808-3

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 11:45

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.92	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	4.0	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	42	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	1.0	1.0	0.20	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	0.56	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	5.0	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.7	10	0.093	ug/L	J	B	1	6020
7440-02-0	Nickel	1.3	2.0	0.20	ug/L	J	^	1	6020
7782-49-2	Selenium	14	5.0	0.57	ug/L			1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.25	2.0	0.14	ug/L	J	B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7440-62-2	Vanadium	8.5	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	530	20	2.3	ug/L		B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: GSP-MW6-043012 Lab Sample ID: 240-10808-3

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 11:45

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW02S-043012 Lab Sample ID: 240-10808-4

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 13:05

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	2.3	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	120	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	0.74	1.0	0.20	ug/L	J		1	6020
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	30	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	1.4	2.0	0.29	ug/L	J	B	1	6020
7439-92-1	Lead	1.3	1.0	0.18	ug/L			1	6020
7439-98-7	Molybdenum	10	10	0.093	ug/L	U		1	6020
7440-02-0	Nickel	48	2.0	0.20	ug/L		^	1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.15	2.0	0.14	ug/L	J	B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	100	20	2.3	ug/L		B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW02S-043012 Lab Sample ID: 240-10808-4

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 13:05

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: GSP-MW5-043012 Lab Sample ID: 240-10808-2

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 10:30

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	3.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	21	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	1.4	1.0	0.20	ug/L			1	6020
7440-43-9	Cadmium	0.31	1.0	0.13	ug/L	J		1	6020
7440-47-3	Chromium	0.78	2.0	0.71	ug/L	J		1	6020
7440-48-4	Cobalt	29	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	0.34	2.0	0.29	ug/L	J	B	1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	0.35	10	0.093	ug/L	J	B	1	6020
7440-02-0	Nickel	19	2.0	0.20	ug/L		^	1	6020
7782-49-2	Selenium	2.7	5.0	0.57	ug/L	J		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.26	2.0	0.14	ug/L	J	B	1	6020
7440-62-2	Vanadium	1.8	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	25	20	2.3	ug/L		B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: GSP-MW6-043012 Lab Sample ID: 240-10808-3

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 11:45

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.76	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.1	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	40	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	1.0	1.0	0.20	ug/L	U		1	6020
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	0.45	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	4.1	2.0	0.29	ug/L		B	1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.2	10	0.093	ug/L	J	B	1	6020
7440-02-0	Nickel	1.2	2.0	0.20	ug/L	J	^	1	6020
7782-49-2	Selenium	13	5.0	0.57	ug/L			1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	0.20	2.0	0.14	ug/L	J	B	1	6020
7440-62-2	Vanadium	6.5	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	460	20	2.3	ug/L		B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW02S-043012 Lab Sample ID: 240-10808-4

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG ID.:

Matrix: Water Date Sampled: 04/30/2012 13:05

Reporting Basis: WET Date Received: 05/01/2012 09:30

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.13	ug/L	U		1	6020
7440-38-2	Arsenic	1.7	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	110	5.0	0.19	ug/L		B	1	6020
7440-41-7	Beryllium	0.68	1.0	0.20	ug/L	J		1	6020
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020
7440-48-4	Cobalt	23	1.0	0.058	ug/L			1	6020
7440-50-8	Copper	0.62	2.0	0.29	ug/L	J	B	1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L			1	6020
7439-98-7	Molybdenum	10	10	0.093	ug/L	U		1	6020
7440-02-0	Nickel	39	2.0	0.20	ug/L		^	1	6020
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020
7440-28-0	Thallium	2.0	2.0	0.14	ug/L	U		1	6020
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020
7440-66-6	Zinc	57	20	2.3	ug/L		B	1	6020
7440-33-7	Tungsten	10	10	0.37	ug/L	U		1	6020
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

TestAmerica Canton

Client Sample ID: GSP-MW5-043012

Dissolved HPLC - Mass. Spec.

Lot-Sample #...:	G2E030413-001	Work Order #...:	MTC2Q1AA	Matrix.....:	WATER
Date Sampled...:	04/30/12	Date Received..:	05/02/12		
Prep Date.....:	05/07/12	Analysis Date..:	05/15/12		
Prep Batch #...:	2128058				
Dilution Factor:	1	Method.....:	SW846 6850		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	0.16 J	1.0	ug/L	0.082

NOTE(S):

J Estimated result. Result is less than RL.

TestAmerica Canton

Client Sample ID: GSP-MW6-043012

Dissolved HPLC - Mass. Spec.

Lot-Sample #...: G2E030413-002	Work Order #...: MTC2R1AA		Matrix.....: WATER	
Date Sampled...: 04/30/12	Date Received..: 05/02/12			
Prep Date.....: 05/07/12	Analysis Date..: 05/15/12			
Prep Batch #...: 2128058				
Dilution Factor: 1	Method.....: SW846 6850			

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	1.0	ug/L	0.082

TestAmerica Canton

Client Sample ID: MT-MW02S-043012

Dissolved HPLC - Mass. Spec.

Lot-Sample #...:	G2E030413-003	**Work Order #...:**	MTC2T1AA	**Matrix.....:**	WATER
Date Sampled...:	04/30/12	**Date Received..:**	05/02/12		
Prep Date.....:	05/07/12	**Analysis Date..:**	05/15/12		
Prep Batch #...:	2128058				
Dilution Factor:	1	**Method.....:**	SW846 6850		

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Perchlorate	ND	1.0	ug/L	0.082

APPENDIX C
SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Project: MSA Groundwater Sampling

Report Number: 240-10808-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 6850 Perchlorate analysis was performed at the TestAmerica West Sacramento Laboratory.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/01/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.9 and 3.2 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples TB-043012 (240-10808-1), GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 05/10/2012.

1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene and Hexachlorobutadiene were detected in method blank MB 240-43549/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

2-Butanone and 2-Chloroethyl vinyl ether failed the recovery criteria low for the MS/MSD of sample 240-10837-5 in batch 240-43549. Refer to the QC report for details.

Sample MT-MW02S-043012 (240-10808-4)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 05/05/2012 and analyzed on 05/08/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

1,4-Dioxane failed the recovery criteria high for the MSD of sample 240-10837-5 in batch 240-43126.

1,4-Dioxane failed the recovery criteria low for the MSD of sample 240-10842-8 in batch 240-43665. 1,4-Dioxane exceeded the rpd limit.

Refer to the QC report for details.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)
Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 05/07/2012.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-42995/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the GRO analyses. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 05/04/2012 and analyzed on 05/07/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

No difficulties were encountered during the DRO analyses. All quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)
Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 05/02/2012 and analyzed on 05/03/2012.

No difficulties were encountered during the metals analyses. All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)
Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 05/02/2012 and analyzed on 05/03/2012.

Several analytes were detected in method blank MB 240-42485/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)
Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 05/03/2012 and 05/07/2012 and analyzed on 05/04/2012 and 05/08/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

TOTAL MERCURY
Samples GSP-MW5-043012 (240-10808-2), GSP-MW6-043012 (240-10808-3) and MT-MW02S-043012 (240-10808-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 05/03/2012 and 05/07/2012 and analyzed on 05/04/2012 and 05/08/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____
Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech	Client Project Manager: Tony Aparicio	Site Contact: Stu Cameron	Lab Contact:	COC No: 006079
Address: 20251 Century Blvd Ste 200	Telephone: (301)528-5552	Telephone: (703)341-8389	Telephone:	1 of 1 COCs
City/State/Zip: Germantown MD, 20874	Email: Tony.Aparicio@tetratech.com	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only: Walk-in client: ☐ Lab pickup: ☐ Lab sampling: ☐
Phone: (301) 528-5552		TAT if different from below _____ ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Job/SDG No.:
Project Name: MSA GW Sampling	Method of Shipment/Carrier:			
Project Number: 112I CO 4021	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite (C) / Grab (G)	VOCs	Total Metals	Dissolved Metals	Perchlorate	1,4-Dioxane	TPH-GRO	TPH-DRO	Sample Specific Notes / Special Instructions:
TB-043012	—	—		X						2							X							
GSP-MW5-043012	4/30/12	1030		X					2	5			5			G	X	X	X	X	X	X	X	
GSP-MW6-043012	↓	1145		X					2	5			5			G	X	X	X	X	X	X	X	
MT-MW02S-043012	↓	1305		X					2	5			5			G	X	X	X	X	X	X	X	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by: Stu Cameron	Company: Tetra Tech	Date/Time: 4-30-12/1445	Received by: Paul Gaylord	Company: TestAmerica	Date/Time: 4/30/12 1446
Relinquished by:	Company: TestAmerica	Date/Time: 4-30-2012/1530	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 5-1-12 930

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05/29/2012

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HOLDTIME

SDG 240-10808-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/3/2012	5/4/2012	3	1	4
HG	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/7/2012	5/8/2012	7	1	8
HG	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/7/2012	5/8/2012	7	1	8
M	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
M	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
M	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
HGF	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/7/2012	5/8/2012	7	1	8
HGF	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/3/2012	5/4/2012	3	1	4
HGF	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/7/2012	5/8/2012	7	1	8
MF	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
MF	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
MF	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/2/2012	5/3/2012	2	1	3
PCL	UG/L	MT-MW02S-043012	240-10808-4	NM	4/30/2012	5/7/2012	5/15/2012	7	8	15
PCL	UG/L	GSP-MW6-043012	240-10808-3	NM	4/30/2012	5/7/2012	5/15/2012	7	8	15
PCL	UG/L	GSP-MW5-043012	240-10808-2	NM	4/30/2012	5/7/2012	5/15/2012	7	8	15

SAMPLE SUMMARY

Client: Tetra Tech, Inc formerly Tetra Tech NUS

Job Number: 240-10808-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-10808-1TB	TB-043012	Water	04/30/2012 0000	05/01/2012 0930
240-10808-2	GSP-MW5-043012	Water	04/30/2012 1030	05/01/2012 0930
240-10808-3	GSP-MW6-043012	Water	04/30/2012 1145	05/01/2012 0930
240-10808-4	MT-MW02S-043012	Water	04/30/2012 1305	05/01/2012 0930

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

ICV Source: MTMSICVW_00014 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00039

Analyte	ICV 240-42666/5 05/03/2012 06:17				CCV 240-42666/22 05/03/2012 07:54				CCV 240-42666/34 05/03/2012 09:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	82.2		80.0	103	98.3		100	98	96.3		100	96
Arsenic	80.9		80.0	101	98.9		100	99	98.8		100	99
Barium	80.9		80.0	101	97.7		100	98	97.5		100	98
Beryllium	81.5		80.0	102	97.5		100	97	97.4		100	97
Cadmium	80.4		80.0	101	99.6		100	100	98.7		100	99
Chromium	79.7		80.0	100	96.9		100	97	98.0		100	98
Cobalt	81.2		80.0	102	99.0		100	99	100		100	100
Copper	83.2		80.0	104	101		100	101	101		100	101
Lead	82.4		80.0	103	99.3		100	99	96.7		100	97
Molybdenum	83.6		80.0	105	103		100	103	101		100	101
Nickel	83.1		80.0	104	101		100	101	102		100	102
Selenium	80.7		80.0	101	101		100	101	99.9		100	100
Silver	82.7		80.0	103	101		100	101	98.9		100	99
Thallium	81.3		80.0	102	100		100	100	100		100	100
Tungsten	80.4		80.0	101	98.4		100	98	97.0		100	97
Vanadium	79.7		80.0	100	96.7		100	97	96.8		100	97
Zinc	81.5		80.0	102	99.8		100	100	99.5		100	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

ICV Source: MTMSICVW_00014 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00039

Analyte	CCV 240-42666/46 05/03/2012 10:08				CCV 240-42666/53 05/03/2012 10:45							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	96.7		100	97	95.8		100	96				
Arsenic	99.6		100	100	99.1		100	99				
Barium	97.3		100	97	97.5		100	97				
Beryllium	98.3		100	98	96.9		100	97				
Cadmium	97.6		100	98	96.9		100	97				
Chromium	98.7		100	99	96.9		100	97				
Cobalt	99.6		100	100	100		100	100				
Copper	102		100	102	101		100	101				
Lead	94.3		100	94	94.2		100	94				
Molybdenum	101		100	101	99.5		100	100				
Nickel	101		100	101	101		100	101				
Selenium	101		100	101	101		100	101				
Silver	99.1		100	99	98.9		100	99				
Thallium	101		100	101	101		100	101				
Tungsten	96.5		100	96	96.7		100	97				
Vanadium	98.7		100	99	97.5		100	98				
Zinc	101		100	101	101		100	101				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

ICV Source: MTHGICVW_00289 Concentration Units: ug/L

CCV Source: MTHGCALW_00189

Analyte	ICV 240-42622/7-A 05/04/2012 10:43				CCVL 240-42622/10-A 05/04/2012 10:53				CCV 240-42622/12-A 05/04/2012 12:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.29		2.50	92	5.09		5.00	102	5.15		5.00	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

ICV Source: MTHGICVW_00289 Concentration Units: ug/L

CCV Source: MTHGCALW_00189

Analyte	CCV 240-42622/12-A 05/04/2012 12:34											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.12		5.00	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

ICV Source: MTHGICVW_00292 Concentration Units: ug/L

CCV Source: MTHGCALW_00190

Analyte	ICV 240-43145/7-A 05/08/2012 14:43				CCVL 240-43145/10-A 05/08/2012 14:49				CCV 240-43145/12-A 05/08/2012 15:39			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.43		2.50	97	5.20		5.00	104	5.32		5.00	106

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

ICV Source: MTHGICVW_00292 Concentration Units: ug/L

CCV Source: MTHGCALW_00190

Analyte	CCV 240-43145/12-A 05/08/2012 16:04				CCV 240-43145/12-A 05/08/2012 16:29				CCV 240-43145/12-A 05/08/2012 16:55			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.31		5.00	106	5.11		5.00	102	5.12		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Method: 6020 Instrument ID: I8

Lab Sample ID: CRI 240-42666/8 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRIW_00016

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	1.96	J	98	50-150
Arsenic	2.00	2.19	J	110	50-150
Barium	1.00	1.33	J	133	50-150
Beryllium	1.00	1.08		108	50-150
Cadmium	0.500	0.658	J	132	50-150
Chromium	2.00	2.08		104	50-150
Cobalt	1.00	1.20		120	50-150
Copper	2.00	2.72		136	50-150
Lead	1.00	1.22		122	50-150
Molybdenum	10.0	9.90	J	99	50-150
Nickel	2.00	3.13	^	156	50-150
Selenium	2.00	2.16	J	108	50-150
Silver	0.500	0.603	J	121	50-150
Thallium	1.00	1.20	J	120	50-150
Vanadium	5.00	4.78	J	96	50-150
Tungsten	10.0	9.47	J	95	50-150
Zinc	10.0	10.6	J	106	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Method: 7470A Instrument ID: H4

Lab Sample ID: CRA 240-42622/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00189

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.186	J	93	50-150

Lab Sample ID: CRA 240-43145/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00190

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.224		112	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-42666/6 05/03/2012 06:22		CCB 240-42666/23 05/03/2012 08:00		CCB 240-42666/35 05/03/2012 09:08		CCB 240-42666/47 05/03/2012 10:13	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.149	J	0.322	J	0.131	J	0.138	J
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	0.239	J	5.0	U	5.0	U
Beryllium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	1.0	U	0.172	J	1.0	U	1.0	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	0.0800	J	0.169	J	0.0610	J	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	0.191	J	1.0	U	1.0	U
Molybdenum	10	0.858	J	0.854	J	0.632	J	0.678	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	2.0	0.496	J	0.686	J	0.554	J	0.489	J
Tungsten	10	1.07	J	0.956	J	0.868	J	0.833	J
Vanadium	20	20	U	20	U	20	U	20	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-42666/54 05/03/2012 10:51							
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	0.133	J						
Arsenic	5.0	5.0	U						
Barium	5.0	5.0	U						
Beryllium	1.0	1.0	U						
Cadmium	1.0	1.0	U						
Chromium	2.0	2.0	U						
Cobalt	1.0	1.0	U						
Copper	2.0	2.0	U						
Lead	1.0	1.0	U						
Molybdenum	10	0.662	J						
Nickel	2.0	2.0	U						
Selenium	5.0	5.0	U						
Silver	1.0	1.0	U						
Thallium	2.0	0.476	J						
Tungsten	10	0.810	J						
Vanadium	20	20	U						
Zinc	20	20	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-42622/8-A 05/04/2012 10:45		CCB 240-42622/11-A 05/04/2012 12:09		CCB 240-42622/11-A 05/04/2012 12:35			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-43145/8-A 05/08/2012 14:45		CCB 240-43145/11-A 05/08/2012 15:40		CCB 240-43145/11-A 05/08/2012 16:06		CCB 240-43145/11-A 05/08/2012 16:31	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-43145/11-A 05/08/2012 16:57							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-42485/1-A

Instrument Code: I8 Batch No.: 42666

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020
7440-38-2	Arsenic	5.0	U		6020
7440-39-3	Barium	0.541	J		6020
7440-41-7	Beryllium	1.0	U		6020
7440-43-9	Cadmium	1.0	U		6020
7440-47-3	Chromium	2.0	U		6020
7440-48-4	Cobalt	1.0	U		6020
7440-50-8	Copper	0.388	J		6020
7439-92-1	Lead	1.0	U		6020
7439-98-7	Molybdenum	0.312	J		6020
7440-02-0	Nickel	2.0	U	^	6020
7782-49-2	Selenium	5.0	U		6020
7440-22-4	Silver	1.0	U		6020
7440-28-0	Thallium	0.332	J		6020
7440-62-2	Vanadium	20	U		6020
7440-33-7	Tungsten	10	U		6020
7440-66-6	Zinc	4.57	J		6020

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-42671/1-A

Instrument Code: H4 Batch No.: 42975

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-43054/1-A

Instrument Code: H4 Batch No.: 43362

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICSA 240-42666/9 Instrument ID: I8

Lab File ID: I8050312A.csv ICS Source: MTMSICSAW_00014

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.163**	
Arsenic		**0.572**	
Barium		**0.131**	
Beryllium		**0.0050**	
Cadmium		**-0.414**	
Chromium		**0.479**	
Cobalt		**0.118**	
Copper		**0.523**	
Lead		**0.0560**	
Molybdenum	**1000**	**1018**	**102**
Nickel		**0.562**	
Selenium		**0.0360**	
Silver		**0.0380**	
Thallium		**0.111**	
Tungsten		**0.347**	
Vanadium		**0.0780**	
Zinc		**1.08**	
Aluminum	*50000*	*48650*	*97*
Boron		*0.397*	
Calcium	*50000*	*50780*	*102*
Iron	*50000*	*50610*	*101*
Magnesium	*50000*	*50890*	*102*
Manganese		*0.237*	
Potassium	*50000*	*50870*	*102*
Sodium	*50000*	*51340*	*103*
Strontium		*0.331*	
Tin		*0.0580*	
Titanium	*1000*	*1045*	*105*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Lab Sample ID: ICSAB 240-42666/10 Instrument ID: I8

Lab File ID: I8050312A.csv ICS Source: MTMSICSABW_00014

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**100**	**100**
Arsenic	**100**	**98.6**	**99**
Barium	**100**	**101**	**101**
Beryllium	**100**	**104**	**104**
Cadmium	**100**	**98.5**	**98**
Chromium	**100**	**105**	**105**
Cobalt	**100**	**100**	**100**
Copper	**100**	**101**	**101**
Lead	**100**	**106**	**106**
Molybdenum	**1100**	**1138**	**103**
Nickel	**100**	**107**	**107**
Selenium	**100**	**101**	**101**
Silver	**100**	**101**	**101**
Thallium	**100**	**104**	**104**
Tungsten	**100**	**99.6**	**100**
Vanadium	**100**	**99.2**	**99**
Zinc	**100**	**103**	**103**
Aluminum	*50000*	*48390*	*97*
Boron	*100*	*99.3*	*99*
Calcium	*50000*	*51380*	*103*
Iron	*50000*	*50960*	*102*
Magnesium	*50000*	*50690*	*101*
Manganese	*100*	*107*	*107*
Potassium	*50000*	*50370*	*101*
Sodium	*50000*	*51610*	*103*
Strontium	*100*	*95.2*	*95*
Tin	*100*	*98.8*	*99*
Titanium	*1100*	*1153*	*105*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

NOT IN SDG

Client ID: _____ Lab ID: 240-10807-B-5-B MS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	95.7		0.42	J	100	95	44-153		6020
Arsenic	959		2.7	J	1000	96	82-123		6020
Barium	1360		370		1000	99	45-144		6020
Beryllium	980		1.0	U	1000	98	77-124		6020
Cadmium	933		0.14	J	1000	93	78-117		6020
Chromium	974		2.6		1000	97	72-110		6020
Cobalt	968		2.6		1000	97	67-114		6020
Copper	931		0.63	J	1000	93	60-123		6020
Lead	984		0.19	J	1000	98	73-115		6020
Molybdenum	104		0.87	J	100	103	80-110		6020
Nickel	962		10		1000	95	72-111	^	6020
Selenium	948		0.87	J	1000	95	72-148		6020
Silver	92.5		1.0	U	100	92	10-139		6020
Thallium	244		0.66	J	250	97	69-117		6020
Vanadium	978		20	U	1000	98	70-112		6020
Tungsten	96.9		2.2	J	100	95	43-133		6020
Zinc	921		3.7	J	1000	92	49-156		6020

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

NOT IN SDG

Client ID: _____ Lab ID: 240-10770-H-3-C MS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.913		0.20	U	1.00	91	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

POT 1.2 SDG

Client ID: _____ Lab ID: 240-10837-N-5-C MS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	1.04		0.20	U	1.00	104	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

PUT IN SDG

Client ID: _____ Lab ID: 240-10837-M-5-C MS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.921		0.12	J	1.00	92	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Not in SDG

Client ID: _____ Lab ID: 240-10807-B-5-C MSD

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	95.8		100	95	44-153	0	20		6020
Arsenic	958		1000	96	82-123	0	20		6020
Barium	1350		1000	98	45-144	1	20		6020
Beryllium	964		1000	96	77-124	2	20		6020
Cadmium	918		1000	92	78-117	2	20		6020
Chromium	973		1000	97	72-110	0	20		6020
Cobalt	963		1000	96	67-114	1	20		6020
Copper	932		1000	93	60-123	0	20		6020
Lead	981		1000	98	73-115	0	20		6020
Molybdenum	103		100	103	80-110	0	20		6020
Nickel	957		1000	95	72-111	1	20	^	6020
Selenium	947		1000	95	72-148	0	20		6020
Silver	92.4		100	92	10-139	0	20		6020
Thallium	247		250	98	69-117	1	20		6020
Vanadium	979		1000	98	70-112	0	20		6020
Tungsten	97.8		100	96	43-133	1	20		6020
Zinc	920		1000	92	49-156	0	20		6020

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

NOT IN SDG

Client ID: _____ Lab ID: 240-10770-H-3-D MSD

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.918		1.00	92	69-134	1	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

6-IN
DUPLICATES
METALS

Client ID: Lab ID: 240-10837-N-5-B DU

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

% Solids for Sample: % Solids for Duplicate:

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.20	0.20	U	0.20	U	NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATES
METALS - DISSOLVED

POT IP SOG

Client ID: _____ Lab ID: 240-10837-M-5-B DU

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.: _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.20	0.12	J	0.20	U	NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-42485/2-A

Lab Name: TestAmerica Canton Job No.: 240-10808-1

Sample Matrix: Water LCS Source: MTICPMSB_00008

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	92.0		92	80	120		6020
Arsenic	1000	918		92	80	120		6020
Barium	1000	918		92	80	120		6020
Beryllium	1000	905		91	80	120		6020
Cadmium	1000	934		93	80	120		6020
Chromium	1000	943		94	80	120		6020
Cobalt	1000	951		95	80	120		6020
Copper	1000	975		98	80	120		6020
Lead	1000	1010		101	80	120		6020
Molybdenum	100	92.2		92	80	120		6020
Nickel	1000	979		98	80	120	^	6020
Selenium	1000	939		94	80	120		6020
Silver	100	97.5		98	80	120		6020
Thallium	250	242		97	80	120		6020
Vanadium	1000	921		92	80	120		6020
Tungsten	100	88.0		88	80	120		6020
Zinc	1000	962		96	80	120		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-42671/2-A

Lab Name: TestAmerica Canton Job No.: 240-10808-1

Sample Matrix: Water LCS Source: MTHGICVW_00289

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.45		89	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-43054/2-A

Lab Name: TestAmerica Canton Job No.: 240-10808-1

Sample Matrix: Water LCS Source: MTHGICVW_00291

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.81		96	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

POT IP SDG

Lab ID: 240-10807-B-5-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-10808-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.42	J	0.670	J	NC		6020
Arsenic	2.7	J	3.93	J	NC		6020
Barium	370		371		NC		6020
Beryllium	1.0	U	5.0	U	NC		6020
Cadmium	0.14	J	5.0	U	NC		6020
Chromium	2.6		10	U	NC		6020
Cobalt	2.6		2.89	J	NC		6020
Copper	0.63	J	10	U	NC		6020
Lead	0.19	J	5.0	U	NC		6020
Molybdenum	0.87	J	1.34	J	NC		6020
Nickel	10		11.6		NC	^	6020
Selenium	0.87	J	25	U	NC		6020
Silver	1.0	U	5.0	U	NC		6020
Thallium	0.66	J	1.64	J	NC		6020
Vanadium	20	U	100	U	NC		6020
Tungsten	2.2	J	3.01	J	NC		6020
Zinc	3.7	J	100	U	NC		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-10808-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10808-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020 MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Tungsten	182.00	10	0.37
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-10808-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-10808-1

SDG Number:

Matrix: Water Instrument ID: H4

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-42485/1-A	05/02/2012 10:01	42485		50	50
LCS 240-42485/2-A	05/02/2012 10:01	42485		50	50
240-10807-B-5-B MS	05/02/2012 10:01	42485		50	50
240-10807-B-5-C MSD	05/02/2012 10:01	42485		50	50
240-10808-2	05/02/2012 10:01	42485		50	50
240-10808-2	05/02/2012 10:01	42485		50	50
240-10808-3	05/02/2012 10:01	42485		50	50
240-10808-3	05/02/2012 10:01	42485		50	50
240-10808-4	05/02/2012 10:01	42485		50	50
240-10808-4	05/02/2012 10:01	42485		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-42671/1-A	05/03/2012 15:55	42671		100	100
LCS 240-42671/2-A	05/03/2012 15:55	42671		100	100
240-10770-H-3-C MS	05/03/2012 15:55	42671		100	100
240-10770-H-3-D MSD	05/03/2012 15:55	42671		100	100
240-10808-2	05/03/2012 15:55	42671		100	100
240-10808-2	05/03/2012 15:55	42671		100	100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-43054/1-A	05/07/2012 14:15	43054		100	100
LCS 240-43054/2-A	05/07/2012 14:15	43054		100	100
240-10837-N-5-B DU	05/07/2012 14:15	43054		100	100
240-10837-N-5-C MS	05/07/2012 14:15	43054		100	100
240-10837-M-5-B DU	05/07/2012 14:15	43054		100	100
240-10837-M-5-C MS	05/07/2012 14:15	43054		100	100
240-10808-3	05/07/2012 14:15	43054		100	100
240-10808-4	05/07/2012 14:15	43054		100	100
240-10808-3	05/07/2012 14:15	43054		100	100
240-10808-4	05/07/2012 14:15	43054		100	100

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 05/03/2012 End Date: 05/03/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
STD2 240-42666/2 IC	06:00	95		94		97		94		95	
STD3 240-42666/3 IC	06:05	94		93		92		88		91	
STD4 240-42666/4 IC	06:12	102		112		104		106		104	
ICV 240-42666/5	06:17	98		102		99		97		97	
ICB 240-42666/6	06:22	104		113		105		103		103	
CRI 240-42666/8	06:33	104		112		103		102		102	
ICSA 240-42666/9	06:39	86		92		87		88		91	
ICSAB 240-42666/10	06:44	70		84		84		85		89	
CCV 240-42666/22	07:54	83		93		90		87		89	
CCB 240-42666/23	08:00	93		105		95		95		95	
MB 240-42485/1-A	08:05	95		106		98		96		95	
LCS 240-42485/2-A	08:11	92		101		94		92		94	
240-10807-B-5-A SD	08:23	89		102		93		90		90	
240-10807-B-5-B MS	08:28	75		82		77		73		76	
240-10807-B-5-C MSD	08:34	75		83		77		72		77	
CCV 240-42666/34	09:03	85		96		89		86		86	
CCB 240-42666/35	09:08	95		107		97		94		94	
240-10808-2	10:02	89		103		92		89		88	
CCV 240-42666/46	10:08	85		97		86		83		83	
CCB 240-42666/47	10:13	93		107		94		92		90	
240-10808-2	10:19	91		103		92		88		86	
240-10808-3	10:24	87		98		86		82		82	
240-10808-3	10:29	85		96		85		81		81	
240-10808-4	10:35	87		100		91		89		88	
240-10808-4	10:40	85		99		90		88		88	
CCV 240-42666/53	10:45	80		92		85		80		80	
CCB 240-42666/54	10:51	89		101		90		89		87	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 05/03/2012 End Date: 05/03/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD2 240-42666/2 IC	06:00			98							
STD3 240-42666/3 IC	06:05			94							
STD4 240-42666/4 IC	06:12			103							
ICV 240-42666/5	06:17			99							
ICB 240-42666/6	06:22			101							
CRI 240-42666/8	06:33			102							
ICSA 240-42666/9	06:39			91							
ICSAB 240-42666/10	06:44			91							
CCV 240-42666/22	07:54			90							
CCB 240-42666/23	08:00			94							
MB 240-42485/1-A	08:05			95							
LCS 240-42485/2-A	08:11			95							
240-10807-B-5-A SD	08:23			91							
240-10807-B-5-B MS	08:28			80							
240-10807-B-5-C MSD	08:34			79							
CCV 240-42666/34	09:03			86							
CCB 240-42666/35	09:08			90							
240-10808-2	10:02			91							
CCV 240-42666/46	10:08			81							
CCB 240-42666/47	10:13			86							
240-10808-2	10:19			91							
240-10808-3	10:24			82							
240-10808-3	10:29			80							
240-10808-4	10:35			86							
240-10808-4	10:40			86							
CCV 240-42666/53	10:45			80							
CCB 240-42666/54	10:51			83							

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 05/03/2012 05:54 End Date: 05/03/2012 10:51

Lab Sample ID	D/F	Type	Time	Analytes																		
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ICIS 240-42666/1			05:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD2 240-42666/2 IC	1		06:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD3 240-42666/3 IC	1		06:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD4 240-42666/4 IC	1		06:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICV 240-42666/5	1		06:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB 240-42666/6	1		06:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CRI 240-42666/7			06:28																				
CRI 240-42666/8	1		06:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA 240-42666/9	1		06:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB 240-42666/10	1		06:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-42666/11			06:50																				
CCB 240-42666/12			06:55																				
CCV 240-42666/13			07:04																				
CCB 240-42666/14			07:10																				
ZZZZZZ			07:15																				
ZZZZZZ			07:21																				
ZZZZZZ			07:26																				
ZZZZZZ			07:31																				
ZZZZZZ			07:37																				
ZZZZZZ			07:42																				
ZZZZZZ			07:49																				
CCV 240-42666/22	1		07:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42666/23	1		08:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
MB 240-42485/1-A	1	R	08:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LCS 240-42485/2-A	1	R	08:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			08:17																				
240-10807-B-5-A SD ^5	5	R	08:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10807-B-5-B MS	1	R	08:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10807-B-5-C MSD	1	R	08:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			08:41																				
ZZZZZZ			08:46																				
ZZZZZZ			08:52																				
ZZZZZZ			08:57																				
CCV 240-42666/34	1		09:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42666/35	1		09:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			09:14																				
ZZZZZZ			09:19																				
ZZZZZZ			09:24																				
ZZZZZZ			09:30																				
ZZZZZZ			09:35																				
ZZZZZZ			09:41																				
ZZZZZZ			09:46																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 05/03/2012 05:54 End Date: 05/03/2012 10:51

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	W	Zn			
ZZZZZZ			09:52																				
ZZZZZZ			09:57																				
240-10808-2	1	R	10:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-42666/46	1		10:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42666/47	1		10:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10808-2	1	D	10:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10808-3	1	R	10:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10808-3	1	D	10:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10808-4	1	R	10:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-10808-4	1	D	10:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-42666/53	1		10:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-42666/54	1		10:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

Prep Types
D = Dissolved
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 05/04/2012 10:31 End Date: 05/04/2012 18:44

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-42622/1-A			10:31	X																				
IC 240-42622/2-A			10:33	X																				
IC 240-42622/3-A			10:35	X																				
IC 240-42622/4-A			10:37	X																				
IC 240-42622/5-A			10:39	X																				
IC 240-42622/6-A			10:41	X																				
ICV 240-42622/7-A	1		10:43	X																				
ICB 240-42622/8-A	1		10:45	X																				
CRA 240-42622/9-A	1		10:48	X																				
CCVL 240-42622/10-A	1		10:53	X																				
CCB 240-42622/11-A			10:55																					
ZZZZZZ			10:56																					
ZZZZZZ			10:58																					
ZZZZZZ			11:00																					
ZZZZZZ			11:02																					
ZZZZZZ			11:04																					
ZZZZZZ			11:06																					
ZZZZZZ			11:09																					
ZZZZZZ			11:11																					
ZZZZZZ			11:13																					
ZZZZZZ			11:15																					
CCV 240-42622/12-A			11:17																					
CCB 240-42622/11-A			11:19																					
ZZZZZZ			11:21																					
ZZZZZZ			11:24																					
ZZZZZZ			11:26																					
ZZZZZZ			11:28																					
ZZZZZZ			11:30																					
ZZZZZZ			11:32																					
ZZZZZZ			11:34																					
ZZZZZZ			11:36																					
ZZZZZZ			11:38																					
ZZZZZZ			11:40																					
CCV 240-42622/12-A			11:42																					
CCB 240-42622/11-A			11:44																					
ZZZZZZ			11:46																					
ZZZZZZ			11:48																					
ZZZZZZ			11:50																					
ZZZZZZ			11:53																					
ZZZZZZ			11:55																					
ZZZZZZ			11:57																					
ZZZZZZ			11:59																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 05/04/2012 10:31 End Date: 05/04/2012 18:44

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			12:00																					
ZZZZZZ			12:03																					
ZZZZZZ			12:05																					
CCV 240-42622/12-A	1		12:07	X																				
CCB 240-42622/11-A	1		12:09	X																				
MB 240-42671/1-A	1	T	12:12	X																				
LCS 240-42671/2-A	1	T	12:14	X																				
ZZZZZZ			12:16																					
240-10770-H-3-C MS	1	T	12:18	X																				
240-10770-H-3-D MSD	1	T	12:20	X																				
ZZZZZZ			12:22																					
ZZZZZZ			12:25																					
ZZZZZZ			12:27																					
240-10808-2	1	T	12:29	X																				
240-10808-2	1	D	12:31	X																				
CCV 240-42622/12-A	1		12:34	X																				
CCB 240-42622/11-A	1		12:35	X																				
ZZZZZZ			12:37																					
ZZZZZZ			12:39																					
ZZZZZZ			12:41																					
ZZZZZZ			12:43																					
ZZZZZZ			12:46																					
ZZZZZZ			12:47																					
ZZZZZZ			12:49																					
ZZZZZZ			12:51																					
ZZZZZZ			12:53																					
ZZZZZZ			12:55																					
CCV 240-42622/12-A			12:59																					
CCB 240-42622/11-A			13:00																					
ZZZZZZ			13:03																					
ZZZZZZ			13:06																					
CCV 240-42622/12-A			13:09																					
CCB 240-42622/11-A			13:11																					
CCV 240-42622/12-A			14:41																					
CCB 240-42622/11-A			14:43																					
ZZZZZZ			14:45																					
ZZZZZZ			14:47																					
ZZZZZZ			14:49																					
ZZZZZZ			14:51																					
ZZZZZZ			14:53																					
ZZZZZZ			14:55																					
ZZZZZZ			14:57																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 05/04/2012 10:31 End Date: 05/04/2012 18:44

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			14:59																					
ZZZZZZ			15:01																					
ZZZZZZ			15:03																					
CCV 240-42622/12-A			15:05																					
CCB 240-42622/11-A			15:07																					
ZZZZZZ			15:09																					
ZZZZZZ			15:11																					
CCV 240-42622/12-A			15:13																					
CRA 240-42622/9-A			15:15																					
CCB 240-42622/11-A			15:18																					
ZZZZZZ			15:20																					
ZZZZZZ			15:22																					
ZZZZZZ			15:24																					
ZZZZZZ			15:26																					
ZZZZZZ			15:28																					
ZZZZZZ			15:30																					
ZZZZZZ			15:33																					
ZZZZZZ			15:34																					
ZZZZZZ			15:36																					
ZZZZZZ			15:39																					
CCV 240-42622/12-A			15:40																					
CCB 240-42622/11-A			15:42																					
ZZZZZZ			15:44																					
ZZZZZZ			15:46																					
ZZZZZZ			15:48																					
ZZZZZZ			15:50																					
ZZZZZZ			15:52																					
ZZZZZZ			15:54																					
ZZZZZZ			15:57																					
ZZZZZZ			15:58																					
ZZZZZZ			16:01																					
ZZZZZZ			16:04																					
CCV 240-42622/12-A			16:06																					
CCB 240-42622/11-A			16:08																					
ZZZZZZ			16:10																					
ZZZZZZ			16:12																					
ZZZZZZ			16:14																					
ZZZZZZ			16:16																					
ZZZZZZ			16:18																					
ZZZZZZ			16:19																					
ZZZZZZ			16:21																					
ZZZZZZ			16:23																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 05/04/2012 10:31 End Date: 05/04/2012 18:44

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			16:25																					
ZZZZZZ			16:27																					
CCV 240-42622/12-A			16:29																					
CCB 240-42622/11-A			16:31																					
ZZZZZZ			16:33																					
ZZZZZZ			16:35																					
ZZZZZZ			16:37																					
ZZZZZZ			16:39																					
ZZZZZZ			16:41																					
ZZZZZZ			16:43																					
CCV 240-42622/12-A			16:46																					
CRA 240-42622/9-A			16:48																					
CCB 240-42622/11-A			16:50																					
ZZZZZZ			16:52																					
ZZZZZZ			16:54																					
ZZZZZZ			16:56																					
ZZZZZZ			16:58																					
ZZZZZZ			17:00																					
ZZZZZZ			17:02																					
ZZZZZZ			17:04																					
ZZZZZZ			17:07																					
ZZZZZZ			17:10																					
ZZZZZZ			17:12																					
CCV 240-42622/12-A			17:14																					
CCB 240-42622/11-A			17:17																					
ZZZZZZ			17:20																					
ZZZZZZ			17:22																					
ZZZZZZ			17:24																					
ZZZZZZ			17:25																					
ZZZZZZ			17:27																					
ZZZZZZ			17:29																					
ZZZZZZ			17:31																					
ZZZZZZ			17:33																					
ZZZZZZ			17:35																					
ZZZZZZ			17:38																					
CCV 240-42622/12-A			17:40																					
CCB 240-42622/11-A			17:42																					
ZZZZZZ			17:44																					
ZZZZZZ			17:46																					
ZZZZZZ			17:48																					
ZZZZZZ			17:49																					
ZZZZZZ			17:52																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 05/04/2012 10:31 End Date: 05/04/2012 18:44

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			17:54																					
ZZZZZZ			17:56																					
ZZZZZZ			17:58																					
ZZZZZZ			18:00																					
ZZZZZZ			18:03																					
CCV 240-42622/12-A			18:05																					
CCB 240-42622/11-A			18:07																					
ZZZZZZ			18:09																					
ZZZZZZ			18:11																					
ZZZZZZ			18:13																					
ZZZZZZ			18:15																					
ZZZZZZ			18:17																					
ZZZZZZ			18:20																					
ZZZZZZ			18:21																					
ZZZZZZ			18:25																					
ZZZZZZ			18:27																					
ZZZZZZ			18:29																					
CCV 240-42622/12-A			18:31																					
CCB 240-42622/11-A			18:33																					
ZZZZZZ			18:35																					
ZZZZZZ			18:37																					
CCV 240-42622/12-A			18:39																					
CRA 240-42622/9-A			18:41																					
CCB 240-42622/11-A			18:44																					

Prep Types
D = Dissolved
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 05/08/2012 14:30 End Date: 05/08/2012 17:03

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-43145/1-A			14:30	X																				
IC 240-43145/2-A			14:33	X																				
IC 240-43145/3-A			14:35	X																				
IC 240-43145/4-A			14:37	X																				
IC 240-43145/5-A			14:39	X																				
IC 240-43145/6-A			14:41	X																				
ICV 240-43145/7-A	1		14:43	X																				
ICB 240-43145/8-A	1		14:45	X																				
CRA 240-43145/9-A	1		14:47	X																				
CCVL 240-43145/10-A	1		14:49	X																				
CCB 240-43145/11-A			14:51																					
ZZZZZZ			14:53																					
ZZZZZZ			14:55																					
ZZZZZZ			14:57																					
ZZZZZZ			15:00																					
ZZZZZZ			15:01																					
ZZZZZZ			15:04																					
ZZZZZZ			15:06																					
ZZZZZZ			15:08																					
ZZZZZZ			15:09																					
ZZZZZZ			15:12																					
CCV 240-43145/12-A			15:13																					
CCB 240-43145/11-A			15:15																					
ZZZZZZ			15:18																					
ZZZZZZ			15:20																					
ZZZZZZ			15:22																					
ZZZZZZ			15:23																					
ZZZZZZ			15:25																					
ZZZZZZ			15:28																					
ZZZZZZ			15:30																					
ZZZZZZ			15:32																					
ZZZZZZ			15:34																					
ZZZZZZ			15:36																					
CCV 240-43145/12-A	1		15:39	X																				
CCB 240-43145/11-A	1		15:40	X																				
ZZZZZZ			15:42																					
ZZZZZZ			15:45																					
ZZZZZZ			15:47																					
ZZZZZZ			15:49																					
MB 240-43054/1-A	1	T	15:51	X																				
LCS 240-43054/2-A	1	T	15:54	X																				
ZZZZZZ			15:56																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-10808-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 05/08/2012 14:30 End Date: 05/08/2012 17:03

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
240-10837-N-5-B DU	1	T	15:58	X																			
240-10837-N-5-C MS	1	T	16:00	X																			
ZZZZZZ			16:02																				
CCV 240-43145/12-A	1		16:04	X																			
CCB 240-43145/11-A	1		16:06	X																			
240-10837-M-5-B DU	1	D	16:08	X																			
240-10837-M-5-C MS	1	D	16:10	X																			
240-10808-3	1	T	16:13	X																			
240-10808-4	1	T	16:15	X																			
ZZZZZZ			16:16																				
ZZZZZZ			16:19																				
ZZZZZZ			16:21																				
ZZZZZZ			16:23																				
ZZZZZZ			16:25																				
ZZZZZZ			16:27																				
CCV 240-43145/12-A	1		16:29	X																			
CCB 240-43145/11-A	1		16:31	X																			
ZZZZZZ			16:33																				
240-10808-3	1	D	16:35	X																			
240-10808-4	1	D	16:37	X																			
ZZZZZZ			16:39																				
ZZZZZZ			16:41																				
ZZZZZZ			16:43																				
ZZZZZZ			16:45																				
ZZZZZZ			16:48																				
ZZZZZZ			16:50																				
ZZZZZZ			16:52																				
CCV 240-43145/12-A	1		16:55	X																			
CCB 240-43145/11-A	1		16:57	X																			
CRA 240-43145/9-A			16:59																				
CCV 240-43145/12-A			17:01																				
CCB 240-43145/11-A			17:03																				

Prep Types
D = Dissolved
T = Total/NA

Sample GSP-MW5-043012 Arsenic rep result 3.4 ug/L

240-10808-h-2-a, 5/3/2012 10:02:46 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B
		ppb	ppb	ppb
x		88.899%	1.291	145.100
%RSD		3.358	3.521	4.185
Run	Time	23Na	25Mg	27Al
		ppb	ppb	ppb
x		T 22910.000	29720.000	M 1882.000
%RSD		T 0.610	1.116	M 1.593
Run	Time	35Cl	39K	43Ca
		ppb	ppb	ppb
x		T 0.000	T 7130.000	39970.000
%RSD		T 0.000	T 1.338	0.963
Run	Time	45Sc	45Sc	47Ti
		ppb	ppb	ppb
x		T 102.927%	91.766%	9.978
%RSD		T 3.285	0.615	87.350
Run	Time	51V	52Cr	53Cl Cl
		ppb	ppb	ppb
x		4.422	2.158	-1.078
%RSD		2.924	1.423	63.520
Run	Time	55Mn	56Fe	59Co
		ppb	ppb	ppb
x		T 724.000	3085.000	26.260
%RSD		T 0.118	0.626	0.579
Run	Time	60Ni	65Cu	66Zn
		ppb	ppb	ppb
x		17.070	4.879	27.900
%RSD		3.691	2.414	1.032
Run	Time	72Ge	75As	77Ar Cl
		ppb	ppb	ppb
x		89.055%	3.427	0.410
%RSD		0.656	5.055	8.212
Run	Time	78Se	88Sr	95Mo
		ppb	ppb	ppb
x		2.237	180.500	0.337
%RSD		12.880	0.921	25.110
Run	Time	105Pd	107Ag	108Mo O
		ppb	ppb	ppb
x		0.000	0.011	-25.870
%RSD		0.000	28.770	14.450
Run	Time	111Cd	115In	118Sn
		ppb	ppb	ppb
x		0.323	87.649%	0.103
%RSD		20.830	0.703	21.390
Run	Time	121Sb	137Ba	159Tb
		ppb	ppb	ppb
x		0.090	20.820	0.000
%RSD		19.370	0.871	0.000
Run	Time	165Ho	182W	205Tl
		ppb	ppb	ppb
x		91.414%	0.027	0.114
%RSD		1.992	10.410	13.610
Run	Time	208Pb	209Bi	
		ppb	ppb	
x		0.388	0.000	
%RSD		11.960	0.000	

Case Narrative

TestAmerica West Sacramento Project Number G2E030413

WATER, 6850, Perchlorate
Samples: 1, 2, 3
In accordance with the requirements of Method 6850, both a Laboratory Control Sample (LCS) and a Synthetic Matrix Check Sample (SMCS) were analyzed with the associated samples. Both are reported on the LCS data evaluation and recovery reports, and are differentiated from one another by their workorder number:

LCS: MTELA1AC
SMCS: MTELA1AD

There are no other anomalies associated with this project.

ANALYTICAL METHODS SUMMARY

G2E030413

PARAMETER	ANALYTICAL METHOD
Perchlorate by 6850	SW846 6850

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD BLANK REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E030413 Work Order #...: MTELA1AA Matrix.....: WATER
MB Lot-Sample #: G2E070000-058

Prep Date.....: 05/07/12
Analysis Date..: 05/14/12 Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Perchlorate	ND	1.0	ug/L	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E030413 Work Order #...: MTELA1AC Matrix.....: WATER
LCS Lot-Sample#: G2E070000-058
Prep Date.....: 05/07/12 Analysis Date..: 05/15/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	92	(80 - 120)	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E030413 Work Order #...: MTELA1AC Matrix.....: WATER
LCS Lot-Sample#: G2E070000-058
Prep Date.....: 05/07/12 Analysis Date..: 05/15/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	5.00	4.62	ug/L	92	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E030413 Work Order #...: MTELA1AD Matrix.....: WATER
LCS Lot-Sample#: G2E070000-058
Prep Date.....: 05/07/12 Analysis Date..: 05/15/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Perchlorate	97	(80 - 120)	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E030413 Work Order #...: MTELA1AD Matrix.....: WATER
LCS Lot-Sample#: G2E070000-058
Prep Date.....: 05/07/12 Analysis Date..: 05/15/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Perchlorate	5.00	4.86	ug/L	97	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E030413 Work Order #...: MTDHX1AC-MS Matrix.....: WATER
MS Lot-Sample #: G2E030450-004 MTDHX1AD-MSD
Date Sampled...: 05/01/12 Date Received..: 05/03/12
Prep Date.....: 05/07/12 Analysis Date..: 05/16/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Perchlorate	99	(80 - 120)			SW846 6850
	97	(80 - 120)	1.8	(0-15)	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

HPLC - Mass. Spec.

Client Lot #...: G2E030413 Work Order #...: MTDHX1AC-MS Matrix.....: WATER
MS Lot-Sample #: G2E030450-004 MTDHX1AD-MSD
Date Sampled...: 05/01/12 Date Received..: 05/03/12
Prep Date.....: 05/07/12 Analysis Date..: 05/16/12
Prep Batch #...: 2128058
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Perchlorate	ND	5.00	4.95	ug/L	99		SW846 6850
	ND	5.00	4.86	ug/L	97	1.8	SW846 6850

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Tetra Tech INC **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**OCTOBER 1, 2012**
FROM:	**J. KALINYAK**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION - VOC / SVOC / PCB / TPH (C06-C10) & (C10-C32)**
LOCKHEED - MSA
SAMPLE DELIVERY GROUP (SDG) 240-13043-1

SAMPLES: 1 / Aqueous / VOC

TB-070912

6 / Soil / VOC/ SVOC / PCB / GRO / DRO

MT-SS19-0-2	MT-SS19-8-10	MT-SS20-0-2
MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10

Overview

The sample set for Lockheed - MSA, SDG 240-13043-1, consisted of one (1) aqueous sample six (6) soil samples including one (1) aqueous trip blank sample. All samples were analyzed for volatile organic compounds (VOC) as listed above. The six (6) soil samples were analyzed for semi-volatile organic compounds, polychlorinated biphenyls (PCB), and total petroleum hydrocarbons (TPH) C06-C10 & C10-C32, as listed above. No field duplicate sample pairs were included in the sample delivery group (SDG).

The samples were collected by Tetra Tech on July 9, 2012 and analyzed by TestAmerica Laboratories, Inc., Canton for all analyses. All analyses were conducted in accordance with EPA SW-846 Methods 8260B for VOCs, 8270D for SVOCs, 8015C for GRO, 8015C for DRO, and 8082A for PCBs, analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, matrix spike/matrix spike duplicate results, internal standard recoveries, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- The VOC initial calibration average relative response factor (RRF) was less than the 0.05 criteria for vinyl acetate and tert-butyl alcohol on instrument A3UX10 on 06/29/12 and on instrument A2UX8 on 06/01/12. The continuing calibration verification (CCV) RRFs for tert-butyl alcohol and vinyl acetate were also less than the 0.05 criteria for instrument A3UX10 on 07/13/12 @ 14:45.
  Affected Samples: All samples
  Action: The sample non-detected results for tert-butyl alcohol and vinyl acetate were qualified rejected, (UR).

- The VOC CCV RRF for acetone was less than the 0.05 criteria for instrument A3UX10 on 07/13/12 @ 14:45.
  Affected Samples: TB-070912
  Action: The sample non-detected result for acetone was qualified rejected, (UR).

- The VOC initial calibration average RRF was less than the 0.05 criteria for 2-chloroethyl vinyl ether on instrument A3UX8 on 06/01/12. The CCV RRFs for 2-chloroethyl vinyl ether was also less than the 0.05 criteria for instrument A3UX8 on 07/12/12 @ 00:20.

  Affected Samples:

MT-SS19-0-2	MT-SS19-8-10	MT-SS20-0-2
MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10

  Action: The sample non-detected results for 2-chloroethyl vinyl ether were qualified rejected, (UR).

- Octamethyl-cyclotetrasiloxane was detected as a tentatively identified compound (TIC) by the laboratory for all soil samples.

  Action: Octamethyl-cyclotetrasiloxane is considered present due to column bleed on the laboratory instrument. The positive TIC octamethyl-cyclotetrasiloxane results for these samples were qualified rejected, (R).

Minor Problems

- The following laboratory VOC contaminants were detected in the method blanks at the following maximum concentrations affecting samples as listed.

Analytes	Maximum Conc.	Action Level
Acetone [1]	6.35 µg/kg	63.50 µg/kg
Naphthalene [1]	0.505 µg/kg	2.525 µg/kg
Methylene Chloride [1]	3.62 µg/kg	36.20 µg/kg

  [1] Method blank MB 240-50546/7 affecting all soil samples.

  An action level of ten times the maximum level for acetone and methylene chloride and five times the maximum level for naphthalene has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Samples were qualified (B) for naphthalene and methylene chloride method blank contamination.

- The following laboratory SVOC contaminant was detected in the method blank at the following maximum concentration affecting samples as listed.

Analytes	Maximum Conc.	Action Level
Bis(2-ethylhexyl)phthalate [1]	30.3 µg/kg	303.0 µg/kg

  [1] Method blank MB 240-51193/23-A affecting soil samples MT-SS19-8-10, MT-SS20-0-2, MT-SS20-8-10, MT-SS21-0-2, and MT-SS21-8-10.

  An action level of ten times the maximum level for bis(2-ethylhexyl)phthalate has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Samples were qualified (B) for bis(2-ethylhexyl)phthalate method blank contamination.

- All soil samples had positive VOC hexane results reported as TICs. The sample positive hexane results were qualified as estimated, (J), presumptively present, as a TIC analyte.

- TPH (C10-C32) was detected in the method blank at the following maximum concentration affecting all samples.

Analytes	Maximum Conc. mg/kg	Action Level mg/kg
TPH (C10-C32) [1]	16.5	82.5

[1] Method blank MB 240-51014/22-A affecting all soil samples.

An action level of five times the maximum level for TPH (C10-C32) has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Sample TPH (C10-C32) results if less than the action level were qualified (B), for method blank contamination. Sample MT-SS19-0-2 was qualified for method blank contamination.

- Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J).

Notes

The following laboratory VOC contaminants were detected in the method blanks at the following maximum concentrations affecting samples as listed.

Analytes	Maximum Conc.	Action Level
1,2,3-Trichlorobenzene [1]	0.580 µg/l	2.900 µg/l
Naphthalene [1]	0.761 µg/l	3.805 µg/l
Tert-Butyl alcohol. [1]	4.05 µg/l	20.25 µg/l

[1] Method blank MB 240-50786/5 affecting sample TB-070912.

An action level of five times the maximum level for the contaminants has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The sample was not qualified for method blank contamination.

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for tert-butyl alcohol, vinyl acetate, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene for instrument A3UX10 on 07/13/12 @ 14:45 affecting the sample listed.

Affected Sample: TB-070912

Action: The sample analytes results for 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene were non-detected and were not qualified. The tert-butyl alcohol and vinyl acetate non-detected results were rejected for RRF criteria non-compliances and no further validation action was necessary.

The VOC CCV %Ds were greater than the 20% and less than the 50% quality control limit for dichlorodifluoromethane, methylene chloride, vinyl acetate, 1,1,1-trichloroethane, 1,1-dichloropropene, tetrachloroethene, n-propylbenzene, and n-butylbenzene for instrument A3UX8 on 07/12/12 @ 00:20 affecting the samples listed.

Affected Sample:

MT-SS19-0-2	MT-SS19-8-10	MT-SS20-0-2
MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10

Action: The sample analytes results for dichlorodifluoromethane, methylene chloride, 1,1,1-trichloroethane, 1,1-dichloropropene, tetrachloroethene, n-propylbenzene, and n-butylbenzene

were non-detected and were not qualified. The vinyl acetate non-detected results were rejected for RRF criteria non-compliances and no further validation action was necessary.

The VOC CCV %D was greater than the 20% and greater than the 50% quality control limit for 2-chloroethyl vinyl ether for instrument A3UX8 on 07/12/12 @ 00:20 affecting the samples listed.

Affected Sample:

MT-SS19-0-2	MT-SS19-8-10	MT-SS20-0-2
MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10

Action: The 2-chloroethyl vinyl ether non-detected results were rejected for an RRF criteria non-compliance and no further validation action was necessary.

The VOC laboratory control sample %R was greater than the quality control limit for acetone for batch 240-50546 affecting all the soil samples. No validation action was taken as all samples had non-detected acetone results.

The VOC MS and the MSD for a spiked sample from another SDG (240-13086-E-8) had %Rs for 2-chloroethyl vinyl ether and tert-butyl alcohol were less than the quality control limit (2-chloroethyl vinyl ether at 0%). No validation action was necessary as the sample was not from this SDG.

The SVOC CCV %D was greater than the 20% and less than the 50% quality control limit for 1,4-dioxane for instrument A4HP9 on 07/19/12 @ 07:31 affecting the sample listed.

Affected Sample: MT-SS19-0-2

Action: The 1,4-dioxane result was non-detected and no further validation action was necessary.

The laboratory reported non-detected sample results to the Method Detection Limit (MDL).

EXECUTIVE SUMMARY

Laboratory Performance Issues: VOC non-detected tert-butyl alcohol, vinyl acetate, 2-chloroethyl vinyl ether, and acetone sample results were rejected due to calibration and CCV RRF criteria non-compliances. The sample VOC, SVOC, and TPH (C10-C32) results were qualified for method blank contamination.

Other Factors Affecting Data Quality: Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, (J). Positive VOC TIC hexane results were qualified estimated presumptively present. The positive TIC octamethyl-cyclotetrasiloxane sample results were rejected as they were attributed to column bleed.

The data for these analyses were reviewed with reference to EPA SW-846 Methods 8260B, 8270D, 8015C, and 8082A, and the Region III EPA Functional Guidelines for Organic Data Validation (9/94).

Tetra Tech
Joseph Kalinyak
Data Validator/Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

DATA QUALIFICATION CODE (QUAL CODE)

Qualifier Codes:

A	=	Lab Blank Contamination
B	=	Field Blank Contamination
C	=	Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01	=	GC/MS Tuning Noncompliance
D	=	MS/MSD Recovery Noncompliance
E	=	LCS/LCSD Recovery Noncompliance
F	=	Lab Duplicate Imprecision
G	=	Field Duplicate Imprecision
H	=	Holding Time Exceedance
I	=	ICP Serial Dilution Noncompliance
J	=	ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K	=	ICP Interference - includes ICS % R Noncompliance
L	=	Instrument Calibration Range Exceedance
M	=	Sample Preservation Noncompliance
N	=	Internal Standard Noncompliance
N01	=	Internal Standard Recovery Noncompliance Dioxins
N02	=	Recovery Standard Noncompliance Dioxins
N03	=	Clean-up Standard Noncompliance Dioxins
O	=	Poor Instrument Performance (i.e., base-time drifting)
P	=	Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q	=	Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R	=	Surrogates Recovery Noncompliance
S	=	Pesticide/PCB Resolution
T	=	% Breakdown Noncompliance for DDT and Endrin
U	=	RPD between columns/detectors >40% for positive results determined via GC/HPLC
V	=	Non-linear calibrations; correlation coefficient $r < 0.995$
W	=	EMPC result
X	=	Signal to noise response drop
Y	=	Percent solids <30%
Z	=	Uncertainty at 2 sigma deviation is less than sample activity
Z1	=	Tentatively Identified Compound considered presumptively present
Z2	=	Tentatively Identified Compound column bleed

PROJ_NO: 04054	NSAMPLE	TB-070912
SDG: 240-13043-1	LAB_ID	240-13043-1
FRACTION: OV	SAMP_DATE	7/9/2012
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U	
1,1-DICHLOROETHANE	0.15	U	
1,1-DICHLOROETHENE	0.19	U	
1,1-DICHLOROPROPENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U	
1,2-DIBROMOETHANE	0.24	U	
1,2-DICHLOROBENZENE	0.13	U	
1,2-DICHLOROETHANE	0.22	U	
1,2-DICHLOROPROPANE	0.18	U	
1,3-DICHLOROBENZENE	0.14	U	
1,3-DICHLOROPROPANE	0.16	U	
1,4-DICHLOROBENZENE	0.13	U	
2,2-DICHLOROPROPANE	0.13	U	
2-BUTANONE	0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U	
2-CHLOROTOLUENE	0.11	U	
2-HEXANONE	0.41	U	
4-CHLOROTOLUENE	0.18	U	
4-ISOPROPYLTOLUENE	0.12	U	
4-METHYL-2-PENTANONE	0.32	U	
ACETONE	1.1	UR	C
BENZENE	0.13	U	
BROMOBENZENE	0.13	U	
BROMOCHLOROMETHANE	0.29	U	
BROMODICHLOROMETHANE	0.15	U	
BROMOFORM	0.64	U	
BROMOMETHANE	0.41	U	

PROJ_NO: 04054	NSAMPLE	TB-070912
SDG: 240-13043-1	LAB_ID	240-13043-1
FRACTION: OV	SAMP_DATE	7/9/2012
MEDIA: WATER	QC_TYPE	NM
	UNITS	UG/L
	PCT_SOLIDS	0.0
	DUP_OF	

PARAMETER	RESULT	VQL	QLCD
CARBON DISULFIDE	0.13	U	
CARBON TETRACHLORIDE	0.13	U	
CHLOROBENZENE	0.15	U	
CHLORODIBROMOMETHANE	0.18	U	
CHLOROETHANE	0.29	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U	
DIBROMOMETHANE	0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U	
DIISOPROPYL ETHER	1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U	
ETHYLBENZENE	0.17	U	
HEXACHLOROBUTADIENE	0.3	U	
ISOPROPYLBENZENE	0.13	U	
M+P-XYLENES	0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U	
METHYLENE CHLORIDE	0.33	U	
NAPHTHALENE	0.24	U	
N-BUTYLBENZENE	0.12	U	
N-PROPYLBENZENE	0.14	U	
O-XYLENE	0.14	U	
SEC-BUTYLBENZENE	0.13	U	
STYRENE	0.11	U	
TERT-AMYL METHYL ETHER	0.067	U	
TERT-BUTYLBENZENE	0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C
TETRACHLOROETHENE	0.29	U	
TOLUENE	0.13	U	
TOTAL XYLENES	0.28	U	
TRANS-1,2-DICHLOROETHENE	0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	U	
TRICHLOROETHENE	0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U	

PROJ_NO: 04054	NSAMPLE	TB-070912		
SDG: 240-13043-1	LAB_ID	240-13043-1		
FRACTION: OV	SAMP_DATE	7/9/2012		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C
VINYL CHLORIDE		0.22	U	

PROJ_NO: 04054	NSAMPLE	MT-SS19-0-2			MT-SS19-8-10			MT-SS20-0-2			MT-SS20-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-2			240-13043-3			240-13043-4			240-13043-5		
FRACTION: OV	SAMP_DATE	7/10/2012			7/10/2012			7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.8			85.8			85.3			82.2		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.55	U		0.6	U		0.54	U		0.56	U	
1,1,1-TRICHLOROETHANE	0.5	U		0.55	U		0.49	U		0.51	U	
1,1,2,2-TETRACHLOROETHANE	0.3	U		0.33	U		0.3	U		0.31	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1.2	U		1.3	U		1.1	U		1.2	U	
1,1-DICHLOROETHANE	0.32	U		0.35	U		0.32	U		0.33	U	
1,1-DICHLOROETHENE	0.46	U		0.51	U		0.46	U		0.47	U	
1,1-DICHLOROPROPENE	0.27	U		0.29	U		0.26	U		0.27	U	
1,2,3-TRICHLOROBENZENE	0.34	U		0.37	U		0.33	U		0.35	U	
1,2,3-TRICHLOROPROPANE	0.8	U		0.88	U		0.79	U		0.82	U	
1,2,3-TRIMETHYLBENZENE	0.15	U		0.17	U		0.15	U		0.15	U	
1,2,4-TRICHLOROBENZENE	0.24	U		0.26	U		0.24	U		0.25	U	
1,2,4-TRIMETHYLBENZENE	0.58	U		0.63	U		0.57	U		0.59	U	
1,2-DIBROMO-3-CHLOROPROPANE	1.2	U		1.3	U		1.1	U		1.2	U	
1,2-DIBROMOETHANE	0.45	U		0.49	U		0.44	U		0.45	U	
1,2-DICHLOROBENZENE	0.32	U		0.35	U		0.32	U		0.33	U	
1,2-DICHLOROETHANE	0.3	U		0.33	U		0.3	U		0.31	U	
1,2-DICHLOROPROPANE	0.61	U		0.67	U		0.6	U		0.63	U	
1,3-DICHLOROBENZENE	0.31	U		0.34	U		0.31	U		0.32	U	
1,3-DICHLOROPROPANE	0.3	U		0.33	U		0.3	U		0.31	U	
1,4-DICHLOROBENZENE	0.59	U		0.64	U		0.58	U		0.6	U	
2,2-DICHLOROPROPANE	0.84	U		0.92	U		0.82	U		0.85	U	
2-BUTANONE	1.2	U		1.4	U		1.2	U		1.3	U	
2-CHLOROETHYL VINYL ETHER	1.2	UR	C	1.4	UR	C	1.2	UR	C	1.3	UR	C
2-CHLOROTOLUENE	0.36	U		0.39	U		0.35	U		0.36	U	
2-HEXANONE	0.56	U		0.61	U		0.55	U		0.57	U	
4-CHLOROTOLUENE	0.36	U		0.4	U		0.36	U		0.37	U	
4-ISOPROPYLTOLUENE	0.19	U		0.2	U		0.18	U		0.19	U	
4-METHYL-2-PENTANONE	0.48	U		0.53	U		0.47	U		0.49	U	
ACETONE	5.6	U		6.1	U		5.5	U		5.7	U	
BENZENE	0.2	U		0.22	U		0.2	U		0.21	U	
BROMOBENZENE	0.29	U		0.32	U		0.29	U		0.3	U	
BROMOCHLOROMETHANE	0.63	U		0.69	U		0.62	U		0.64	U	
BROMODICHLOROMETHANE	0.25	U		0.27	U		0.25	U		0.25	U	
BROMOFORM	0.29	U		0.32	U		0.29	U		0.3	U	
BROMOMETHANE	0.48	U		0.53	U		0.47	U		0.49	U	

PROJ_NO: 04054	NSAMPLE	MT-SS21-0-2			MT-SS21-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-6			240-13043-7		
FRACTION: OV	SAMP_DATE	7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	84.8			85.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.51	U		0.61	U	
1,1,1-TRICHLOROETHANE		0.46	U		0.55	U	
1,1,2,2-TETRACHLOROETHANE		0.28	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1.1	U		1.3	U	
1,1-DICHLOROETHANE		0.29	U		0.36	U	
1,1-DICHLOROETHENE		0.43	U		0.51	U	
1,1-DICHLOROPROPENE		0.25	U		0.3	U	
1,2,3-TRICHLOROBENZENE		0.31	U		0.38	U	
1,2,3-TRICHLOROPROPANE		0.74	U		0.89	U	
1,2,3-TRIMETHYLBENZENE		0.14	U		0.17	U	
1,2,4-TRICHLOROBENZENE		0.22	U		0.27	U	
1,2,4-TRIMETHYLBENZENE		0.53	U		0.64	U	
1,2-DIBROMO-3-CHLOROPROPANE		1.1	U		1.3	U	
1,2-DIBROMOETHANE		0.41	U		0.49	U	
1,2-DICHLOROBENZENE		0.29	U		0.36	U	
1,2-DICHLOROETHANE		0.28	U		0.34	U	
1,2-DICHLOROPROPANE		0.56	U		0.68	U	
1,3-DICHLOROBENZENE		0.29	U		0.35	U	
1,3-DICHLOROPROPANE		0.28	U		0.34	U	
1,4-DICHLOROBENZENE		0.54	U		0.65	U	
2,2-DICHLOROPROPANE		0.77	U		0.93	U	
2-BUTANONE		1.1	U		1.4	U	
2-CHLOROETHYL VINYL ETHER		1.1	UR	C	1.4	UR	C
2-CHLOROTOLUENE		0.33	U		0.4	U	
2-HEXANONE		0.52	U		0.62	U	
4-CHLOROTOLUENE		0.34	U		0.41	U	
4-ISOPROPYLTOLUENE		0.17	U		0.21	U	
4-METHYL-2-PENTANONE		0.44	U		0.53	U	
ACETONE		5.2	U		6.2	U	
BENZENE		0.19	U		0.23	U	
BROMOBENZENE		0.27	U		0.33	U	
BROMOCHLOROMETHANE		0.58	U		0.7	U	
BROMODICHLOROMETHANE		0.23	U		0.28	U	
BROMOFORM		0.27	U		0.33	U	
BROMOMETHANE		0.44	U		0.53	U	

PROJ_NO: 04054	NSAMPLE	MT-SS19-0-2			MT-SS19-8-10			MT-SS20-0-2			MT-SS20-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-2			240-13043-3			240-13043-4			240-13043-5		
FRACTION: OV	SAMP_DATE	7/10/2012			7/10/2012			7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.8			85.8			85.3			82.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.39	U		0.43	U		0.39	U		0.4	U	
CARBON TETRACHLORIDE		0.33	U		0.36	U		0.32	U		0.34	U	
CHLOROBENZENE		0.29	U		0.32	U		0.29	U		0.3	U	
CHLORODIBROMOMETHANE		0.49	U		0.54	U		0.48	U		0.5	U	
CHLOROETHANE		0.77	U		0.84	U		0.75	U		0.78	U	
CHLOROFORM		0.26	U		0.28	U		0.25	U		0.26	U	
CHLOROMETHANE		0.36	U		0.4	U		0.36	U		0.37	U	
CIS-1,2-DICHLOROETHENE		0.32	U		0.35	U		0.32	U		0.33	U	
CIS-1,3-DICHLOROPROPENE		0.3	U		0.33	U		0.3	U		0.31	U	
CYCLOTETRASILOXANE, OCTAMETHYL-		11	R	Z2	5.3	R	Z2	16	R	Z2	7.6	R	Z2
DIBROMOMETHANE		0.56	U		0.61	U		0.55	U		0.57	U	
DICHLORODIFLUOROMETHANE		0.45	U		0.49	U		0.44	U		0.45	U	
DIISOPROPYL ETHER		1.3	U		1.5	U		1.3	U		1.4	U	
ETHYL TERT-BUTYL ETHER		0.2	U		0.21	U		0.19	U		0.2	U	
ETHYLBENZENE		0.23	U		0.25	U		0.23	U		0.24	U	
HEXACHLOROBUTADIENE		1.1	U		1.2	U		1.1	U		1.1	U	
HEXANE		2.6	J	Z1	2.6	J	Z1	1.7	J	Z1	1.6	J	Z1
ISOPROPYLBENZENE		0.14	U		0.16	U		0.14	U		0.15	U	
M+P-XYLENES		1.1	U		1.2	U		1.1	U		1.1	U	
METHYL TERT-BUTYL ETHER		0.38	U		0.42	U		0.38	U		0.39	U	
METHYLENE CHLORIDE		1.9	B	A	3	B	A	1.7	B	A	0.78	B	A
NAPHTHALENE		0.17	U		1.6	B	A	0.24	B	A	0.17	U	
N-BUTYLBENZENE		0.2	U		0.22	U		0.2	U		0.21	U	
N-PROPYLBENZENE		0.36	U		0.39	U		0.35	U		0.36	U	
O-XYLENE		0.31	U		0.34	U		0.31	U		0.32	U	
SEC-BUTYLBENZENE		0.16	U		0.18	U		0.16	U		0.16	U	
STYRENE		0.13	U		0.15	U		0.13	U		0.14	U	
TERT-AMYL METHYL ETHER		0.33	U		0.36	U		0.32	U		0.34	U	
TERT-BUTYLBENZENE		0.26	U		0.28	U		0.25	U		0.26	U	
TERTIARY-BUTYL ALCOHOL		6.8	UR	C	7.4	UR	C	6.7	UR	C	6.9	UR	C
TETRACHLOROETHENE		0.46	U		0.51	U		0.46	U		0.47	U	
TOLUENE		0.24	U		0.26	U		0.24	U		0.25	U	
TOTAL XYLENES		0.6	U		0.65	U		0.59	U		0.61	U	
TRANS-1,2-DICHLOROETHENE		0.36	U		0.4	U		0.36	U		0.37	U	
TRANS-1,3-DICHLOROPROPENE		0.48	U		0.53	U		0.47	U		0.49	U	

PROJ_NO: 04054	NSAMPLE	MT-SS21-0-2			MT-SS21-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-6			240-13043-7		
FRACTION: OV	SAMP_DATE	7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	84.8			85.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		0.36	U		0.43	U	
CARBON TETRACHLORIDE		0.3	U		4.4	J	P
CHLOROBENZENE		0.27	U		0.33	U	
CHLORODIBROMOMETHANE		0.45	U		0.54	U	
CHLOROETHANE		0.7	U		0.85	U	
CHLOROFORM		0.24	U		0.29	U	
CHLOROMETHANE		0.34	U		0.41	U	
CIS-1,2-DICHLOROETHENE		0.29	U		0.36	U	
CIS-1,3-DICHLOROPROPENE		0.28	U		0.34	U	
CYCLOTETRASILOXANE, OCTAMETHYL-		12	R	Z2	7.4	R	Z2
DIBROMOMETHANE		0.52	U		0.62	U	
DICHLORODIFLUOROMETHANE		0.41	U		0.49	U	
DIISOPROPYL ETHER		1.2	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.18	U		0.22	U	
ETHYLBENZENE		0.21	U		0.26	U	
HEXACHLOROBUTADIENE		0.98	U		1.2	U	
HEXANE		2.1	J	Z1	1.6	J	Z1
ISOPROPYLBENZENE		0.13	U		0.16	U	
M+P-XYLENES		0.98	U		1.2	U	
METHYL TERT-BUTYL ETHER		0.35	U		0.42	U	
METHYLENE CHLORIDE		1	B	A	0.66	B	A
NAPHTHALENE		0.16	U		0.19	U	
N-BUTYLBENZENE		0.19	U		0.23	U	
N-PROPYLBENZENE		0.33	U		0.4	U	
O-XYLENE		0.29	U		0.35	U	
SEC-BUTYLBENZENE		0.15	U		0.18	U	
STYRENE		0.12	U		0.15	U	
TERT-AMYL METHYL ETHER		0.3	U		0.37	U	
TERT-BUTYLBENZENE		0.24	U		0.29	U	
TERTIARY-BUTYL ALCOHOL		6.2	UR	C	7.5	UR	C
TETRACHLOROETHENE		0.43	U		0.51	U	
TOLUENE		0.22	U		0.27	U	
TOTAL XYLENES		0.55	U		0.66	U	
TRANS-1,2-DICHLOROETHENE		0.34	U		0.41	U	
TRANS-1,3-DICHLOROPROPENE		0.44	U		0.53	U	

PROJ_NO: 04054	NSAMPLE	MT-SS19-0-2			MT-SS19-8-10			MT-SS20-0-2			MT-SS20-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-2			240-13043-3			240-13043-4			240-13043-5		
FRACTION: OV	SAMP_DATE	7/10/2012			7/10/2012			7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.8			85.8			85.3			82.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROETHENE		0.37	U		0.41	U		0.37	U		0.38	U	
TRICHLOROFLUOROMETHANE		0.3	U		0.33	U		0.3	U		0.31	U	
VINYL ACETATE		0.22	UR	C	0.24	UR	C	0.22	UR	C	0.23	UR	C
VINYL CHLORIDE		0.35	U		0.38	U		0.34	U		0.35	U	

PROJ_NO: 04054	NSAMPLE	MT-SS21-0-2			MT-SS21-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-6			240-13043-7		
FRACTION: OV	SAMP_DATE	7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	84.8			85.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROETHENE		0.34	U		110		
TRICHLOROFLUOROMETHANE		0.28	U		0.34	U	
VINYL ACETATE		0.2	UR	C	0.25	UR	C
VINYL CHLORIDE		0.32	U		0.39	U	

PROJ_NO: 04054	NSAMPLE	MT-SS19-0-2			MT-SS19-8-10			MT-SS20-0-2			MT-SS20-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-2			240-13043-3			240-13043-4			240-13043-5		
FRACTION: OS	SAMP_DATE	7/9/2012			7/9/2012			7/9/2012			7/9/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.8			85.8			85.3			82.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		33	U		31	U		32	U		33	U	
1,4-DIOXANE		27	U		26	U		26	U		27	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		12	U		11	U		11	U		12	U	
2,4,5-TRICHLOROPHENOL		30	U		29	U		29	U		30	U	
2,4,6-TRICHLOROPHENOL		97	U		93	U		94	U		97	U	
2,4-DICHLOROPHENOL		24	U		23	U		23	U		24	U	
2,4-DIMETHYLPHENOL		24	U		23	U		23	U		24	U	
2,4-DINITROPHENOL		97	U		93	U		94	U		97	U	
2,4-DINITROTOLUENE		33	U		31	U		32	U		33	U	
2,6-DINITROTOLUENE		25	U		24	U		25	U		25	U	
2-CHLORONAPHTHALENE		4	U		3.8	U		3.9	U		4	U	
2-CHLOROPHENOL		33	U		31	U		32	U		33	U	
2-METHYLNAPHTHALENE		4	U		3.8	U		3.9	U		4	U	
2-METHYLPHENOL		97	U		93	U		94	U		97	U	
2-NITROANILINE		11	U		11	U		11	U		11	U	
2-NITROPHENOL		33	U		31	U		32	U		33	U	
3&4-METHYLPHENOL		24	U		23	U		23	U		24	U	
3,3'-DICHLOROBENZIDINE		22	U		21	U		21	U		22	U	
3-NITROANILINE		19	U		19	U		19	U		19	U	
4,6-DINITRO-2-METHYLPHENOL		97	U		93	U		94	U		97	U	
4-BROMOPHENYL PHENYL ETHER		16	U		15	U		15	U		16	U	
4-CHLORO-3-METHYLPHENOL		25	U		24	U		25	U		25	U	
4-CHLOROANILINE		21	U		20	U		20	U		21	U	
4-CHLOROPHENYL PHENYL ETHER		16	U		15	U		15	U		16	U	
4-NITROANILINE		32	U		30	U		30	U		32	U	
4-NITROPHENOL		97	U		93	U		94	U		97	U	
ACENAPHTHENE		4	U		3.8	U		3.9	U		4	U	
ACENAPHTHYLENE		4	U		3.8	U		3.9	U		4	U	
ACETOPHENONE		11	U		11	U		11	U		11	U	
ANTHRACENE		4	U		3.8	U		3.9	U		4	U	
ATRAZINE		11	U		11	U		11	U		11	U	
BENZALDEHYDE		15	U		14	U		14	U		15	U	
BENZO(A)ANTHRACENE		4	U		3.8	U		3.9	U		11		
BENZO(A)PYRENE		4	U		6.6	J	P	3.9	U		16		
BENZO(B)FLUORANTHENE		4	U		6.3	J	P	3.9	U		15		

PROJ_NO: 04054	NSAMPLE	MT-SS21-0-2			MT-SS21-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-6			240-13043-7		
FRACTION: OS	SAMP_DATE	7/9/2012			7/9/2012		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	84.8			85.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		32	U		32	U	
1,4-DIOXANE		26	U		26	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		11	U		11	U	
2,4,5-TRICHLOROPHENOL		29	U		29	U	
2,4,6-TRICHLOROPHENOL		93	U		94	U	
2,4-DICHLOROPHENOL		23	U		24	U	
2,4-DIMETHYLPHENOL		23	U		24	U	
2,4-DINITROPHENOL		93	U		94	U	
2,4-DINITROTOLUENE		32	U		32	U	
2,6-DINITROTOLUENE		25	U		25	U	
2-CHLORONAPHTHALENE		3.9	U		3.9	U	
2-CHLOROPHENOL		32	U		32	U	
2-METHYLNAPHTHALENE		3.9	U		3.9	U	
2-METHYLPHENOL		93	U		94	U	
2-NITROANILINE		11	U		11	U	
2-NITROPHENOL		32	U		32	U	
3&4-METHYLPHENOL		23	U		24	U	
3,3'-DICHLOROBENZIDINE		21	U		21	U	
3-NITROANILINE		19	U		19	U	
4,6-DINITRO-2-METHYLPHENOL		93	U		94	U	
4-BROMOPHENYL PHENYL ETHER		15	U		15	U	
4-CHLORO-3-METHYLPHENOL		25	U		25	U	
4-CHLOROANILINE		20	U		20	U	
4-CHLOROPHENYL PHENYL ETHER		15	U		15	U	
4-NITROANILINE		30	U		31	U	
4-NITROPHENOL		93	U		94	U	
ACENAPHTHENE		3.9	U		3.9	U	
ACENAPHTHYLENE		3.9	U		3.9	U	
ACETOPHENONE		11	U		11	U	
ANTHRACENE		3.9	U		3.9	U	
ATRAZINE		11	U		11	U	
BENZALDEHYDE		14	U		14	U	
BENZO(A)ANTHRACENE		6	J	P	9.3		
BENZO(A)PYRENE		4.9	J	P	8.2		
BENZO(B)FLUORANTHENE		5.6	J	P	8.7		

PROJ_NO: 04054	NSAMPLE	MT-SS19-0-2			MT-SS19-8-10			MT-SS20-0-2			MT-SS20-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-2			240-13043-3			240-13043-4			240-13043-5		
FRACTION: OS	SAMP_DATE	7/9/2012			7/9/2012			7/9/2012			7/9/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.8			85.8			85.3			82.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		4	U		3.8	U		3.9	U		15		
BENZO(K)FLUORANTHENE		4	U		4.9	J	P	3.9	U		7.2	J	P
BIS(2-CHLOROETHOXY)METHANE		27	U		26	U		26	U		27	U	
BIS(2-CHLOROETHYL)ETHER		2.4	U		2.3	U		2.3	U		2.4	U	
BIS(2-ETHYLHEXYL)PHTHALATE		23	U		26	B	A	34	B	A	28	B	A
BUTYL BENZYL PHTHALATE		12	U		12	U		12	U		12	U	
CAPROLACTAM		45	U		43	U		43	U		45	U	
CARBAZOLE		33	U		31	U		32	U		33	U	
CHRYSENE		1.3	U		1.3	U		1.3	U		11		
DIBENZO(A,H)ANTHRACENE		4	U		3.8	U		3.9	U		4	U	
DIBENZOFURAN		4	U		3.8	U		3.9	U		4	U	
DIETHYL PHTHALATE		19	U		19	U		19	U		19	U	
DIMETHYL PHTHALATE		21	U		20	U		20	U		21	U	
DI-N-BUTYL PHTHALATE		18	U		34	J	P	24	J	P	18	U	
DI-N-OCTYL PHTHALATE		33	U		31	U		32	U		33	U	
FLUORANTHENE		4	U		15			5.7	J	P	13		
FLUORENE		4	U		3.8	U		3.9	U		4	U	
HEXACHLOROBENZENE		2.5	U		2.4	U		2.5	U		2.5	U	
HEXACHLOROBUTADIENE		33	U		31	U		32	U		33	U	
HEXACHLOROCYCLOPENTADIENE		33	U		31	U		32	U		33	U	
HEXACHLOROETHANE		11	U		10	U		11	U		11	U	
INDENO(1,2,3-CD)PYRENE		4	U		3.8	U		3.9	U		10		
ISOPHORONE		16	U		15	U		15	U		16	U	
NAPHTHALENE		4	U		3.8	U		3.9	U		4	U	
NITROBENZENE		2.7	U		2.6	U		2.6	U		2.7	U	
N-NITROSODIMETHYLAMINE		19	U		19	U		19	U		19	U	
N-NITROSO-DI-N-PROPYLAMINE		33	U		31	U		32	U		33	U	
N-NITROSODIPHENYLAMINE		25	U		24	U		25	U		25	U	
PENTACHLOROPHENOL		97	U		93	U		94	U		97	U	
PHENANTHRENE		4	U		3.8	U		3.9	U		9.4		
PHENOL		33	U		31	U		32	U		33	U	
PYRENE		4	U		16			4.8	J	P	19		

PROJ_NO: 04054	NSAMPLE	MT-SS21-0-2			MT-SS21-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-6			240-13043-7		
FRACTION: OS	SAMP_DATE	7/9/2012			7/9/2012		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	84.8			85.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		3.9	U		5.4	J	P
BENZO(K)FLUORANTHENE		3.9	U		3.9	U	
BIS(2-CHLOROETHOXY)METHANE		26	U		26	U	
BIS(2-CHLOROETHYL)ETHER		2.3	U		2.4	U	
BIS(2-ETHYLHEXYL)PHTHALATE		24	B	A	22	U	
BUTYL BENZYL PHTHALATE		12	U		12	U	
CAPROLACTAM		43	U		44	U	
CARBAZOLE		32	U		32	U	
CHRYSENE		7	J	P	8.4		
DIBENZO(A,H)ANTHRACENE		3.9	U		3.9	U	
DIBENZOFURAN		3.9	U		3.9	U	
DIETHYL PHTHALATE		19	U		19	U	
DIMETHYL PHTHALATE		20	U		20	U	
DI-N-BUTYL PHTHALATE		18	U		18	U	
DI-N-OCTYL PHTHALATE		32	U		32	U	
FLUORANTHENE		14			11		
FLUORENE		3.9	U		3.9	U	
HEXACHLOROBENZENE		2.5	U		2.5	U	
HEXACHLOROBUTADIENE		32	U		32	U	
HEXACHLOROCYCLOPENTADIENE		32	U		32	U	
HEXACHLOROETHANE		11	U		11	U	
INDENO(1,2,3-CD)PYRENE		3.9	U		3.9	U	
ISOPHORONE		15	U		15	U	
NAPHTHALENE		3.9	U		3.9	U	
NITROBENZENE		2.6	U		2.6	U	
N-NITROSODIMETHYLAMINE		19	U		19	U	
N-NITROSO-DI-N-PROPYLAMINE		32	U		32	U	
N-NITROSODIPHENYLAMINE		25	U		25	U	
PENTACHLOROPHENOL		93	U		94	U	
PHENANTHRENE		11			6.9	J	P
PHENOL		32	U		32	U	
PYRENE		14			18		

PROJ_NO: 04054	NSAMPLE	MT-SS19-0-2			MT-SS19-8-10			MT-SS20-0-2			MT-SS20-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-2			240-13043-3			240-13043-4			240-13043-5		
FRACTION: PCB	SAMP_DATE	7/9/2012			7/9/2012			7/9/2012			7/9/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.8			85.8			85.3			82.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		25	U		24	U		25	U		26	U	
AROCLOR-1221		19	U		19	U		19	U		20	U	
AROCLOR-1232		17	U		16	U		16	U		17	U	
AROCLOR-1242		16	U		15	U		15	U		16	U	
AROCLOR-1248		20	U		20	U		20	U		21	U	
AROCLOR-1254		20	U		20	U		20	U		21	U	
AROCLOR-1260		20	U		20	U		20	U		21	U	

PROJ_NO: 04054	NSAMPLE	MT-SS21-0-2			MT-SS21-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-6			240-13043-7		
FRACTION: PCB	SAMP_DATE	7/9/2012			7/9/2012		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	UG/KG			UG/KG		
	PCT_SOLIDS	84.8			85.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		25	U		25	U	
AROCLOR-1221		19	U		19	U	
AROCLOR-1232		17	U		16	U	
AROCLOR-1242		15	U		15	U	
AROCLOR-1248		20	U		20	U	
AROCLOR-1254		20	U		20	U	
AROCLOR-1260		20	U		20	U	

PROJ_NO: 04054	NSAMPLE	MT-SS19-0-2						MT-SS19-8-10					
SDG: 240-13043-1	LAB_ID	240-13043-2						240-13043-3					
FRACTION: PET	SAMP_DATE	7/9/2012						7/9/2012					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	83.8			83.8			85.8			85.8		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					55	U					54	U	
TPH (C10-C32)		11	B	A				11	U				

PROJ_NO: 04054	NSAMPLE	MT-SS20-0-2						MT-SS20-8-10					
SDG: 240-13043-1	LAB_ID	240-13043-4						240-13043-5					
FRACTION: PET	SAMP_DATE	7/9/2012						7/9/2012					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	85.3			85.3			82.2			82.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					54	U					56	U	
TPH (C10-C32)		11	U					11	U				

PROJ_NO: 04054	NSAMPLE	MT-SS21-0-2						MT-SS21-8-10					
SDG: 240-13043-1	LAB_ID	240-13043-6						240-13043-7					
FRACTION: PET	SAMP_DATE	7/9/2012						7/9/2012					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	84.8			84.8			85.0			85.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					54	U					54	U	
TPH (C10-C32)		11	U					11	U				

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: TB-070912 | Lab Sample ID: 240-13043-1

Matrix: Water | Lab File ID: UXX7821.D

Analysis Method: 8260B | Date Collected: 07/09/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 07/13/2012 22:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50786 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: TB-070912 | Lab Sample ID: 240-13043-1

Matrix: Water | Lab File ID: UXX7821.D

Analysis Method: 8260B | Date Collected: 07/09/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 07/13/2012 22:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50786 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: TB-070912 Lab Sample ID: 240-13043-1

Matrix: Water Lab File ID: UXX7821.D

Analysis Method: 8260B Date Collected: 07/09/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/13/2012 22:46

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-129
460-00-4	4-Bromofluorobenzene (Surr)	92		66-117
2037-26-5	Toluene-d8 (Surr)	100		74-115
1868-53-7	Dibromofluoromethane (Surr)	100		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: TB-070912 | Lab Sample ID: 240-13043-1

Matrix: Water | Lab File ID: UXX7821.D

Analysis Method: 8260B | Date Collected: 07/09/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 07/13/2012 22:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50786 | Units: ug/L

Number TICs Found: 0 | TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 | Lab Sample ID: 240-13043-2

Matrix: Solid | Lab File ID: UX89763.D

Analysis Method: 8260B | Date Collected: 07/09/2012 11:40

Sample wt/vol: 6.703(g) | Date Analyzed: 07/12/2012 03:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.2 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.5	U	4.5	0.55
71-55-6	1,1,1-Trichloroethane	4.5	U	4.5	0.50
79-34-5	1,1,2,2-Tetrachloroethane	4.5	U	4.5	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.5	U	4.5	1.2
75-34-3	1,1-Dichloroethane	4.5	U	4.5	0.32
75-35-4	1,1-Dichloroethene	4.5	U	4.5	0.46
563-58-6	1,1-Dichloropropene	4.5	U	4.5	0.27
87-61-6	1,2,3-Trichlorobenzene	4.5	U	4.5	0.34
96-18-4	1,2,3-Trichloropropane	4.5	U	4.5	0.80
526-73-8	1,2,3-Trimethylbenzene	4.5	U	4.5	0.15
120-82-1	1,2,4-Trichlorobenzene	4.5	U	4.5	0.24
95-63-6	1,2,4-Trimethylbenzene	4.5	U	4.5	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	8.9	U	8.9	1.2
106-93-4	1,2-Dibromoethane	4.5	U	4.5	0.45
95-50-1	1,2-Dichlorobenzene	4.5	U	4.5	0.32
107-06-2	1,2-Dichloroethane	4.5	U	4.5	0.30
78-87-5	1,2-Dichloropropane	4.5	U	4.5	0.61
541-73-1	1,3-Dichlorobenzene	4.5	U	4.5	0.31
142-28-9	1,3-Dichloropropane	4.5	U	4.5	0.30
106-46-7	1,4-Dichlorobenzene	4.5	U	4.5	0.59
594-20-7	2,2-Dichloropropane	4.5	U	4.5	0.84
78-93-3	2-Butanone	18	U	18	1.2
110-75-8	2-Chloroethyl vinyl ether	45	U	45	1.2
95-49-8	2-Chlorotoluene	4.5	U	4.5	0.36
591-78-6	2-Hexanone	18	U	18	0.56
106-43-4	4-Chlorotoluene	4.5	U	4.5	0.36
108-10-1	4-Methyl-2-pentanone	18	U	18	0.48
67-64-1	Acetone	18	U *	18	5.6
71-43-2	Benzene	4.5	U	4.5	0.20
108-86-1	Bromobenzene	4.5	U	4.5	0.29
74-97-5	Bromochloromethane	4.5	U	4.5	0.63
75-27-4	Bromodichloromethane	4.5	U	4.5	0.25
75-25-2	Bromoform	4.5	U	4.5	0.29
74-83-9	Bromomethane	4.5	U	4.5	0.48
75-15-0	Carbon disulfide	4.5	U	4.5	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 Lab Sample ID: 240-13043-2

Matrix: Solid Lab File ID: UX89763.D

Analysis Method: 8260B Date Collected: 07/09/2012 11:40

Sample wt/vol: 6.703(g) Date Analyzed: 07/12/2012 03:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.2 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.5	U	4.5	0.33
108-90-7	Chlorobenzene	4.5	U	4.5	0.29
75-00-3	Chloroethane	4.5	U	4.5	0.77
67-66-3	Chloroform	4.5	U	4.5	0.26
74-87-3	Chloromethane	4.5	U	4.5	0.36
156-59-2	cis-1,2-Dichloroethene	4.5	U	4.5	0.32
10061-01-5	cis-1,3-Dichloropropene	4.5	U	4.5	0.30
124-48-1	Dibromochloromethane	4.5	U	4.5	0.49
74-95-3	Dibromomethane	4.5	U	4.5	0.56
75-71-8	Dichlorodifluoromethane	4.5	U	4.5	0.45
108-20-3	Diisopropyl ether	8.9	U	8.9	1.3
100-41-4	Ethylbenzene	4.5	U	4.5	0.23
637-92-3	Ethyl-t-butyl ether (ETBE)	4.5	U	4.5	0.20
87-68-3	Hexachlorobutadiene	4.5	U	4.5	1.1
98-82-8	Isopropylbenzene	4.5	U	4.5	0.14
1634-04-4	Methyl tert-butyl ether	18	U	18	0.38
75-09-2	Methylene Chloride	1.9	J B	4.5	0.60
179601-23-1	m-Xylene & p-Xylene	8.9	U	8.9	1.1
91-20-3	Naphthalene	4.5	U	4.5	0.17
104-51-8	n-Butylbenzene	4.5	U	4.5	0.20
103-65-1	n-Propylbenzene	4.5	U	4.5	0.36
95-47-6	o-Xylene	4.5	U	4.5	0.31
99-87-6	p-Isopropyltoluene	4.5	U	4.5	0.19
135-98-8	sec-Butylbenzene	4.5	U	4.5	0.16
100-42-5	Styrene	4.5	U	4.5	0.13
994-05-8	Tert-amyl-methyl ether (TAME)	4.5	U	4.5	0.33
75-65-0	tert-Butyl alcohol	180	U	180	6.8
98-06-6	tert-Butylbenzene	4.5	U	4.5	0.26
127-18-4	Tetrachloroethene	4.5	U	4.5	0.46
108-88-3	Toluene	4.5	U	4.5	0.24
156-60-5	trans-1,2-Dichloroethene	4.5	U	4.5	0.36
10061-02-6	trans-1,3-Dichloropropene	4.5	U	4.5	0.48
79-01-6	Trichloroethene	4.5	U	4.5	0.37
75-69-4	Trichlorofluoromethane	4.5	U	4.5	0.30
108-05-4	Vinyl acetate	8.9	U	8.9	0.22
75-01-4	Vinyl chloride	4.5	U	4.5	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 Lab Sample ID: 240-13043-2

Matrix: Solid Lab File ID: UX89763.D

Analysis Method: 8260B Date Collected: 07/09/2012 11:40

Sample wt/vol: 6.703(g) Date Analyzed: 07/12/2012 03:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.2 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	8.9	U	8.9	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		58-123
460-00-4	4-Bromofluorobenzene (Surr)	84		52-136
1868-53-7	Dibromofluoromethane (Surr)	87		37-132
2037-26-5	Toluene-d8 (Surr)	85		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 | Lab Sample ID: 240-13043-2

Matrix: Solid | Lab File ID: UX89763.D

Analysis Method: 8260B | Date Collected: 07/09/2012 11:40

Sample wt/vol: 6.703(g) | Date Analyzed: 07/12/2012 03:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.2 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

Number TICs Found: 2 | TIC Result Total: 13.6

CAS NO.	COMPOUND NAME	RT	RESULT	Q
110-54-3	Hexane	3.74	2.6	J
556-67-2	Cyclotetrasiloxane, octamethyl-	8.92	11	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 | Lab Sample ID: 240-13043-3

Matrix: Solid | Lab File ID: UX89758.D

Analysis Method: 8260B | Date Collected: 07/09/2012 11:45

Sample wt/vol: 5.986(g) | Date Analyzed: 07/12/2012 01:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.2 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.9	U	4.9	0.60
71-55-6	1,1,1-Trichloroethane	4.9	U	4.9	0.55
79-34-5	1,1,2,2-Tetrachloroethane	4.9	U	4.9	0.33
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.9	U	4.9	1.3
75-34-3	1,1-Dichloroethane	4.9	U	4.9	0.35
75-35-4	1,1-Dichloroethene	4.9	U	4.9	0.51
563-58-6	1,1-Dichloropropene	4.9	U	4.9	0.29
87-61-6	1,2,3-Trichlorobenzene	4.9	U	4.9	0.37
96-18-4	1,2,3-Trichloropropane	4.9	U	4.9	0.88
526-73-8	1,2,3-Trimethylbenzene	4.9	U	4.9	0.17
120-82-1	1,2,4-Trichlorobenzene	4.9	U	4.9	0.26
95-63-6	1,2,4-Trimethylbenzene	4.9	U	4.9	0.63
96-12-8	1,2-Dibromo-3-Chloropropane	9.7	U	9.7	1.3
106-93-4	1,2-Dibromoethane	4.9	U	4.9	0.49
95-50-1	1,2-Dichlorobenzene	4.9	U	4.9	0.35
107-06-2	1,2-Dichloroethane	4.9	U	4.9	0.33
78-87-5	1,2-Dichloropropane	4.9	U	4.9	0.67
541-73-1	1,3-Dichlorobenzene	4.9	U	4.9	0.34
142-28-9	1,3-Dichloropropane	4.9	U	4.9	0.33
106-46-7	1,4-Dichlorobenzene	4.9	U	4.9	0.64
594-20-7	2,2-Dichloropropane	4.9	U	4.9	0.92
78-93-3	2-Butanone	19	U	19	1.4
110-75-8	2-Chloroethyl vinyl ether	49	U	49	1.4
95-49-8	2-Chlorotoluene	4.9	U	4.9	0.39
591-78-6	2-Hexanone	19	U	19	0.61
106-43-4	4-Chlorotoluene	4.9	U	4.9	0.40
108-10-1	4-Methyl-2-pentanone	19	U	19	0.53
67-64-1	Acetone	19	U *	19	6.1
71-43-2	Benzene	4.9	U	4.9	0.22
108-86-1	Bromobenzene	4.9	U	4.9	0.32
74-97-5	Bromochloromethane	4.9	U	4.9	0.69
75-27-4	Bromodichloromethane	4.9	U	4.9	0.27
75-25-2	Bromoform	4.9	U	4.9	0.32
74-83-9	Bromomethane	4.9	U	4.9	0.53
75-15-0	Carbon disulfide	4.9	U	4.9	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 Lab Sample ID: 240-13043-3

Matrix: Solid Lab File ID: UX89758.D

Analysis Method: 8260B Date Collected: 07/09/2012 11:45

Sample wt/vol: 5.986(g) Date Analyzed: 07/12/2012 01:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.2 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.9	U	4.9	0.36
108-90-7	Chlorobenzene	4.9	U	4.9	0.32
75-00-3	Chloroethane	4.9	U	4.9	0.84
67-66-3	Chloroform	4.9	U	4.9	0.28
74-87-3	Chloromethane	4.9	U	4.9	0.40
156-59-2	cis-1,2-Dichloroethene	4.9	U	4.9	0.35
10061-01-5	cis-1,3-Dichloropropene	4.9	U	4.9	0.33
124-48-1	Dibromochloromethane	4.9	U	4.9	0.54
74-95-3	Dibromomethane	4.9	U	4.9	0.61
75-71-8	Dichlorodifluoromethane	4.9	U	4.9	0.49
108-20-3	Diisopropyl ether	9.7	U	9.7	1.5
100-41-4	Ethylbenzene	4.9	U	4.9	0.25
637-92-3	Ethyl-t-butyl ether (ETBE)	4.9	U	4.9	0.21
87-68-3	Hexachlorobutadiene	4.9	U	4.9	1.2
98-82-8	Isopropylbenzene	4.9	U	4.9	0.16
1634-04-4	Methyl tert-butyl ether	19	U	19	0.42
75-09-2	Methylene Chloride	3.0	J B	4.9	0.65
179601-23-1	m-Xylene & p-Xylene	9.7	U	9.7	1.2
91-20-3	Naphthalene	1.6	J B	4.9	0.18
104-51-8	n-Butylbenzene	4.9	U	4.9	0.22
103-65-1	n-Propylbenzene	4.9	U	4.9	0.39
95-47-6	o-Xylene	4.9	U	4.9	0.34
99-87-6	p-Isopropyltoluene	4.9	U	4.9	0.20
135-98-8	sec-Butylbenzene	4.9	U	4.9	0.18
100-42-5	Styrene	4.9	U	4.9	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	4.9	U	4.9	0.36
75-65-0	tert-Butyl alcohol	190	U	190	7.4
98-06-6	tert-Butylbenzene	4.9	U	4.9	0.28
127-18-4	Tetrachloroethene	4.9	U	4.9	0.51
108-88-3	Toluene	4.9	U	4.9	0.26
156-60-5	trans-1,2-Dichloroethene	4.9	U	4.9	0.40
10061-02-6	trans-1,3-Dichloropropene	4.9	U	4.9	0.53
79-01-6	Trichloroethene	4.9	U	4.9	0.41
75-69-4	Trichlorofluoromethane	4.9	U	4.9	0.33
108-05-4	Vinyl acetate	9.7	U	9.7	0.24
75-01-4	Vinyl chloride	4.9	U	4.9	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 Lab Sample ID: 240-13043-3

Matrix: Solid Lab File ID: UX89758.D

Analysis Method: 8260B Date Collected: 07/09/2012 11:45

Sample wt/vol: 5.986(g) Date Analyzed: 07/12/2012 01:53

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.2 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	9.7	U	9.7	0.65

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		58-123
460-00-4	4-Bromofluorobenzene (Surr)	88		52-136
1868-53-7	Dibromofluoromethane (Surr)	88		37-132
2037-26-5	Toluene-d8 (Surr)	84		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 | Lab Sample ID: 240-13043-3

Matrix: Solid | Lab File ID: UX89758.D

Analysis Method: 8260B | Date Collected: 07/09/2012 11:45

Sample wt/vol: 5.986(g) | Date Analyzed: 07/12/2012 01:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.2 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

Number TICs Found: 2 | TIC Result Total: 7.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q
110-54-3	Hexane	3.74	2.6	J
556-67-2	Cyclotetrasiloxane, octamethyl-	8.92	5.3	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 | Lab Sample ID: 240-13043-4

Matrix: Solid | Lab File ID: UX89759.D

Analysis Method: 8260B | Date Collected: 07/09/2012 13:40

Sample wt/vol: 6.687(g) | Date Analyzed: 07/12/2012 02:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.7 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.4	U	4.4	0.54
71-55-6	1,1,1-Trichloroethane	4.4	U	4.4	0.49
79-34-5	1,1,2,2-Tetrachloroethane	4.4	U	4.4	0.30
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.4	U	4.4	1.1
75-34-3	1,1-Dichloroethane	4.4	U	4.4	0.32
75-35-4	1,1-Dichloroethene	4.4	U	4.4	0.46
563-58-6	1,1-Dichloropropene	4.4	U	4.4	0.26
87-61-6	1,2,3-Trichlorobenzene	4.4	U	4.4	0.33
96-18-4	1,2,3-Trichloropropane	4.4	U	4.4	0.79
526-73-8	1,2,3-Trimethylbenzene	4.4	U	4.4	0.15
120-82-1	1,2,4-Trichlorobenzene	4.4	U	4.4	0.24
95-63-6	1,2,4-Trimethylbenzene	4.4	U	4.4	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	8.8	U	8.8	1.1
106-93-4	1,2-Dibromoethane	4.4	U	4.4	0.44
95-50-1	1,2-Dichlorobenzene	4.4	U	4.4	0.32
107-06-2	1,2-Dichloroethane	4.4	U	4.4	0.30
78-87-5	1,2-Dichloropropane	4.4	U	4.4	0.60
541-73-1	1,3-Dichlorobenzene	4.4	U	4.4	0.31
142-28-9	1,3-Dichloropropane	4.4	U	4.4	0.30
106-46-7	1,4-Dichlorobenzene	4.4	U	4.4	0.58
594-20-7	2,2-Dichloropropane	4.4	U	4.4	0.82
78-93-3	2-Butanone	18	U	18	1.2
110-75-8	2-Chloroethyl vinyl ether	44	U	44	1.2
95-49-8	2-Chlorotoluene	4.4	U	4.4	0.35
591-78-6	2-Hexanone	18	U	18	0.55
106-43-4	4-Chlorotoluene	4.4	U	4.4	0.36
108-10-1	4-Methyl-2-pentanone	18	U	18	0.47
67-64-1	Acetone	18	U *	18	5.5
71-43-2	Benzene	4.4	U	4.4	0.20
108-86-1	Bromobenzene	4.4	U	4.4	0.29
74-97-5	Bromochloromethane	4.4	U	4.4	0.62
75-27-4	Bromodichloromethane	4.4	U	4.4	0.25
75-25-2	Bromoform	4.4	U	4.4	0.29
74-83-9	Bromomethane	4.4	U	4.4	0.47
75-15-0	Carbon disulfide	4.4	U	4.4	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 Lab Sample ID: 240-13043-4

Matrix: Solid Lab File ID: UX89759.D

Analysis Method: 8260B Date Collected: 07/09/2012 13:40

Sample wt/vol: 6.687(g) Date Analyzed: 07/12/2012 02:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.7 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.4	U	4.4	0.32
108-90-7	Chlorobenzene	4.4	U	4.4	0.29
75-00-3	Chloroethane	4.4	U	4.4	0.75
67-66-3	Chloroform	4.4	U	4.4	0.25
74-87-3	Chloromethane	4.4	U	4.4	0.36
156-59-2	cis-1,2-Dichloroethene	4.4	U	4.4	0.32
10061-01-5	cis-1,3-Dichloropropene	4.4	U	4.4	0.30
124-48-1	Dibromochloromethane	4.4	U	4.4	0.48
74-95-3	Dibromomethane	4.4	U	4.4	0.55
75-71-8	Dichlorodifluoromethane	4.4	U	4.4	0.44
108-20-3	Diisopropyl ether	8.8	U	8.8	1.3
100-41-4	Ethylbenzene	4.4	U	4.4	0.23
637-92-3	Ethyl-t-butyl ether (ETBE)	4.4	U	4.4	0.19
87-68-3	Hexachlorobutadiene	4.4	U	4.4	1.1
98-82-8	Isopropylbenzene	4.4	U	4.4	0.14
1634-04-4	Methyl tert-butyl ether	18	U	18	0.38
75-09-2	Methylene Chloride	1.7	J B	4.4	0.59
179601-23-1	m-Xylene & p-Xylene	8.8	U	8.8	1.1
91-20-3	Naphthalene	0.24	J B	4.4	0.17
104-51-8	n-Butylbenzene	4.4	U	4.4	0.20
103-65-1	n-Propylbenzene	4.4	U	4.4	0.35
95-47-6	o-Xylene	4.4	U	4.4	0.31
99-87-6	p-Isopropyltoluene	4.4	U	4.4	0.18
135-98-8	sec-Butylbenzene	4.4	U	4.4	0.16
100-42-5	Styrene	4.4	U	4.4	0.13
994-05-8	Tert-amyl-methyl ether (TAME)	4.4	U	4.4	0.32
75-65-0	tert-Butyl alcohol	180	U	180	6.7
98-06-6	tert-Butylbenzene	4.4	U	4.4	0.25
127-18-4	Tetrachloroethene	4.4	U	4.4	0.46
108-88-3	Toluene	4.4	U	4.4	0.24
156-60-5	trans-1,2-Dichloroethene	4.4	U	4.4	0.36
10061-02-6	trans-1,3-Dichloropropene	4.4	U	4.4	0.47
79-01-6	Trichloroethene	4.4	U	4.4	0.37
75-69-4	Trichlorofluoromethane	4.4	U	4.4	0.30
108-05-4	Vinyl acetate	8.8	U	8.8	0.22
75-01-4	Vinyl chloride	4.4	U	4.4	0.34

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 | Lab Sample ID: 240-13043-4

Matrix: Solid | Lab File ID: UX89759.D

Analysis Method: 8260B | Date Collected: 07/09/2012 13:40

Sample wt/vol: 6.687(g) | Date Analyzed: 07/12/2012 02:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.7 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	8.8	U	8.8	0.59

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		58-123
460-00-4	4-Bromofluorobenzene (Surr)	88		52-136
1868-53-7	Dibromofluoromethane (Surr)	88		37-132
2037-26-5	Toluene-d8 (Surr)	92		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 | Lab Sample ID: 240-13043-4

Matrix: Solid | Lab File ID: UX89759.D

Analysis Method: 8260B | Date Collected: 07/09/2012 13:40

Sample wt/vol: 6.687(g) | Date Analyzed: 07/12/2012 02:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.7 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

Number TICs Found: 2 | TIC Result Total: 17.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q
110-54-3	Hexane	3.74	1.7	J
556-67-2	Cyclotetrasiloxane, octamethyl-	8.92	16	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: UX89760.D

Analysis Method: 8260B | Date Collected: 07/09/2012 13:45

Sample wt/vol: 6.7(g) | Date Analyzed: 07/12/2012 02:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.8 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.5	U	4.5	0.56
71-55-6	1,1,1-Trichloroethane	4.5	U	4.5	0.51
79-34-5	1,1,2,2-Tetrachloroethane	4.5	U	4.5	0.31
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.5	U	4.5	1.2
75-34-3	1,1-Dichloroethane	4.5	U	4.5	0.33
75-35-4	1,1-Dichloroethene	4.5	U	4.5	0.47
563-58-6	1,1-Dichloropropene	4.5	U	4.5	0.27
87-61-6	1,2,3-Trichlorobenzene	4.5	U	4.5	0.35
96-18-4	1,2,3-Trichloropropane	4.5	U	4.5	0.82
526-73-8	1,2,3-Trimethylbenzene	4.5	U	4.5	0.15
120-82-1	1,2,4-Trichlorobenzene	4.5	U	4.5	0.25
95-63-6	1,2,4-Trimethylbenzene	4.5	U	4.5	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	9.1	U	9.1	1.2
106-93-4	1,2-Dibromoethane	4.5	U	4.5	0.45
95-50-1	1,2-Dichlorobenzene	4.5	U	4.5	0.33
107-06-2	1,2-Dichloroethane	4.5	U	4.5	0.31
78-87-5	1,2-Dichloropropane	4.5	U	4.5	0.63
541-73-1	1,3-Dichlorobenzene	4.5	U	4.5	0.32
142-28-9	1,3-Dichloropropane	4.5	U	4.5	0.31
106-46-7	1,4-Dichlorobenzene	4.5	U	4.5	0.60
594-20-7	2,2-Dichloropropane	4.5	U	4.5	0.85
78-93-3	2-Butanone	18	U	18	1.3
110-75-8	2-Chloroethyl vinyl ether	45	U	45	1.3
95-49-8	2-Chlorotoluene	4.5	U	4.5	0.36
591-78-6	2-Hexanone	18	U	18	0.57
106-43-4	4-Chlorotoluene	4.5	U	4.5	0.37
108-10-1	4-Methyl-2-pentanone	18	U	18	0.49
67-64-1	Acetone	18	U *	18	5.7
71-43-2	Benzene	4.5	U	4.5	0.21
108-86-1	Bromobenzene	4.5	U	4.5	0.30
74-97-5	Bromochloromethane	4.5	U	4.5	0.64
75-27-4	Bromodichloromethane	4.5	U	4.5	0.25
75-25-2	Bromoform	4.5	U	4.5	0.30
74-83-9	Bromomethane	4.5	U	4.5	0.49
75-15-0	Carbon disulfide	4.5	U	4.5	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 Lab Sample ID: 240-13043-5

Matrix: Solid Lab File ID: UX89760.D

Analysis Method: 8260B Date Collected: 07/09/2012 13:45

Sample wt/vol: 6.7(g) Date Analyzed: 07/12/2012 02:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.8 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.5	U	4.5	0.34
108-90-7	Chlorobenzene	4.5	U	4.5	0.30
75-00-3	Chloroethane	4.5	U	4.5	0.78
67-66-3	Chloroform	4.5	U	4.5	0.26
74-87-3	Chloromethane	4.5	U	4.5	0.37
156-59-2	cis-1,2-Dichloroethene	4.5	U	4.5	0.33
10061-01-5	cis-1,3-Dichloropropene	4.5	U	4.5	0.31
124-48-1	Dibromochloromethane	4.5	U	4.5	0.50
74-95-3	Dibromomethane	4.5	U	4.5	0.57
75-71-8	Dichlorodifluoromethane	4.5	U	4.5	0.45
108-20-3	Diisopropyl ether	9.1	U	9.1	1.4
100-41-4	Ethylbenzene	4.5	U	4.5	0.24
637-92-3	Ethyl-t-butyl ether (ETBE)	4.5	U	4.5	0.20
87-68-3	Hexachlorobutadiene	4.5	U	4.5	1.1
98-82-8	Isopropylbenzene	4.5	U	4.5	0.15
1634-04-4	Methyl tert-butyl ether	18	U	18	0.39
75-09-2	Methylene Chloride	0.78	J B	4.5	0.61
179601-23-1	m-Xylene & p-Xylene	9.1	U	9.1	1.1
91-20-3	Naphthalene	4.5	U	4.5	0.17
104-51-8	n-Butylbenzene	4.5	U	4.5	0.21
103-65-1	n-Propylbenzene	4.5	U	4.5	0.36
95-47-6	o-Xylene	4.5	U	4.5	0.32
99-87-6	p-Isopropyltoluene	4.5	U	4.5	0.19
135-98-8	sec-Butylbenzene	4.5	U	4.5	0.16
100-42-5	Styrene	4.5	U	4.5	0.14
994-05-8	Tert-amyl-methyl ether (TAME)	4.5	U	4.5	0.34
75-65-0	tert-Butyl alcohol	180	U	180	6.9
98-06-6	tert-Butylbenzene	4.5	U	4.5	0.26
127-18-4	Tetrachloroethene	4.5	U	4.5	0.47
108-88-3	Toluene	4.5	U	4.5	0.25
156-60-5	trans-1,2-Dichloroethene	4.5	U	4.5	0.37
10061-02-6	trans-1,3-Dichloropropene	4.5	U	4.5	0.49
79-01-6	Trichloroethene	4.5	U	4.5	0.38
75-69-4	Trichlorofluoromethane	4.5	U	4.5	0.31
108-05-4	Vinyl acetate	9.1	U	9.1	0.23
75-01-4	Vinyl chloride	4.5	U	4.5	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 Lab Sample ID: 240-13043-5

Matrix: Solid Lab File ID: UX89760.D

Analysis Method: 8260B Date Collected: 07/09/2012 13:45

Sample wt/vol: 6.7(g) Date Analyzed: 07/12/2012 02:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.8 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	9.1	U	9.1	0.61

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		58-123
460-00-4	4-Bromofluorobenzene (Surr)	89		52-136
1868-53-7	Dibromofluoromethane (Surr)	89		37-132
2037-26-5	Toluene-d8 (Surr)	90		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: UX89760.D

Analysis Method: 8260B | Date Collected: 07/09/2012 13:45

Sample wt/vol: 6.7(g) | Date Analyzed: 07/12/2012 02:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.8 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

Number TICs Found: 2 | TIC Result Total: 9.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q
110-54-3	Hexane	3.73	1.6	J
556-67-2	Cyclotetrasiloxane, octamethyl-	8.92	7.6	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 | Lab Sample ID: 240-13043-6

Matrix: Solid | Lab File ID: UX89761.D

Analysis Method: 8260B | Date Collected: 07/09/2012 14:30

Sample wt/vol: 7.203(g) | Date Analyzed: 07/12/2012 02:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.1	U	4.1	0.51
71-55-6	1,1,1-Trichloroethane	4.1	U	4.1	0.46
79-34-5	1,1,2,2-Tetrachloroethane	4.1	U	4.1	0.28
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.1	U	4.1	1.1
75-34-3	1,1-Dichloroethane	4.1	U	4.1	0.29
75-35-4	1,1-Dichloroethene	4.1	U	4.1	0.43
563-58-6	1,1-Dichloropropene	4.1	U	4.1	0.25
87-61-6	1,2,3-Trichlorobenzene	4.1	U	4.1	0.31
96-18-4	1,2,3-Trichloropropane	4.1	U	4.1	0.74
526-73-8	1,2,3-Trimethylbenzene	4.1	U	4.1	0.14
120-82-1	1,2,4-Trichlorobenzene	4.1	U	4.1	0.22
95-63-6	1,2,4-Trimethylbenzene	4.1	U	4.1	0.53
96-12-8	1,2-Dibromo-3-Chloropropane	8.2	U	8.2	1.1
106-93-4	1,2-Dibromoethane	4.1	U	4.1	0.41
95-50-1	1,2-Dichlorobenzene	4.1	U	4.1	0.29
107-06-2	1,2-Dichloroethane	4.1	U	4.1	0.28
78-87-5	1,2-Dichloropropane	4.1	U	4.1	0.56
541-73-1	1,3-Dichlorobenzene	4.1	U	4.1	0.29
142-28-9	1,3-Dichloropropane	4.1	U	4.1	0.28
106-46-7	1,4-Dichlorobenzene	4.1	U	4.1	0.54
594-20-7	2,2-Dichloropropane	4.1	U	4.1	0.77
78-93-3	2-Butanone	16	U	16	1.1
110-75-8	2-Chloroethyl vinyl ether	41	U	41	1.1
95-49-8	2-Chlorotoluene	4.1	U	4.1	0.33
591-78-6	2-Hexanone	16	U	16	0.52
106-43-4	4-Chlorotoluene	4.1	U	4.1	0.34
108-10-1	4-Methyl-2-pentanone	16	U	16	0.44
67-64-1	Acetone	16	U *	16	5.2
71-43-2	Benzene	4.1	U	4.1	0.19
108-86-1	Bromobenzene	4.1	U	4.1	0.27
74-97-5	Bromochloromethane	4.1	U	4.1	0.58
75-27-4	Bromodichloromethane	4.1	U	4.1	0.23
75-25-2	Bromoform	4.1	U	4.1	0.27
74-83-9	Bromomethane	4.1	U	4.1	0.44
75-15-0	Carbon disulfide	4.1	U	4.1	0.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 | Lab Sample ID: 240-13043-6

Matrix: Solid | Lab File ID: UX89761.D

Analysis Method: 8260B | Date Collected: 07/09/2012 14:30

Sample wt/vol: 7.203(g) | Date Analyzed: 07/12/2012 02:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.1	U	4.1	0.30
108-90-7	Chlorobenzene	4.1	U	4.1	0.27
75-00-3	Chloroethane	4.1	U	4.1	0.70
67-66-3	Chloroform	4.1	U	4.1	0.24
74-87-3	Chloromethane	4.1	U	4.1	0.34
156-59-2	cis-1,2-Dichloroethene	4.1	U	4.1	0.29
10061-01-5	cis-1,3-Dichloropropene	4.1	U	4.1	0.28
124-48-1	Dibromochloromethane	4.1	U	4.1	0.45
74-95-3	Dibromomethane	4.1	U	4.1	0.52
75-71-8	Dichlorodifluoromethane	4.1	U	4.1	0.41
108-20-3	Diisopropyl ether	8.2	U	8.2	1.2
100-41-4	Ethylbenzene	4.1	U	4.1	0.21
637-92-3	Ethyl-t-butyl ether (ETBE)	4.1	U	4.1	0.18
87-68-3	Hexachlorobutadiene	4.1	U	4.1	0.98
98-82-8	Isopropylbenzene	4.1	U	4.1	0.13
1634-04-4	Methyl tert-butyl ether	16	U	16	0.35
75-09-2	Methylene Chloride	1.0	J B	4.1	0.55
179601-23-1	m-Xylene & p-Xylene	8.2	U	8.2	0.98
91-20-3	Naphthalene	4.1	U	4.1	0.16
104-51-8	n-Butylbenzene	4.1	U	4.1	0.19
103-65-1	n-Propylbenzene	4.1	U	4.1	0.33
95-47-6	o-Xylene	4.1	U	4.1	0.29
99-87-6	p-Isopropyltoluene	4.1	U	4.1	0.17
135-98-8	sec-Butylbenzene	4.1	U	4.1	0.15
100-42-5	Styrene	4.1	U	4.1	0.12
994-05-8	Tert-amyl-methyl ether (TAME)	4.1	U	4.1	0.30
75-65-0	tert-Butyl alcohol	160	U	160	6.2
98-06-6	tert-Butylbenzene	4.1	U	4.1	0.24
127-18-4	Tetrachloroethene	4.1	U	4.1	0.43
108-88-3	Toluene	4.1	U	4.1	0.22
156-60-5	trans-1,2-Dichloroethene	4.1	U	4.1	0.34
10061-02-6	trans-1,3-Dichloropropene	4.1	U	4.1	0.44
79-01-6	Trichloroethene	4.1	U	4.1	0.34
75-69-4	Trichlorofluoromethane	4.1	U	4.1	0.28
108-05-4	Vinyl acetate	8.2	U	8.2	0.20
75-01-4	Vinyl chloride	4.1	U	4.1	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 Lab Sample ID: 240-13043-6

Matrix: Solid Lab File ID: UX89761.D

Analysis Method: 8260B Date Collected: 07/09/2012 14:30

Sample wt/vol: 7.203(g) Date Analyzed: 07/12/2012 02:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.2 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	8.2	U	8.2	0.55

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		58-123
460-00-4	4-Bromofluorobenzene (Surr)	91		52-136
1868-53-7	Dibromofluoromethane (Surr)	90		37-132
2037-26-5	Toluene-d8 (Surr)	88		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 Lab Sample ID: 240-13043-6

Matrix: Solid Lab File ID: UX89761.D

Analysis Method: 8260B Date Collected: 07/09/2012 14:30

Sample wt/vol: 7.203(g) Date Analyzed: 07/12/2012 02:57

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.2 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

Number TICs Found: 2 TIC Result Total: 14.1

CAS NO.	COMPOUND NAME	RT	RESULT	Q
110-54-3	Hexane	3.74	2.1	J
556-67-2	Cyclotetrasiloxane, octamethyl-	8.92	12	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 Lab Sample ID: 240-13043-7

Matrix: Solid Lab File ID: UX89762.D

Analysis Method: 8260B Date Collected: 07/09/2012 14:35

Sample wt/vol: 5.952(g) Date Analyzed: 07/12/2012 03:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.0 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.9	U	4.9	0.61
71-55-6	1,1,1-Trichloroethane	4.9	U	4.9	0.55
79-34-5	1,1,2,2-Tetrachloroethane	4.9	U	4.9	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.9	U	4.9	1.3
75-34-3	1,1-Dichloroethane	4.9	U	4.9	0.36
75-35-4	1,1-Dichloroethene	4.9	U	4.9	0.51
563-58-6	1,1-Dichloropropene	4.9	U	4.9	0.30
87-61-6	1,2,3-Trichlorobenzene	4.9	U	4.9	0.38
96-18-4	1,2,3-Trichloropropane	4.9	U	4.9	0.89
526-73-8	1,2,3-Trimethylbenzene	4.9	U	4.9	0.17
120-82-1	1,2,4-Trichlorobenzene	4.9	U	4.9	0.27
95-63-6	1,2,4-Trimethylbenzene	4.9	U	4.9	0.64
96-12-8	1,2-Dibromo-3-Chloropropane	9.9	U	9.9	1.3
106-93-4	1,2-Dibromoethane	4.9	U	4.9	0.49
95-50-1	1,2-Dichlorobenzene	4.9	U	4.9	0.36
107-06-2	1,2-Dichloroethane	4.9	U	4.9	0.34
78-87-5	1,2-Dichloropropane	4.9	U	4.9	0.68
541-73-1	1,3-Dichlorobenzene	4.9	U	4.9	0.35
142-28-9	1,3-Dichloropropane	4.9	U	4.9	0.34
106-46-7	1,4-Dichlorobenzene	4.9	U	4.9	0.65
594-20-7	2,2-Dichloropropane	4.9	U	4.9	0.93
78-93-3	2-Butanone	20	U	20	1.4
110-75-8	2-Chloroethyl vinyl ether	49	U	49	1.4
95-49-8	2-Chlorotoluene	4.9	U	4.9	0.40
591-78-6	2-Hexanone	20	U	20	0.62
106-43-4	4-Chlorotoluene	4.9	U	4.9	0.41
108-10-1	4-Methyl-2-pentanone	20	U	20	0.53
67-64-1	Acetone	20	U *	20	6.2
71-43-2	Benzene	4.9	U	4.9	0.23
108-86-1	Bromobenzene	4.9	U	4.9	0.33
74-97-5	Bromochloromethane	4.9	U	4.9	0.70
75-27-4	Bromodichloromethane	4.9	U	4.9	0.28
75-25-2	Bromoform	4.9	U	4.9	0.33
74-83-9	Bromomethane	4.9	U	4.9	0.53
75-15-0	Carbon disulfide	4.9	U	4.9	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 | Lab Sample ID: 240-13043-7

Matrix: Solid | Lab File ID: UX89762.D

Analysis Method: 8260B | Date Collected: 07/09/2012 14:35

Sample wt/vol: 5.952(g) | Date Analyzed: 07/12/2012 03:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.0 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.4	J	4.9	0.37
108-90-7	Chlorobenzene	4.9	U	4.9	0.33
75-00-3	Chloroethane	4.9	U	4.9	0.85
67-66-3	Chloroform	4.9	U	4.9	0.29
74-87-3	Chloromethane	4.9	U	4.9	0.41
156-59-2	cis-1,2-Dichloroethene	4.9	U	4.9	0.36
10061-01-5	cis-1,3-Dichloropropene	4.9	U	4.9	0.34
124-48-1	Dibromochloromethane	4.9	U	4.9	0.54
74-95-3	Dibromomethane	4.9	U	4.9	0.62
75-71-8	Dichlorodifluoromethane	4.9	U	4.9	0.49
108-20-3	Diisopropyl ether	9.9	U	9.9	1.5
100-41-4	Ethylbenzene	4.9	U	4.9	0.26
637-92-3	Ethyl-t-butyl ether (ETBE)	4.9	U	4.9	0.22
87-68-3	Hexachlorobutadiene	4.9	U	4.9	1.2
98-82-8	Isopropylbenzene	4.9	U	4.9	0.16
1634-04-4	Methyl tert-butyl ether	20	U	20	0.42
75-09-2	Methylene Chloride	0.66	J B	4.9	0.66
179601-23-1	m-Xylene & p-Xylene	9.9	U	9.9	1.2
91-20-3	Naphthalene	4.9	U	4.9	0.19
104-51-8	n-Butylbenzene	4.9	U	4.9	0.23
103-65-1	n-Propylbenzene	4.9	U	4.9	0.40
95-47-6	o-Xylene	4.9	U	4.9	0.35
99-87-6	p-Isopropyltoluene	4.9	U	4.9	0.21
135-98-8	sec-Butylbenzene	4.9	U	4.9	0.18
100-42-5	Styrene	4.9	U	4.9	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	4.9	U	4.9	0.37
75-65-0	tert-Butyl alcohol	200	U	200	7.5
98-06-6	tert-Butylbenzene	4.9	U	4.9	0.29
127-18-4	Tetrachloroethene	4.9	U	4.9	0.51
108-88-3	Toluene	4.9	U	4.9	0.27
156-60-5	trans-1,2-Dichloroethene	4.9	U	4.9	0.41
10061-02-6	trans-1,3-Dichloropropene	4.9	U	4.9	0.53
79-01-6	Trichloroethene	110		4.9	0.42
75-69-4	Trichlorofluoromethane	4.9	U	4.9	0.34
108-05-4	Vinyl acetate	9.9	U	9.9	0.25
75-01-4	Vinyl chloride	4.9	U	4.9	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 | Lab Sample ID: 240-13043-7

Matrix: Solid | Lab File ID: UX89762.D

Analysis Method: 8260B | Date Collected: 07/09/2012 14:35

Sample wt/vol: 5.952(g) | Date Analyzed: 07/12/2012 03:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.0 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	9.9	U	9.9	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		58-123
460-00-4	4-Bromofluorobenzene (Surr)	92		52-136
1868-53-7	Dibromofluoromethane (Surr)	89		37-132
2037-26-5	Toluene-d8 (Surr)	89		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 | Lab Sample ID: 240-13043-7

Matrix: Solid | Lab File ID: UX89762.D

Analysis Method: 8260B | Date Collected: 07/09/2012 14:35

Sample wt/vol: 5.952(g) | Date Analyzed: 07/12/2012 03:18

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.0 | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

Number TICs Found: 2 | TIC Result Total: 9

CAS NO.	COMPOUND NAME	RT	RESULT	Q
110-54-3	Hexane	3.74	1.6	J
556-67-2	Cyclotetrasiloxane, octamethyl-	8.92	7.4	T J N

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 | Lab Sample ID: 240-13043-2

Matrix: Solid | Lab File ID: 20719026.D

Analysis Method: 8270D | Date Collected: 07/09/2012 11:40

Extract. Method: 3540C | Date Extracted: 07/17/2012 08:20

Sample wt/vol: 29.54(g) | Date Analyzed: 07/19/2012 16:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51296 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	61	U	61	33
123-91-1	1,4-Dioxane	120	U	120	27
88-06-2	2,4,6-Trichlorophenol	180	U	180	97
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	400	U	400	97
121-14-2	2,4-Dinitrotoluene	240	U	240	33
91-58-7	2-Chloronaphthalene	61	U	61	4.0
95-57-8	2-Chlorophenol	61	U	61	33
91-57-6	2-Methylnaphthalene	8.1	U	8.1	4.0
95-48-7	2-Methylphenol	240	U	240	97
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	61	U	61	33
15831-10-4	3 & 4 Methylphenol	480	U	480	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	22
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	97
101-55-3	4-Bromophenyl phenyl ether	61	U	61	16
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	21
7005-72-3	4-Chlorophenyl phenyl ether	61	U	61	16
100-01-6	4-Nitroaniline	240	U	240	32
83-32-9	Acenaphthene	8.1	U	8.1	4.0
208-96-8	Acenaphthylene	8.1	U	8.1	4.0
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	8.1	U	8.1	4.0
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U	120	15
56-55-3	Benzo[a]anthracene	8.1	U	8.1	4.0
50-32-8	Benzo[a]pyrene	8.1	U	8.1	4.0
205-99-2	Benzo[b]fluoranthene	8.1	U	8.1	4.0
191-24-2	Benzo[g,h,i]perylene	8.1	U	8.1	4.0
207-08-9	Benzo[k]fluoranthene	8.1	U	8.1	4.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 | Lab Sample ID: 240-13043-2

Matrix: Solid | Lab File ID: 20719026.D

Analysis Method: 8270D | Date Collected: 07/09/2012 11:40

Extract. Method: 3540C | Date Extracted: 07/17/2012 08:20

Sample wt/vol: 29.54(g) | Date Analyzed: 07/19/2012 16:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51296 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	27
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	61	U	61	23
85-68-7	Butyl benzyl phthalate	61	U	61	12
105-60-2	Caprolactam	400	U	400	45
86-74-8	Carbazole	61	U	61	33
218-01-9	Chrysene	8.1	U	8.1	1.3
84-74-2	Di-n-butyl phthalate	61	U	61	18
117-84-0	Di-n-octyl phthalate	61	U	61	33
53-70-3	Dibenzo(a,h)anthracene	8.1	U	8.1	4.0
132-64-9	Dibenzofuran	61	U	61	4.0
84-66-2	Diethyl phthalate	61	U	61	19
131-11-3	Dimethyl phthalate	61	U	61	21
206-44-0	Fluoranthene	8.1	U	8.1	4.0
86-73-7	Fluorene	8.1	U	8.1	4.0
118-74-1	Hexachlorobenzene	8.1	U	8.1	2.5
87-68-3	Hexachlorobutadiene	61	U	61	33
77-47-4	Hexachlorocyclopentadiene	400	U	400	33
67-72-1	Hexachloroethane	61	U	61	11
193-39-5	Indeno[1,2,3-cd]pyrene	8.1	U	8.1	4.0
78-59-1	Isophorone	61	U	61	16
621-64-7	N-Nitrosodi-n-propylamine	61	U	61	33
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	61	U	61	25
91-20-3	Naphthalene	8.1	U	8.1	4.0
98-95-3	Nitrobenzene	120	U	120	2.7
87-86-5	Pentachlorophenol	180	U	180	97
85-01-8	Phenanthrene	8.1	U	8.1	4.0
108-95-2	Phenol	61	U	61	33
129-00-0	Pyrene	8.1	U	8.1	4.0
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	12
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	400	U	400	97

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 | Lab Sample ID: 240-13043-2

Matrix: Solid | Lab File ID: 20719026.D

Analysis Method: 8270D | Date Collected: 07/09/2012 11:40

Extract. Method: 3540C | Date Extracted: 07/17/2012 08:20

Sample wt/vol: 29.54(g) | Date Analyzed: 07/19/2012 16:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51296 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	64		41-119
4165-62-2	Phenol-d5 (Surr)	54		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	47		24-112
367-12-4	2-Fluorophenol (Surr)	58		26-110
321-60-8	2-Fluorobiphenyl (Surr)	41		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	29		10-118

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 | Lab Sample ID: 240-13043-3

Matrix: Solid | Lab File ID: 20720015.D

Analysis Method: 8270D | Date Collected: 07/09/2012 11:45

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.12(g) | Date Analyzed: 07/20/2012 13:56

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	58	U	58	31
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	170	U	170	93
95-95-4	2,4,5-Trichlorophenol	170	U	170	29
120-83-2	2,4-Dichlorophenol	170	U	170	23
105-67-9	2,4-Dimethylphenol	170	U	170	23
51-28-5	2,4-Dinitrophenol	380	U	380	93
121-14-2	2,4-Dinitrotoluene	230	U	230	31
91-58-7	2-Chloronaphthalene	58	U	58	3.8
95-57-8	2-Chlorophenol	58	U	58	31
91-57-6	2-Methylnaphthalene	7.7	U	7.7	3.8
95-48-7	2-Methylphenol	230	U	230	93
88-74-4	2-Nitroaniline	230	U	230	11
88-75-5	2-Nitrophenol	58	U	58	31
15831-10-4	3 & 4 Methylphenol	460	U	460	23
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	230	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	170	U	170	93
101-55-3	4-Bromophenyl phenyl ether	58	U	58	15
59-50-7	4-Chloro-3-methylphenol	170	U	170	24
106-47-8	4-Chloroaniline	170	U	170	20
7005-72-3	4-Chlorophenyl phenyl ether	58	U	58	15
100-01-6	4-Nitroaniline	230	U	230	30
83-32-9	Acenaphthene	7.7	U	7.7	3.8
208-96-8	Acenaphthylene	7.7	U	7.7	3.8
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.7	U	7.7	3.8
1912-24-9	Atrazine	230	U	230	11
100-52-7	Benzaldehyde	120	U	120	14
56-55-3	Benzo[a]anthracene	7.7	U	7.7	3.8
50-32-8	Benzo[a]pyrene	6.6	J	7.7	3.8
205-99-2	Benzo[b]fluoranthene	6.3	J	7.7	3.8
191-24-2	Benzo[g,h,i]perylene	7.7	U	7.7	3.8
207-08-9	Benzo[k]fluoranthene	4.9	J	7.7	3.8

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 | Lab Sample ID: 240-13043-3

Matrix: Solid | Lab File ID: 20720015.D

Analysis Method: 8270D | Date Collected: 07/09/2012 11:45

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.12(g) | Date Analyzed: 07/20/2012 13:56

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	26	J B	58	22
85-68-7	Butyl benzyl phthalate	58	U	58	12
105-60-2	Caprolactam	380	U	380	43
86-74-8	Carbazole	58	U	58	31
218-01-9	Chrysene	7.7	U	7.7	1.3
84-74-2	Di-n-butyl phthalate	34	J	58	17
117-84-0	Di-n-octyl phthalate	58	U	58	31
53-70-3	Dibenzo(a,h)anthracene	7.7	U	7.7	3.8
132-64-9	Dibenzofuran	58	U	58	3.8
84-66-2	Diethyl phthalate	58	U	58	19
131-11-3	Dimethyl phthalate	58	U	58	20
206-44-0	Fluoranthene	15		7.7	3.8
86-73-7	Fluorene	7.7	U	7.7	3.8
118-74-1	Hexachlorobenzene	7.7	U	7.7	2.4
87-68-3	Hexachlorobutadiene	58	U	58	31
77-47-4	Hexachlorocyclopentadiene	380	U	380	31
67-72-1	Hexachloroethane	58	U	58	10
193-39-5	Indeno[1,2,3-cd]pyrene	7.7	U	7.7	3.8
78-59-1	Isophorone	58	U	58	15
621-64-7	N-Nitrosodi-n-propylamine	58	U	58	31
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	58	U	58	24
91-20-3	Naphthalene	7.7	U	7.7	3.8
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	170	U	170	93
85-01-8	Phenanthrene	7.7	U	7.7	3.8
108-95-2	Phenol	58	U	58	31
129-00-0	Pyrene	16		7.7	3.8
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	230	U	230	24
100-02-7	4-Nitrophenol	380	U	380	93

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 | Lab Sample ID: 240-13043-3

Matrix: Solid | Lab File ID: 20720015.D

Analysis Method: 8270D | Date Collected: 07/09/2012 11:45

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.12(g) | Date Analyzed: 07/20/2012 13:56

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	90		41-119
4165-62-2	Phenol-d5 (Surr)	95		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	70		24-112
367-12-4	2-Fluorophenol (Surr)	91		26-110
321-60-8	2-Fluorobiphenyl (Surr)	64		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	63		10-118

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 | Lab Sample ID: 240-13043-4

Matrix: Solid | Lab File ID: 20720016.D

Analysis Method: 8270D | Date Collected: 07/09/2012 13:40

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.08(g) | Date Analyzed: 07/20/2012 14:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	58	U	58	32
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	94
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	23
105-67-9	2,4-Dimethylphenol	180	U	180	23
51-28-5	2,4-Dinitrophenol	390	U	390	94
121-14-2	2,4-Dinitrotoluene	230	U	230	32
91-58-7	2-Chloronaphthalene	58	U	58	3.9
95-57-8	2-Chlorophenol	58	U	58	32
91-57-6	2-Methylnaphthalene	7.8	U	7.8	3.9
95-48-7	2-Methylphenol	230	U	230	94
88-74-4	2-Nitroaniline	230	U	230	11
88-75-5	2-Nitrophenol	58	U	58	32
15831-10-4	3 & 4 Methylphenol	470	U	470	23
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	230	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	94
101-55-3	4-Bromophenyl phenyl ether	58	U	58	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	58	U	58	15
100-01-6	4-Nitroaniline	230	U	230	30
83-32-9	Acenaphthene	7.8	U	7.8	3.9
208-96-8	Acenaphthylene	7.8	U	7.8	3.9
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.8	U	7.8	3.9
1912-24-9	Atrazine	230	U	230	11
100-52-7	Benzaldehyde	120	U	120	14
56-55-3	Benzo[a]anthracene	7.8	U	7.8	3.9
50-32-8	Benzo[a]pyrene	7.8	U	7.8	3.9
205-99-2	Benzo[b]fluoranthene	7.8	U	7.8	3.9
191-24-2	Benzo[g,h,i]perylene	7.8	U	7.8	3.9
207-08-9	Benzo[k]fluoranthene	7.8	U	7.8	3.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 | Lab Sample ID: 240-13043-4

Matrix: Solid | Lab File ID: 20720016.D

Analysis Method: 8270D | Date Collected: 07/09/2012 13:40

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.08(g) | Date Analyzed: 07/20/2012 14:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	34	J B	58	22
85-68-7	Butyl benzyl phthalate	58	U	58	12
105-60-2	Caprolactam	390	U	390	43
86-74-8	Carbazole	58	U	58	32
218-01-9	Chrysene	7.8	U	7.8	1.3
84-74-2	Di-n-butyl phthalate	24	J	58	18
117-84-0	Di-n-octyl phthalate	58	U	58	32
53-70-3	Dibenzo(a,h)anthracene	7.8	U	7.8	3.9
132-64-9	Dibenzofuran	58	U	58	3.9
84-66-2	Diethyl phthalate	58	U	58	19
131-11-3	Dimethyl phthalate	58	U	58	20
206-44-0	Fluoranthene	5.7	J	7.8	3.9
86-73-7	Fluorene	7.8	U	7.8	3.9
118-74-1	Hexachlorobenzene	7.8	U	7.8	2.5
87-68-3	Hexachlorobutadiene	58	U	58	32
77-47-4	Hexachlorocyclopentadiene	390	U	390	32
67-72-1	Hexachloroethane	58	U	58	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.8	U	7.8	3.9
78-59-1	Isophorone	58	U	58	15
621-64-7	N-Nitrosodi-n-propylamine	58	U	58	32
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	58	U	58	25
91-20-3	Naphthalene	7.8	U	7.8	3.9
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	94
85-01-8	Phenanthrene	7.8	U	7.8	3.9
108-95-2	Phenol	58	U	58	32
129-00-0	Pyrene	4.8	J	7.8	3.9
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	230	U	230	25
100-02-7	4-Nitrophenol	390	U	390	94

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 | Lab Sample ID: 240-13043-4

Matrix: Solid | Lab File ID: 20720016.D

Analysis Method: 8270D | Date Collected: 07/09/2012 13:40

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.08(g) | Date Analyzed: 07/20/2012 14:15

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	88		41-119
4165-62-2	Phenol-d5 (Surr)	84		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	63		24-112
367-12-4	2-Fluorophenol (Surr)	79		26-110
321-60-8	2-Fluorobiphenyl (Surr)	60		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	67		10-118

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: 20720019.D

Analysis Method: 8270D | Date Collected: 07/09/2012 13:45

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.10(g) | Date Analyzed: 07/20/2012 15:12

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	61	U	61	33
123-91-1	1,4-Dioxane	120	U	120	27
88-06-2	2,4,6-Trichlorophenol	180	U	180	97
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	400	U	400	97
121-14-2	2,4-Dinitrotoluene	240	U	240	33
91-58-7	2-Chloronaphthalene	61	U	61	4.0
95-57-8	2-Chlorophenol	61	U	61	33
91-57-6	2-Methylnaphthalene	8.1	U	8.1	4.0
95-48-7	2-Methylphenol	240	U	240	97
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	61	U	61	33
15831-10-4	3 & 4 Methylphenol	490	U	490	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	22
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	97
101-55-3	4-Bromophenyl phenyl ether	61	U	61	16
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	21
7005-72-3	4-Chlorophenyl phenyl ether	61	U	61	16
100-01-6	4-Nitroaniline	240	U	240	32
83-32-9	Acenaphthene	8.1	U	8.1	4.0
208-96-8	Acenaphthylene	8.1	U	8.1	4.0
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	8.1	U	8.1	4.0
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U	120	15
56-55-3	Benzo[a]anthracene	11		8.1	4.0
50-32-8	Benzo[a]pyrene	16		8.1	4.0
205-99-2	Benzo[b]fluoranthene	15		8.1	4.0
191-24-2	Benzo[g,h,i]perylene	15		8.1	4.0
207-08-9	Benzo[k]fluoranthene	7.2	J	8.1	4.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: 20720019.D

Analysis Method: 8270D | Date Collected: 07/09/2012 13:45

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.10(g) | Date Analyzed: 07/20/2012 15:12

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	27
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	28	J B	61	23
85-68-7	Butyl benzyl phthalate	61	U	61	12
105-60-2	Caprolactam	400	U	400	45
86-74-8	Carbazole	61	U	61	33
218-01-9	Chrysene	11		8.1	1.3
84-74-2	Di-n-butyl phthalate	61	U	61	18
117-84-0	Di-n-octyl phthalate	61	U	61	33
53-70-3	Dibenzo(a,h)anthracene	8.1	U	8.1	4.0
132-64-9	Dibenzofuran	61	U	61	4.0
84-66-2	Diethyl phthalate	61	U	61	19
131-11-3	Dimethyl phthalate	61	U	61	21
206-44-0	Fluoranthene	13		8.1	4.0
86-73-7	Fluorene	8.1	U	8.1	4.0
118-74-1	Hexachlorobenzene	8.1	U	8.1	2.5
87-68-3	Hexachlorobutadiene	61	U	61	33
77-47-4	Hexachlorocyclopentadiene	400	U	400	33
67-72-1	Hexachloroethane	61	U	61	11
193-39-5	Indeno[1,2,3-cd]pyrene	10		8.1	4.0
78-59-1	Isophorone	61	U	61	16
621-64-7	N-Nitrosodi-n-propylamine	61	U	61	33
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	61	U	61	25
91-20-3	Naphthalene	8.1	U	8.1	4.0
98-95-3	Nitrobenzene	120	U	120	2.7
87-86-5	Pentachlorophenol	180	U	180	97
85-01-8	Phenanthrene	9.4		8.1	4.0
108-95-2	Phenol	61	U	61	33
129-00-0	Pyrene	19		8.1	4.0
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	12
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	400	U	400	97

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: 20720019.D

Analysis Method: 8270D | Date Collected: 07/09/2012 13:45

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.10(g) | Date Analyzed: 07/20/2012 15:12

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	86		41-119
4165-62-2	Phenol-d5 (Surr)	89		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	65		24-112
367-12-4	2-Fluorophenol (Surr)	83		26-110
321-60-8	2-Fluorobiphenyl (Surr)	61		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	69		10-118

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 Lab Sample ID: 240-13043-6

Matrix: Solid Lab File ID: 20720017.D

Analysis Method: 8270D Date Collected: 07/09/2012 14:30

Extract. Method: 3540C Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.32(g) Date Analyzed: 07/20/2012 14:34

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 15.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	58	U	58	32
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	93
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	23
105-67-9	2,4-Dimethylphenol	180	U	180	23
51-28-5	2,4-Dinitrophenol	390	U	390	93
121-14-2	2,4-Dinitrotoluene	230	U	230	32
91-58-7	2-Chloronaphthalene	58	U	58	3.9
95-57-8	2-Chlorophenol	58	U	58	32
91-57-6	2-Methylnaphthalene	7.8	U	7.8	3.9
95-48-7	2-Methylphenol	230	U	230	93
88-74-4	2-Nitroaniline	230	U	230	11
88-75-5	2-Nitrophenol	58	U	58	32
15831-10-4	3 & 4 Methylphenol	470	U	470	23
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	230	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	93
101-55-3	4-Bromophenyl phenyl ether	58	U	58	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	58	U	58	15
100-01-6	4-Nitroaniline	230	U	230	30
83-32-9	Acenaphthene	7.8	U	7.8	3.9
208-96-8	Acenaphthylene	7.8	U	7.8	3.9
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.8	U	7.8	3.9
1912-24-9	Atrazine	230	U	230	11
100-52-7	Benzaldehyde	120	U	120	14
56-55-3	Benzo[a]anthracene	6.0	J	7.8	3.9
50-32-8	Benzo[a]pyrene	4.9	J	7.8	3.9
205-99-2	Benzo[b]fluoranthene	5.6	J	7.8	3.9
191-24-2	Benzo[g,h,i]perylene	7.8	U	7.8	3.9
207-08-9	Benzo[k]fluoranthene	7.8	U	7.8	3.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 | Lab Sample ID: 240-13043-6

Matrix: Solid | Lab File ID: 20720017.D

Analysis Method: 8270D | Date Collected: 07/09/2012 14:30

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.32(g) | Date Analyzed: 07/20/2012 14:34

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	24	J B	58	22
85-68-7	Butyl benzyl phthalate	58	U	58	12
105-60-2	Caprolactam	390	U	390	43
86-74-8	Carbazole	58	U	58	32
218-01-9	Chrysene	7.0	J	7.8	1.3
84-74-2	Di-n-butyl phthalate	58	U	58	18
117-84-0	Di-n-octyl phthalate	58	U	58	32
53-70-3	Dibenzo(a,h)anthracene	7.8	U	7.8	3.9
132-64-9	Dibenzofuran	58	U	58	3.9
84-66-2	Diethyl phthalate	58	U	58	19
131-11-3	Dimethyl phthalate	58	U	58	20
206-44-0	Fluoranthene	14		7.8	3.9
86-73-7	Fluorene	7.8	U	7.8	3.9
118-74-1	Hexachlorobenzene	7.8	U	7.8	2.5
87-68-3	Hexachlorobutadiene	58	U	58	32
77-47-4	Hexachlorocyclopentadiene	390	U	390	32
67-72-1	Hexachloroethane	58	U	58	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.8	U	7.8	3.9
78-59-1	Isophorone	58	U	58	15
621-64-7	N-Nitrosodi-n-propylamine	58	U	58	32
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	58	U	58	25
91-20-3	Naphthalene	7.8	U	7.8	3.9
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	93
85-01-8	Phenanthrene	11		7.8	3.9
108-95-2	Phenol	58	U	58	32
129-00-0	Pyrene	14		7.8	3.9
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	230	U	230	25
100-02-7	4-Nitrophenol	390	U	390	93

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 | Lab Sample ID: 240-13043-6

Matrix: Solid | Lab File ID: 20720017.D

Analysis Method: 8270D | Date Collected: 07/09/2012 14:30

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.32(g) | Date Analyzed: 07/20/2012 14:34

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	85		41-119
4165-62-2	Phenol-d5 (Surr)	90		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	64		24-112
367-12-4	2-Fluorophenol (Surr)	89		26-110
321-60-8	2-Fluorobiphenyl (Surr)	61		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	81		10-118

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 | Lab Sample ID: 240-13043-7

Matrix: Solid | Lab File ID: 20720018.D

Analysis Method: 8270D | Date Collected: 07/09/2012 14:35

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 29.94(g) | Date Analyzed: 07/20/2012 14:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	59	U	59	32
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	94
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	390	U	390	94
121-14-2	2,4-Dinitrotoluene	240	U	240	32
91-58-7	2-Chloronaphthalene	59	U	59	3.9
95-57-8	2-Chlorophenol	59	U	59	32
91-57-6	2-Methylnaphthalene	7.9	U	7.9	3.9
95-48-7	2-Methylphenol	240	U	240	94
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	59	U	59	32
15831-10-4	3 & 4 Methylphenol	470	U	470	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	94
101-55-3	4-Bromophenyl phenyl ether	59	U	59	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	59	U	59	15
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	7.9	U	7.9	3.9
208-96-8	Acenaphthylene	7.9	U	7.9	3.9
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.9	U	7.9	3.9
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U	120	14
56-55-3	Benzo[a]anthracene	9.3		7.9	3.9
50-32-8	Benzo[a]pyrene	8.2		7.9	3.9
205-99-2	Benzo[b]fluoranthene	8.7		7.9	3.9
191-24-2	Benzo[g,h,i]perylene	5.4	J	7.9	3.9
207-08-9	Benzo[k]fluoranthene	7.9	U	7.9	3.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 | Lab Sample ID: 240-13043-7

Matrix: Solid | Lab File ID: 20720018.D

Analysis Method: 8270D | Date Collected: 07/09/2012 14:35

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 29.94(g) | Date Analyzed: 07/20/2012 14:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	59	U	59	22
85-68-7	Butyl benzyl phthalate	59	U	59	12
105-60-2	Caprolactam	390	U	390	44
86-74-8	Carbazole	59	U	59	32
218-01-9	Chrysene	8.4		7.9	1.3
84-74-2	Di-n-butyl phthalate	59	U	59	18
117-84-0	Di-n-octyl phthalate	59	U	59	32
53-70-3	Dibenzo(a,h)anthracene	7.9	U	7.9	3.9
132-64-9	Dibenzofuran	59	U	59	3.9
84-66-2	Diethyl phthalate	59	U	59	19
131-11-3	Dimethyl phthalate	59	U	59	20
206-44-0	Fluoranthene	11		7.9	3.9
86-73-7	Fluorene	7.9	U	7.9	3.9
118-74-1	Hexachlorobenzene	7.9	U	7.9	2.5
87-68-3	Hexachlorobutadiene	59	U	59	32
77-47-4	Hexachlorocyclopentadiene	390	U	390	32
67-72-1	Hexachloroethane	59	U	59	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.9	U	7.9	3.9
78-59-1	Isophorone	59	U	59	15
621-64-7	N-Nitrosodi-n-propylamine	59	U	59	32
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	59	U	59	25
91-20-3	Naphthalene	7.9	U	7.9	3.9
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	94
85-01-8	Phenanthrene	6.9	J	7.9	3.9
108-95-2	Phenol	59	U	59	32
129-00-0	Pyrene	18		7.9	3.9
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	390	U	390	94

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 | Lab Sample ID: 240-13043-7

Matrix: Solid | Lab File ID: 20720018.D

Analysis Method: 8270D | Date Collected: 07/09/2012 14:35

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 29.94(g) | Date Analyzed: 07/20/2012 14:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	93		41-119
4165-62-2	Phenol-d5 (Surr)	89		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	59		24-112
367-12-4	2-Fluorophenol (Surr)	85		26-110
321-60-8	2-Fluorobiphenyl (Surr)	55		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	66		10-118

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 | Lab Sample ID: 240-13043-2

Matrix: Solid | Lab File ID: YF071821.D

Analysis Method: 8015C | Date Collected: 07/09/2012 11:40

Sample wt/vol: 5(g) | Date Analyzed: 07/19/2012 02:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 16.2 | Level: (low/med) Low

Analysis Batch No.: 51212 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	55

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	82		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 Lab Sample ID: 240-13043-3

Matrix: Solid Lab File ID: YF071822.D

Analysis Method: 8015C Date Collected: 07/09/2012 11:45

Sample wt/vol: 5(g) Date Analyzed: 07/19/2012 02:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.2 Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	83		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 Lab Sample ID: 240-13043-4

Matrix: Solid Lab File ID: YF071823.D

Analysis Method: 8015C Date Collected: 07/09/2012 13:40

Sample wt/vol: 5(g) Date Analyzed: 07/19/2012 03:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.7 Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	85		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: YF071824.D

Analysis Method: 8015C | Date Collected: 07/09/2012 13:45

Sample wt/vol: 5(g) | Date Analyzed: 07/19/2012 04:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 17.8 | Level: (low/med) Low

Analysis Batch No.: 51212 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	56

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	79		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 Lab Sample ID: 240-13043-6

Matrix: Solid Lab File ID: YF071825.D

Analysis Method: 8015C Date Collected: 07/09/2012 14:30

Sample wt/vol: 5(g) Date Analyzed: 07/19/2012 04:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 15.2 Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	83		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 Lab Sample ID: 240-13043-7

Matrix: Solid Lab File ID: YF071826.D

Analysis Method: 8015C Date Collected: 07/09/2012 14:35

Sample wt/vol: 5(g) Date Analyzed: 07/19/2012 05:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 15.0 Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	77		10-150

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 Lab Sample ID: 240-13043-2

Matrix: Solid Lab File ID: P6B72005.D

Analysis Method: 8015C Date Collected: 07/09/2012 11:40

Extraction Method: 3540C Date Extracted: 07/17/2012 09:14

Sample wt/vol: 29.96(g) Date Analyzed: 07/20/2012 12:31

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 16.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 51479 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	11	J B	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	34		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 Lab Sample ID: 240-13043-3

Matrix: Solid Lab File ID: P6B72006.D

Analysis Method: 8015C Date Collected: 07/09/2012 11:45

Extraction Method: 3540C Date Extracted: 07/17/2012 09:14

Sample wt/vol: 29.80(g) Date Analyzed: 07/20/2012 13:02

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 14.2 GPC Cleanup:(Y/N) N

Analysis Batch No.: 51479 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	39		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 Lab Sample ID: 240-13043-4

Matrix: Solid Lab File ID: P6B72007.D

Analysis Method: 8015C Date Collected: 07/09/2012 13:40

Extraction Method: 3540C Date Extracted: 07/17/2012 09:14

Sample wt/vol: 29.95(g) Date Analyzed: 07/20/2012 13:34

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 14.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 51479 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	38		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: P6B72008.D

Analysis Method: 8015C | Date Collected: 07/09/2012 13:45

Extraction Method: 3540C | Date Extracted: 07/17/2012 09:14

Sample wt/vol: 29.98(g) | Date Analyzed: 07/20/2012 14:05

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	40		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 | Lab Sample ID: 240-13043-6

Matrix: Solid | Lab File ID: P6B72009.D

Analysis Method: 8015C | Date Collected: 07/09/2012 14:30

Extraction Method: 3540C | Date Extracted: 07/17/2012 09:14

Sample wt/vol: 30.08(g) | Date Analyzed: 07/20/2012 14:36

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51479 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	36		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 Lab Sample ID: 240-13043-7

Matrix: Solid Lab File ID: P6B72010.D

Analysis Method: 8015C Date Collected: 07/09/2012 14:35

Extraction Method: 3540C Date Extracted: 07/17/2012 09:14

Sample wt/vol: 29.86(g) Date Analyzed: 07/20/2012 15:08

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: 15.0 GPC Cleanup:(Y/N) N

Analysis Batch No.: 51479 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	37		10-110

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-0-2 | Lab Sample ID: 240-13043-2

Matrix: Solid | Lab File ID: P1300008.D

Analysis Method: 8082A | Date Collected: 07/09/2012 11:40

Extraction Method: 3540C | Date Extracted: 07/17/2012 08:46

Sample wt/vol: 29.69(g) | Date Analyzed: 07/19/2012 02:46

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 16.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51268 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	40	U	40	25
11104-28-2	Aroclor-1221	40	U	40	19
11141-16-5	Aroclor-1232	40	U	40	17
53469-21-9	Aroclor-1242	40	U	40	16
12672-29-6	Aroclor-1248	40	U	40	20
11097-69-1	Aroclor-1254	40	U	40	20
11096-82-5	Aroclor-1260	40	U	40	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	70		29-151
2051-24-3	Decachlorobiphenyl	100		14-163

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS19-8-10 | Lab Sample ID: 240-13043-3

Matrix: Solid | Lab File ID: P1300009.D

Analysis Method: 8082A | Date Collected: 07/09/2012 11:45

Extraction Method: 3540C | Date Extracted: 07/17/2012 08:46

Sample wt/vol: 29.98(g) | Date Analyzed: 07/19/2012 03:01

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 14.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51268 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	38	U	38	24
11104-28-2	Aroclor-1221	38	U	38	19
11141-16-5	Aroclor-1232	38	U	38	16
53469-21-9	Aroclor-1242	38	U	38	15
12672-29-6	Aroclor-1248	38	U	38	20
11097-69-1	Aroclor-1254	38	U	38	20
11096-82-5	Aroclor-1260	38	U	38	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	81		29-151
2051-24-3	Decachlorobiphenyl	102		14-163

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-0-2 Lab Sample ID: 240-13043-4

Matrix: Solid Lab File ID: P1300008.D

Analysis Method: 8082A Date Collected: 07/09/2012 13:40

Extraction Method: 3540C Date Extracted: 07/17/2012 08:46

Sample wt/vol: 30.01(g) Date Analyzed: 07/19/2012 14:54

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(mL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 14.7 GPC Cleanup:(Y/N) N

Analysis Batch No.: 51369 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	39	U	39	25
11104-28-2	Aroclor-1221	39	U	39	19
11141-16-5	Aroclor-1232	39	U	39	16
53469-21-9	Aroclor-1242	39	U	39	15
12672-29-6	Aroclor-1248	39	U	39	20
11097-69-1	Aroclor-1254	39	U	39	20
11096-82-5	Aroclor-1260	39	U	39	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	90		29-151
2051-24-3	Decachlorobiphenyl	83		14-163

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: P1300009.D

Analysis Method: 8082A | Date Collected: 07/09/2012 13:45

Extraction Method: 3540C | Date Extracted: 07/17/2012 08:46

Sample wt/vol: 29.74(g) | Date Analyzed: 07/19/2012 15:09

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51369 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	41	U	41	26
11104-28-2	Aroclor-1221	41	U	41	20
11141-16-5	Aroclor-1232	41	U	41	17
53469-21-9	Aroclor-1242	41	U	41	16
12672-29-6	Aroclor-1248	41	U	41	21
11097-69-1	Aroclor-1254	41	U	41	21
11096-82-5	Aroclor-1260	41	U	41	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	95		29-151
2051-24-3	Decachlorobipheny1	117		14-163

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-0-2 | Lab Sample ID: 240-13043-6

Matrix: Solid | Lab File ID: P1300010.D

Analysis Method: 8082A | Date Collected: 07/09/2012 14:30

Extraction Method: 3540C | Date Extracted: 07/17/2012 08:46

Sample wt/vol: 29.93(g) | Date Analyzed: 07/19/2012 15:24

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51369 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	39	U	39	25
11104-28-2	Aroclor-1221	39	U	39	19
11141-16-5	Aroclor-1232	39	U	39	17
53469-21-9	Aroclor-1242	39	U	39	15
12672-29-6	Aroclor-1248	39	U	39	20
11097-69-1	Aroclor-1254	39	U	39	20
11096-82-5	Aroclor-1260	39	U	39	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	76		29-151
2051-24-3	Decachlorobiphenyl	116		14-163

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 | Lab Sample ID: 240-13043-7

Matrix: Solid | Lab File ID: P1300013.D

Analysis Method: 8082A | Date Collected: 07/09/2012 14:35

Extraction Method: 3540C | Date Extracted: 07/17/2012 08:46

Sample wt/vol: 30.14(g) | Date Analyzed: 07/19/2012 06:17

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 15.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51268 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	39	U	39	25
11104-28-2	Aroclor-1221	39	U	39	19
11141-16-5	Aroclor-1232	39	U	39	16
53469-21-9	Aroclor-1242	39	U	39	15
12672-29-6	Aroclor-1248	39	U	39	20
11097-69-1	Aroclor-1254	39	U	39	20
11096-82-5	Aroclor-1260	39	U	39	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	55		29-151
2051-24-3	Decachlorobiphenyl	74		14-163

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG 240-13043-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS19-8-10	240-13043-3	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS20-0-2	240-13043-4	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS20-8-10	240-13043-5	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
M	MG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS19-8-10	240-13043-3	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS20-8-10	240-13043-5	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS20-0-2	240-13043-4	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
OS	UG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/17/2012	7/19/2012	8	2	10
OS	UG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/18/2012	7/20/2012	9	2	11
OS	UG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/18/2012	7/20/2012	9	2	11

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/KG	MT-SS20-8-10	240-13043-5	NM	7/9/2012	7/18/2012	7/20/2012	9	2	11
OS	UG/KG	MT-SS20-0-2	240-13043-4	NM	7/9/2012	7/18/2012	7/20/2012	9	2	11
OS	UG/KG	MT-SS19-8-10	240-13043-3	NM	7/9/2012	7/18/2012	7/20/2012	9	2	11
OV	UG/KG	MT-SS19-8-10	240-13043-3	NM	7/10/2012	7/10/2012	7/12/2012	0	2	2
OV	UG/KG	MT-SS21-8-10	240-13043-7	NM	7/10/2012	7/10/2012	7/12/2012	0	2	2
OV	UG/KG	MT-SS21-0-2	240-13043-6	NM	7/10/2012	7/10/2012	7/12/2012	0	2	2
OV	UG/KG	MT-SS20-8-10	240-13043-5	NM	7/10/2012	7/10/2012	7/12/2012	0	2	2
OV	UG/KG	MT-SS20-0-2	240-13043-4	NM	7/10/2012	7/10/2012	7/12/2012	0	2	2
OV	UG/KG	MT-SS19-0-2	240-13043-2	NM	7/10/2012	7/10/2012	7/12/2012	0	2	2
OV	UG/L	TB-070912	240-13043-1	NM	7/9/2012	7/13/2012	7/13/2012	4	0	4
PCB	UG/KG	MT-SS20-8-10	240-13043-5	NM	7/9/2012	7/17/2012	7/19/2012	8	2	10
PCB	UG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/17/2012	7/19/2012	8	2	10
PCB	UG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/17/2012	7/19/2012	8	2	10
PCB	UG/KG	MT-SS19-8-10	240-13043-3	NM	7/9/2012	7/17/2012	7/19/2012	8	2	10
PCB	UG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/17/2012	7/19/2012	8	2	10
PCB	UG/KG	MT-SS20-0-2	240-13043-4	NM	7/9/2012	7/17/2012	7/19/2012	8	2	10
DRO	MG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/17/2012	7/20/2012	8	3	11
DRO	MG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/17/2012	7/20/2012	8	3	11

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
DRO	MG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/17/2012	7/20/2012	8	3	11
DRO	MG/KG	MT-SS20-8-10	240-13043-5	NM	7/9/2012	7/17/2012	7/20/2012	8	3	11
DRO	MG/KG	MT-SS20-0-2	240-13043-4	NM	7/9/2012	7/17/2012	7/20/2012	8	3	11
DRO	MG/KG	MT-SS19-8-10	240-13043-3	NM	7/9/2012	7/17/2012	7/20/2012	8	3	11
GRO	UG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/19/2012	7/19/2012	10	0	10
GRO	UG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/19/2012	7/19/2012	10	0	10
GRO	UG/KG	MT-SS20-8-10	240-13043-5	NM	7/9/2012	7/19/2012	7/19/2012	10	0	10
GRO	UG/KG	MT-SS20-0-2	240-13043-4	NM	7/9/2012	7/19/2012	7/19/2012	10	0	10
GRO	UG/KG	MT-SS19-8-10	240-13043-3	NM	7/9/2012	7/19/2012	7/19/2012	10	0	10
GRO	UG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/19/2012	7/19/2012	10	0	10

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech Inc.	Client Project Manager: Tony Apanavage	Site Contact: Stu Cameron	Lab Contact: Pat O'Meara	COC No:
Address: 20251 Century Blvd.	Telephone: 301 528-3021	Telephone: 703 342-8389	Telephone: 330 497-9396	1 of 1 COCs
City/State/Zip: Germantown, MD 20874	Email:			
Phone: 301 528-3021		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: MSA-MT Soil Boring Sampling	Method of Shipment/Carrier: Fed EX			
Project Number: 112IC04054-04	Shipping/Tracking No:			
PO#				

Analyses

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	MeOH/Tol		VOCs	SVOCs, PCBs	Metals	Gas	VOCs	Sample Specific Notes / Special Instructions:
TB-070912	7-9-12	—		X						2					N	G	X					
MT-SS19-0-2	↓	1140				X							4	3			X	X	X	X	X	
~~MT-SB19-8-10~~ MT-SS19-8-10		1145				X							4	3			X	X	X	X	X	
MT-SS20-0-2		1340				X							4	3			X	X	X	X	X	
~~MT-SB20-8-10~~ MT-SS20-8-10		1345				X							4	3			X	X	X	X	X	
~~MT-SB21-0-2~~ MT-SS21-0-2		1430				X							4	3			X	X	X	X	X	
~~MT-SB21-8-10~~ MT-SS21-8-10		1435				X							4	3			X	X	X	X	X	

AC 11/29/12

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tt nus	7-9-12 / 1515			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TAL	Date/Time: 7/10/12 830

07/26/2012

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TAL-0016 (1008)

TestAmerica North Canton Sample Receipt Form/Narrative Login # : 13043

Client TETRA TECH Site Name _____ By: Terrell Cook
(Signature)

Cooler Received on 7-10-12 Opened on 7-10-12

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam (Plastic Bag) None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF 0°C)	Observed Sample Temp. _____ °C	Corrected Sample Temp. _____ °C	
IR GUN# 4G	(CF –1°C)	Observed Sample Temp. _____ °C	Corrected Sample Temp. _____ °C	☐ Multiple on Back
IR GUN# 5G	(CF –1°C)	Observed Sample Temp. _____ °C	Corrected Sample Temp. _____ °C	
IR GUN# 8	(CF 0°C)	Observed Sample Temp. 1.6 °C	Corrected Sample Temp. 1.6 °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA)
11. Were VOAs on the COC? Yes (No)
12. Were air bubbles >6 mm in any VOA vials? Yes No (NA)
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-13043-1

Login Number: 13043
List Number: 1
Creator: Livengood, Chris

List Source: TestAmerica Canton

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MSA-MT SOIL BORING

Report Number: 240-13043-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 07/10/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.6 C.

The following samples were logged for TPH DRO analysis per client request: MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6), and MT-SS21-8-10 (240-13043-7). This analysis was not originally requested on the chain-of-custody (COC).

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 07/10/2012 and analyzed on 07/12/2012.

Acetone was detected in method blank MB 240-50546/7 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Methylene Chloride and Naphthalene were detected in method blank MB 240-50546/7 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

The laboratory control sample (LCS) for batch 50546 exceeded control limits for the following analyte: Acetone. This compound has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Insufficient sample volume was available to meet method-mandated requirements for matrix spike/matrix spike duplicate (MS/MSD) analyses for batch 50546.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample TB-070912 (240-13043-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/13/2012.

1,2,3-Trichlorobenzene, Naphthalene and tert-Butyl alcohol were detected in method blank MB 240-50786/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

2-Chloroethyl vinyl ether and tert-Butyl alcohol failed the recovery criteria low for the MS/MSD of sample 240-13086-8 in batch 240-50786.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/17/2012 and 07/18/2012 and analyzed on 07/19/2012 and 07/20/2012.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 240-51193/23-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

The continuing calibration verification (CCV) for 1,4-dioxane, associated with batch 51296 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)
Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 07/19/2012.

No difficulties were encountered during the GRO analyses. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for diesel range organics (DRO)in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 07/17/2012 and analyzed on 07/20/2012.

Total Petroleum Hydrocarbons (C10-C32) was detected in method blank MB 240-51014/22-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the DRO analyses. All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)
Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 07/17/2012 and analyzed on 07/19/2012.

The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: MT-SS19-0-2 (240-13043-2) and MT-SS21-8-10 (240-13043-7). Lot # S65830.

No other difficulties were encountered during the PCBs analyses. All quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)
Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for total metals (ICP)in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/12/2012 and analyzed on 07/16/2012.

Antimony, Barium and Beryllium were detected in method blank MB 240-50598/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes failed the recovery criteria low for the MS of sample MT-SS19-0-2 (240-13043-2) in batch 240-51051. Antimony, Chromium, Selenium and Vanadium failed the recovery criteria low for the MSD of sample MT-SS19-0-2 (240-13043-2) in batch 240-51051.

A matrix spike and matrix spike duplicate were performed on sample MT-SS19-0-2 (240-13043-2) instead of a matrix spike and laboratory duplicate.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-13043-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Closed System Purge and Trap	TAL NC		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270D	
Soxhlet Extraction	TAL NC		SW846 3540C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL NC	SW846 8015C	
Purge and Trap	TAL NC		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL NC	SW846 8015C	
Soxhlet Extraction	TAL NC		SW846 3540C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL NC	SW846 8082A	
Soxhlet Extraction	TAL NC		SW846 3540C
Metals (ICP)	TAL NC	SW846 6010C	
Preparation, Metals	TAL NC		SW846 3050B
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	TAL NC	SW846 7471B	
Preparation, Mercury	TAL NC		SW846 7471B
Percent Moisture	TAL NC	EPA Moisture	
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Purge and Trap	TAL NC		SW846 5030B

Lab References:

TAL NC = TestAmerica Canton

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-13043-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-13043-1	TB-070912	Water	07/09/2012 0000	07/10/2012 0830
240-13043-2	MT-SS19-0-2	Solid	07/09/2012 1140	07/10/2012 0830
240-13043-3	MT-SS19-8-10	Solid	07/09/2012 1145	07/10/2012 0830
240-13043-4	MT-SS20-0-2	Solid	07/09/2012 1340	07/10/2012 0830
240-13043-5	MT-SS20-8-10	Solid	07/09/2012 1345	07/10/2012 0830
240-13043-6	MT-SS21-0-2	Solid	07/09/2012 1430	07/10/2012 0830
240-13043-7	MT-SS21-8-10	Solid	07/09/2012 1435	07/10/2012 0830

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-13043-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC VOA		
	U	Indicates the analyte was analyzed for but not detected.
GC Semi VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: BFB4823.D BFB Injection Date: 06/29/2012

Instrument ID: A3UX10 BFB Injection Time: 08:55

Analysis Batch No.: 49387

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.3	(0.4)1
174	50.0 - 120.00 % of mass 95	91.9	
175	5.0 - 9.0 % of mass 174	6.7	(7.3)1
176	95.0 - 101.0 % of mass 174	88.8	(96.6)1
177	5.0 - 9.0 % of mass 176	5.8	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-49387/2	UXX7453.D	06/29/2012	09:19
	STD8260 240-49387/3	UXX7454.D	06/29/2012	09:40
	STD8260 240-49387/4	UXX7455.D	06/29/2012	10:02
	STD8260 240-49387/5	UXX7456.D	06/29/2012	10:23
	STD8260 240-49387/6	UXX7457.D	06/29/2012	10:44
	STD8260 240-49387/7	UXX7458.D	06/29/2012	11:06
	STDA9 240-49387/8	UXX7459.D	06/29/2012	11:27
	STDA9 240-49387/9	UXX7460.D	06/29/2012	11:49
	STDA9 240-49387/10	UXX7461.D	06/29/2012	12:11
	STDA9 240-49387/11	UXX7462.D	06/29/2012	12:33
	STDA9 240-49387/12	UXX7463.D	06/29/2012	12:54
	STDA9 240-49387/13	UXX7464.D	06/29/2012	13:15
	ICV 240-49387/14	UXX7465.D	06/29/2012	13:37

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-49387/7	UXX7458.D
Level 2	STD8260 240-49387/6	UXX7457.D
Level 3	STD8260 240-49387/5	UXX7456.D
Level 4	STD8260 240-49387/4	UXX7455.D
Level 5	STD8260 240-49387/3	UXX7454.D
Level 6	STD8260 240-49387/2	UXX7453.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1764 0.2112	0.1880	0.1735	0.1926	0.1882	Ave		0.1883				7.1		15.0			
Chloromethane	0.2163 0.2431	0.2342	0.2241	0.2363	0.2234	Ave		0.2296			0.1000	4.3		15.0			
Vinyl chloride	0.2069 0.2382	0.2235	0.2129	0.2289	0.2139	Ave		0.2207				5.3		15.0			
Bromomethane	0.1179 0.1402	0.1273	0.1186	0.1283	0.1162	Ave		0.1248				7.3		15.0			
Chloroethane	0.1337 0.1616	0.1486	0.1409	0.1489	0.1417	Ave		0.1459				6.5		15.0			
Trichlorofluoromethane	0.2169 0.2803	0.2422	0.2203	0.2474	0.2402	Ave		0.2412				9.4		15.0			
Acrolein	0.0287 0.0324	0.0297	0.0316	0.0331	0.0332	Ave		~~0.0315~~				6.0		15.0			
1,1-Dichloroethene	0.1921 0.2157	0.1913	0.2008	0.2036	0.2021	Ave		0.2009				4.4		15.0			
Acetone	0.0904 0.0472	0.0716	0.0575	0.0548	0.0503	Lin1	0.0947	0.0472							0.9990		0.9900
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1690 0.1912	0.1578	0.1554	0.1796	0.1627	Ave		0.1693				8.2		15.0			
Iodomethane	0.3173 0.3714	0.3391	0.3413	0.3522	0.3484	Ave		0.3449				5.1		15.0			
Carbon disulfide	0.6202 0.7504	0.6340	0.6576	0.6942	0.6894	Ave		0.6743				7.0		15.0			
Acetonitrile	0.0168 0.0122	0.0156	0.0145	0.0153	0.0144	Ave		0.0148				11.0		15.0			
Methyl acetate	0.1278 0.1338	0.1325	0.1267	0.1301	0.1289	Ave		0.1300				2.1		15.0			
Methylene Chloride	0.4330 0.2600	0.3444	0.2744	0.2542	0.2446	Lin1	0.1748	0.2472							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0128 0.0102	0.0133	0.0125	0.0129	0.0127	Ave		0.0124				9.1		15.0			
Acrylonitrile	0.0670 0.0720	0.0675	0.0678	0.0726	0.0722	Ave		0.0699				3.8		15.0			
Methyl tert-butyl ether	0.5510 0.6431	0.5703	0.5926	0.6172	0.6255	Ave		0.6000				5.8		15.0			
trans-1,2-Dichloroethene	0.2100 0.2480	0.2234	0.2296	0.2332	0.2336	Ave		0.2296				5.5		15.0			
Hexane	0.0477 0.0594	0.0428	0.0499	0.0565	0.0549	Ave		0.0519				12.0		15.0			
1,1-Dichloroethane	0.3351 0.3959	0.3604	0.3698	0.3739	0.3813	Ave		0.3694			0.1000	5.6		15.0			
Vinyl acetate	0.0305 0.0481	0.0337	0.0400	0.0437	0.0462	Linl	-0.024	0.0477							0.9990		0.9900
2-Butanone	0.0721 0.0722	0.0721	0.0700	0.0737	0.0743	Ave		0.0724				2.1		15.0			
cis-1,2-Dichloroethene	0.2360 0.2592	0.2289	0.2387	0.2441	0.2477	Ave		0.2424				4.3		15.0			
2,2-Dichloropropane	0.2119 0.2528	0.2180	0.2376	0.2427	0.2428	Ave		0.2343				6.8		15.0			
Bromochloromethane	0.1064 0.1250	0.1124	0.1163	0.1181	0.1191	Ave		0.1162				5.4		15.0			
~~Tetrahydrofuran~~	0.0510 0.0490	0.0476	0.0474	0.0496	0.0485	Ave		~~0.0489~~				2.8		15.0			
Chloroform	0.3646 0.4025	0.3600	0.3770	0.3804	0.3813	Ave		0.3776				4.0		15.0			
1,1,1-Trichloroethane	0.2751 0.3290	0.2877	0.2959	0.3080	0.3069	Ave		0.3004				6.2		15.0			
Cyclohexane	0.3258 0.4131	0.3126	0.3432	0.3802	0.3755	Ave		0.3584				11.0		15.0			
1,1-Dichloropropene	0.2705 0.3220	0.2724	0.2837	0.3006	0.3029	Ave		0.2920				6.9		15.0			
Carbon tetrachloride	0.2254 0.2919	0.2343	0.2492	0.2640	0.2732	Ave		0.2563				9.7		15.0			
1,2-Dichloroethane	0.2627 0.2909	0.2728	0.2692	0.2756	0.2775	Ave		0.2748				3.5		15.0			
Benzene	0.8227 0.9779	0.8539	0.8838	0.8982	0.9135	Ave		0.8916				6.0		15.0			
Trichloroethene	0.2327 0.2582	0.2331	0.2378	0.2427	0.2428	Ave		0.2412				3.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.3257 0.4139	0.3056	0.3422	0.3769	0.3799	Ave		0.3574				11.0		15.0			
1,2-Dichloropropane	0.1827 0.2229	0.1907	0.1972	0.2035	0.2099	Ave		0.2012				7.1		15.0			
Dibromomethane	0.1089 0.1263	0.1147	0.1149	0.1186	0.1210	Ave		0.1174				5.1		15.0			
~~1,4-Dioxane~~	0.0009 0.0008	0.0012	0.0012	0.0013	0.0011	Qua	-0.031	~~0.0015~~	0						1.0000		0.9900
Bromodichloromethane	0.2182 0.2820	0.2284	0.2417	0.2525	0.2579	Ave		0.2468				9.2		15.0			
2-Chloroethyl vinyl ether	0.0858 0.1279	0.0963	0.1096	0.1193	0.1233	Ave		0.1104				15.0		15.0			
cis-1,3-Dichloropropene	0.2544 0.3565	0.2666	0.2952	0.3099	0.3258	Ave		0.3014				13.0		15.0			
4-Methyl-2-pentanone	0.1269 0.1547	0.1389	0.1449	0.1537	0.1549	Ave		0.1457				7.7		15.0			
Toluene	1.1955 1.4453	1.2830	1.3193	1.3738	1.3876	Ave		1.3341				6.6		15.0			
trans-1,3-Dichloropropene	0.3048 0.4278	0.3184	0.3545	0.3847	0.4019	Ave		0.3654				13.0		15.0			
Ethyl methacrylate	0.2605 0.3798	0.2813	0.3114	0.3466	0.3613	Ave		0.3235				15.0		15.0			
1,1,2-Trichloroethane	0.2285 0.2546	0.2319	0.2431	0.2513	0.2523	Ave		0.2436				4.6		15.0			
1,3-Dichloropropane	0.4178 0.4724	0.4278	0.4459	0.4632	0.4639	Ave		0.4485				4.9		15.0			
Tetrachloroethene	0.2759 0.2947	0.2692	0.2762	0.2882	0.2890	Ave		0.2822				3.5		15.0			
2-Hexanone	0.1121 0.1391	0.1204	0.1258	0.1397	0.1398	Ave		0.1295				9.1		15.0			
Dibromochloromethane	0.1969 0.2894	0.2262	0.2451	0.2608	0.2724	Ave		0.2485				13.0		15.0			
1,2-Dibromoethane	0.2194 0.2561	0.2317	0.2387	0.2476	0.2531	Ave		0.2411				5.8		15.0			
Chlorobenzene	0.8188 0.9103	0.8528	0.8703	0.8799	0.8806	Ave		0.8688			0.3000	3.5		15.0			
1,1,1,2-Tetrachloroethane	0.2467 0.3016	0.2590	0.2778	0.2853	0.2907	Ave		0.2769				7.4		15.0			
Ethylbenzene	0.4056 0.4894	0.4220	0.4500	0.4699	0.4798	Ave		0.4528				7.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.4877 0.6194	0.5341	0.5709	0.5951	0.5936	Ave		0.5668				8.5		15.0			
o-Xylene	0.4823 0.5691	0.5095	0.5393	0.5551	0.5538	Ave		0.5349				6.1		15.0			
Styrene	0.7289 0.9793	0.7914	0.8695	0.9208	0.9312	Ave		0.8702				11.0		15.0			
Bromoform	0.1194 0.1650	0.1283	0.1410	0.1519	0.1547	Ave		0.1434			0.1000	12.0		15.0			
Isopropylbenzene	1.1340 1.4228	1.2305	1.3443	1.3820	1.3600	Ave		1.3123				8.3		15.0			
1,1,2,2-Tetrachloroethane	0.5529 0.5626	0.5697	0.5464	0.5777	0.5744	Ave		0.5639			0.3000	2.2		15.0			
Bromobenzene	0.6600 0.7530	0.6735	0.6808	0.7251	0.7306	Ave		0.7038				5.3		15.0			
1,2,3-Trichloropropane	0.1923 0.1937	0.1946	0.1861	0.1999	0.1968	Ave		0.1939				2.4		15.0			
trans-1,4-Dichloro-2-butene	0.1051 0.1580	0.1201	0.1264	0.1399	0.1502	Ave		0.1333				15.0		15.0			
n-Propylbenzene	0.6259 0.7932	0.6577	0.7144	0.7503	0.7668	Ave		0.7180				9.1		15.0			
2-Chlorotoluene	0.5824 0.6736	0.6170	0.6392	0.6502	0.6538	Ave		0.6360				5.1		15.0			
1,3,5-Trimethylbenzene	1.7132 2.2163	1.8883	2.0634	2.1516	2.1526	Ave		2.0309				9.5		15.0			
4-Chlorotoluene	0.6177 0.7161	0.6277	0.6666	0.7020	0.6912	Ave		0.6702				6.0		15.0			
tert-Butylbenzene	1.7416 1.9474	1.6792	1.9900	1.9065	2.0793	Ave		1.8907				8.1		15.0			
1,2,4-Trimethylbenzene	1.7367 2.1693	1.8899	2.0546	2.1353	2.1296	Ave		2.0192				8.5		15.0			
sec-Butylbenzene	1.9768 2.4455	2.1467	2.3084	2.4014	2.4009	Ave		2.2800				8.0		15.0			
1,3-Dichlorobenzene	1.1955 1.2503	1.2130	1.2211	1.2271	1.2375	Ave		1.2241				1.6		15.0			
p-Isopropyltoluene	1.6347 2.0620	1.7750	1.9736	2.0397	2.0444	Ave		1.9216				9.2		15.0			
1,4-Dichlorobenzene	1.2780 1.2982	1.2746	1.2595	1.3001	1.2780	Ave		1.2814				1.2		15.0			
n-Butylbenzene	1.2983 1.5749	1.3527	1.4847	1.5457	1.5746	Ave		1.4718				8.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.0625 1.0823	1.1166	1.1363	1.1318	1.1130	Ave		1.1071				2.6		15.0			
1,2-Dibromo-3-Chloropropane	0.0656 0.0696	0.0777	0.0779	0.0864	0.0808	Ave		0.0763				9.9		15.0			
1,3,5-Trichlorobenzene	0.6748 0.6382	0.7060	0.7388	0.7150	0.6894	Ave		0.6937				5.0		15.0			
1,2,4-Trichlorobenzene	0.5786 0.5163	0.6069	0.6245	0.6111	0.5736	Ave		0.5852				6.7		15.0			
Hexachlorobutadiene	0.2844 0.1865	0.2717	0.2648	0.2522	0.2206	Ave		0.2467				15.0		15.0			
Naphthalene	1.1070 0.9869	1.2788	1.3351	1.3947	1.2569	Ave		1.2266				12.0		15.0			
1,2,3-Trichlorobenzene	0.5181 0.3557	0.5752	0.5628	0.5396	0.4516	Qua	0.0757	0.5610	-0.005						0.9990		0.9900
Dibromofluoromethane (Surr)	0.1734 0.2067	0.1830	0.1957	0.1990	0.1996	Ave		0.1929				6.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2082 0.2482	0.2333	0.2300	0.2372	0.2403	Ave		0.2329				5.8		15.0			
Toluene-d8 (Surr)	0.9400 1.1991	1.0675	1.1059	1.1558	1.1910	Ave		1.1099				8.8		15.0			
4-Bromofluorobenzene (Surr)	0.3321 0.3816	0.3683	0.3778	0.3839	0.3769	Ave		0.3701				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 11:27 Calibration End Date: 06/29/2012 13:15 Calibration ID: 9790

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-49387/13	UXX7464.D
Level 2	STDA9 240-49387/12	UXX7463.D
Level 3	STDA9 240-49387/11	UXX7462.D
Level 4	STDA9 240-49387/10	UXX7461.D
Level 5	STDA9 240-49387/9	UXX7460.D
Level 6	STDA9 240-49387/8	UXX7459.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.3466 0.3284	0.3045	0.3419	0.3002	0.3538	Ave		0.3292				6.8		15.0			
Ethyl ether	0.1485 0.1669	0.1579	0.1577	0.1622	0.1655	Ave		0.1598				4.2		15.0			
3-Chloro-1-propene	0.0962 0.1231	0.1058	0.1080	0.1101	0.1166	Ave		0.1100				8.4		15.0			
Diisopropyl ether	0.1714 0.2161	0.1821	0.1892	0.1944	0.2076	Ave		0.1935				8.5		15.0			
2-Chloro-1,3-butadiene	0.2684 0.3302	0.2967	0.2954	0.3010	0.3188	Ave		0.3017				7.1		15.0			
Ethyl-t-butyl ether (ETBE)	0.5128 0.6231	0.5476	0.5532	0.5689	0.6041	Ave		0.5683				7.1		15.0			
~~Propionitrile~~	0.0185 0.0221	0.0196	0.0218	0.0231	0.0242	Ave		~~0.0216~~				10.0		15.0			
Ethyl acetate	0.1391 0.1512	0.1331	0.1418	0.1453	0.1517	Ave		0.1437				5.0		15.0			
Methacrylonitrile	0.0927 0.1008	0.0980	0.0992	0.0945	0.1030	Ave		0.0980				3.9		15.0			
~~Isobutyl alcohol~~	0.0058 0.0062	0.0067	0.0067	0.0070	0.0072	Ave		~~0.0066~~				7.9		15.0			
Tert-amyl-methyl ether (TAME)	0.4532 0.5890	0.4893	0.5109	0.5279	0.5744	Ave		0.5241				9.8		15.0			
~~n-Heptane~~	0.0420 0.0475	0.0462	0.0438	0.0454	0.0457	Ave		~~0.0451~~				4.3		15.0			
~~n-Butanol~~	0.0037 0.0050	0.0050	0.0055	0.0057	0.0064	Qua	-0.136	~~0.0077~~	0						0.9970		0.9900
Methyl methacrylate	0.1087 0.1446	0.1222	0.1302	0.1310	0.1429	Ave		0.1299				10.0		15.0			
~~2-Nitropropane~~	0.0224 0.0351	0.0245	0.0269	0.0287	0.0342	Lin1	-0.038	~~0.0345~~							0.9950		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 11:27 Calibration End Date: 06/29/2012 13:15 Calibration ID: 9790

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
~~Cyclohexanone~~	0.0254 0.0253	0.0359	0.0297	0.0316	0.0400	Ave		~~0.0313~~				19.0	*	15.0			
1,2,3-Trimethylbenzene	1.6277 2.1722	1.7671	1.8576	2.0150	2.1222	Ave		1.9270				11.0		15.0			
2-Methylnaphthalene	0.4757 +++++	0.4892	0.5242	0.5059	0.5320	Ave		0.5054				4.6		15.0			
n-Butyl acetate	0.1024 0.1609	0.1160	0.1336	0.1420	0.1546	Lin1	-0.156	0.1592							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-49387/7	UXX7458.D
Level 2	STD8260 240-49387/6	UXX7457.D
Level 3	STD8260 240-49387/5	UXX7456.D
Level 4	STD8260 240-49387/4	UXX7455.D
Level 5	STD8260 240-49387/3	UXX7454.D
Level 6	STD8260 240-49387/2	UXX7453.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	25912 1183836	55123	129755	286885	563320	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	31776 1362477	68683	167638	352072	668977	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	30398 1335390	65544	159256	340925	640524	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	17320 785784	37333	88701	191176	348009	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	19640 905629	43568	105393	221739	424132	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	31866 1571032	71026	164771	368608	719215	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	42162 1815359	86994	236704	492770	995155	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	28223 1208844	56101	150185	303223	605024	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Lin1	26549 528967	42007	85947	163150	301273	2.00 80.0	4.00	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	24832 1071783	46290	116254	267511	487126	1.00 40.0	2.00	5.00	10.0	20.0
Iodomethane	FB	Ave	46622 2081738	99443	255268	524608	1042992	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	91124 4206373	185944	491831	1034050	2063946	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Ave	24695 681101	45634	108253	227665	432068	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	37555 1499535	77728	189604	387486	772006	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	63622 1457126	101013	205231	378616	732465	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	37594 1141323	78233	187209	385546	759678	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	19696 806738	39589	101460	216321	432560	2.00 80.0	4.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	80951 3604908	167258	443259	919412	1872767	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	30848 1390019	65527	171721	347361	699514	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	7013 332836	12546	37348	84139	164496	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	49236 2219116	105697	276582	556934	1141458	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Lin1	4484 269391	9895	29895	65113	138319	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	21184 809776	42268	104655	219541	444851	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	34680 1453002	67143	178518	363559	741585	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	31138 1416836	63936	177750	361492	726966	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	15636 700785	32951	86968	175922	356661	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	7500 274759	13952	35450	73934	145198	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	53562 2256209	105586	282008	566620	1141553	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	40424 1843923	84386	221360	458737	918702	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	47864 2315620	91686	256683	566296	1124255	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	39747 1804720	79888	212211	447737	906867	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	33118 1636446	68720	186381	393339	817813	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	38596 1630793	80002	201357	410573	830821	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	120869 5481335	250412	661028	1338057	2734867	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	34187 1447083	68348	177837	361502	727076	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	47848 2320118	89612	255959	561458	1137534	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	26841 1249390	55935	147537	303127	628459	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	15993 708125	33633	85978	176652	362362	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	6345 226980	18268	44802	93988	167996	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	32054 1580658	66971	180818	376136	772032	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	25203 1433330	56510	163998	355478	738129	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	37374 1998565	78182	220815	461609	975306	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	37294 1734720	81475	216718	457792	927421	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	124566 5908101	267657	707154	1447917	2945672	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	31753 1748719	66433	190013	405501	853194	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	27141 1552504	58679	166902	365331	767008	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	23806 1040685	48368	130332	264842	535608	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	43534 1931181	89236	239027	488224	984822	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	28752 1204698	56155	148031	303721	613617	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	23362 1137589	50242	134855	294478	593451	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	20515 1182882	47195	131354	274867	578338	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	22855 1047073	48329	127948	260988	537256	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	85310 3721304	177905	466481	927347	1869434	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	25703 1233014	54040	148885	300639	617224	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	42264 2000457	88037	241220	495214	1018488	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	101620 5064193	222846	612045	1254396	2520224	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	50257 2326513	106281	289074	585024	1175695	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	75942 4003209	165094	466080	970515	1976855	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Ave	12445 674592	26763	75577	160084	328462	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	118156 5816176	256706	720578	1456570	2887150	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	28455 1092127	60402	151127	302916	582546	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	33965 1461635	71408	188306	380244	740976	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	9899 375896	20628	51474	104800	199638	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	5410 306704	12732	34962	73379	152299	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	32211 1539634	69738	197583	393422	777670	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	29971 1307508	65417	176794	340956	663092	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	88171 4302132	200209	570713	1128262	2183175	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	31792 1389936	66558	184374	368124	701033	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	89634 3780128	178043	550411	999730	2108826	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	89380 4210841	200386	568276	1119714	2159891	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	101739 4746976	227613	638492	1259240	2435052	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	61529 2426868	128611	337736	643450	1255112	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	84133 4002493	188203	545867	1069584	2073458	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	65775 2519916	135141	348357	681732	1296172	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	66819 3057030	143426	410648	810518	1597024	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	54680 2100801	118395	314293	593514	1128783	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	3376 135103	8234	21535	45289	81992	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	34728 1238735	74852	204336	374908	699152	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	29780 1002216	64346	172718	320436	581707	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 09:19 Calibration End Date: 06/29/2012 11:06 Calibration ID: 9788

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	14636 362110	28812	73241	132224	223760	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	56973 1915622	135591	369289	731376	1274780	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Qua	26665 690507	60991	155661	282971	458047	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	25474 1158518	53658	146374	296464	597593	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	30595 1391272	68416	172058	353306	719594	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	97947 4901813	222688	592765	1218131	2528330	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	34603 1559861	76841	202496	404625	800201	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 11:27 Calibration End Date: 06/29/2012 13:15 Calibration ID: 9790

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-49387/13	UXX7464.D
Level 2	STDA9 240-49387/12	UXX7463.D
Level 3	STDA9 240-49387/11	UXX7462.D
Level 4	STDA9 240-49387/10	UXX7461.D
Level 5	STDA9 240-49387/9	UXX7460.D
Level 6	STDA9 240-49387/8	UXX7459.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	49941 1979679	87701	254301	446343	1040148	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	21401 1005948	45473	117252	241105	486511	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	13857 741711	30477	80338	163714	342804	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	123525 6514036	262303	703412	1445014	3052013	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	38679 1990519	85463	219652	447468	937476	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	73895 3755974	157729	411379	845875	1776347	1.00 40.0	2.00	5.00	10.0	20.0
Propionitrile	FB	Ave	5334 266273	11286	32450	68805	142514	2.00 80.0	4.00	10.0	20.0	40.0
Ethyl acetate	FB	Ave	40102 1823068	76653	210910	431922	892056	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	13355 607420	28229	73750	140496	302837	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Ave	11941 508890	26284	70473	140035	303403	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	65309 3550156	140926	379974	784848	1689048	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	6048 286344	13313	32600	67554	134252	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBZ	Qua	7657 417205	19639	57091	114493	268140	20.0 800	40.0	100	200	400
Methyl methacrylate	FB	Ave	15665 871328	35188	96792	194832	420265	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Lin1	6464 422652	14118	40016	85335	200991	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	12548 492884	32458	74127	142793	397291	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49387

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 11:27 Calibration End Date: 06/29/2012 13:15 Calibration ID: 9790

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	80442 4231206	159601	463864	911834	2110393	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Ave	47020 +++++	88363	261810	457886	1058036	2.00 +++++	4.00	10.0	20.0	40.0
n-Butyl acetate	CBZ	Lin1	20941 1329797	45283	139744	283262	648686	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-49387/14 Calibration Date: 06/29/2012 13:37

Instrument ID: A3UX10 Calib Start Date: 06/29/2012 09:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/29/2012 11:06

Lab File ID: UXX7465.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1883	0.1748		9.28	10.0	-7.2	50.0
Chloromethane	Ave	0.2296	0.2342	0.1000	10.2	10.0	2.0	50.0
Vinyl chloride	Ave	0.2207	0.2152		9.75	10.0	-2.5	20.0
Bromomethane	Ave	0.1248	0.1146		9.18	10.0	-8.2	50.0
Chloroethane	Ave	0.1459	0.1383		9.48	10.0	-5.2	50.0
Trichlorofluoromethane	Ave	0.2412	0.2496		10.3	10.0	3.5	50.0
1,1-Dichloroethene	Ave	0.2009	0.2130		10.6	10.0	6.0	20.0
Acetone	Lin1		0.0494		18.9	20.0	-5.5	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1693	0.1751		10.3	10.0	3.4	50.0
Iodomethane	Ave	0.3449	0.3538		10.3	10.0	2.6	50.0
Carbon disulfide	Ave	0.6743	0.6665		9.88	10.0	-1.2	50.0
Methyl acetate	Ave	0.1300	0.1486		11.4	10.0	14.4	50.0
Methylene Chloride	Lin1		0.2615		9.87	10.0	-1.3	50.0
tert-Butyl alcohol	Ave	0.0124	0.0121		194	200	-2.9	50.0
Methyl tert-butyl ether	Ave	0.6000	0.6172		10.3	10.0	2.9	50.0
trans-1,2-Dichloroethene	Ave	0.2296	0.2389		10.4	10.0	4.0	50.0
Hexane	Ave	0.0519	0.0565		10.9	10.0	8.8	20.0
1,1-Dichloroethane	Ave	0.3694	0.3966	0.1000	10.7	10.0	7.4	50.0
Vinyl acetate	Lin1		0.0389		8.64	10.0	-13.6	50.0
2-Butanone	Ave	0.0724	0.0701		19.4	20.0	-3.1	50.0
cis-1,2-Dichloroethene	Ave	0.2424	0.2499		10.3	10.0	3.1	50.0
2,2-Dichloropropane	Ave	0.2343	0.2433		10.4	10.0	3.8	50.0
Bromochloromethane	Ave	0.1162	0.1180		10.2	10.0	1.5	50.0
Tetrahydrofuran	Ave	0.0489	0.0483		9.89	10.0	-1.1	50.0
Chloroform	Ave	0.3776	0.3783		10.0	10.0	0.2	20.0
1,1,1-Trichloroethane	Ave	0.3004	0.3050		10.2	10.0	1.5	50.0
Cyclohexane	Ave	0.3584	0.3534		9.86	10.0	-1.4	50.0
1,1-Dichloropropene	Ave	0.2920	0.3026		10.4	10.0	3.6	50.0
Carbon tetrachloride	Ave	0.2563	0.2680		10.5	10.0	4.6	50.0
1,2-Dichloroethane	Ave	0.2748	0.2856		10.4	10.0	3.9	50.0
Benzene	Ave	0.8916	0.9311		10.4	10.0	4.4	50.0
Trichloroethene	Ave	0.2412	0.2455		10.2	10.0	1.8	50.0
Methylcyclohexane	Ave	0.3574	0.3577		10.0	10.0	0.1	50.0
1,2-Dichloropropane	Ave	0.2012	0.2125		10.6	10.0	5.6	20.0
Dibromomethane	Ave	0.1174	0.1247		10.6	10.0	6.2	50.0
Bromodichloromethane	Ave	0.2468	0.2614		10.6	10.0	5.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1104	0.1101		9.97	10.0	-0.3	50.0
cis-1,3-Dichloropropene	Ave	0.3014	0.2988		9.91	10.0	-0.9	50.0
4-Methyl-2-pentanone	Ave	0.1457	0.1501		20.6	20.0	3.1	50.0
Toluene	Ave	1.334	1.387		10.4	10.0	4.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-49387/14 Calibration Date: 06/29/2012 13:37

Instrument ID: A3UX10 Calib Start Date: 06/29/2012 09:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/29/2012 11:06

Lab File ID: UXX7465.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
trans-1,3-Dichloropropene	Ave	0.3654	0.3836		10.5	10.0	5.0	50.0
1,1,2-Trichloroethane	Ave	0.2436	0.2635		10.8	10.0	8.1	50.0
1,3-Dichloropropane	Ave	0.4485	0.4685		10.4	10.0	4.5	50.0
Tetrachloroethene	Ave	0.2822	0.2912		10.3	10.0	3.2	50.0
2-Hexanone	Ave	0.1295	0.1350		20.9	20.0	4.3	50.0
Dibromochloromethane	Ave	0.2485	0.2619		10.5	10.0	5.4	50.0
1,2-Dibromoethane	Ave	0.2411	0.2506		10.4	10.0	4.0	50.0
Chlorobenzene	Ave	0.8688	0.8936	0.3000	10.3	10.0	2.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2769	0.2941		10.6	10.0	6.2	50.0
Ethylbenzene	Ave	0.4528	0.4731		10.4	10.0	4.5	20.0
m-Xylene & p-Xylene	Ave	0.5668	0.6022		21.2	20.0	6.2	50.0
o-Xylene	Ave	0.5349	0.5662		10.6	10.0	5.9	50.0
Styrene	Ave	0.8702	0.9365		10.8	10.0	7.6	50.0
Bromoform	Ave	0.1434	0.1470	0.1000	10.3	10.0	2.5	50.0
Isopropylbenzene	Ave	1.312	1.383		10.5	10.0	5.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5639	0.5441	0.3000	9.65	10.0	-3.5	50.0
Bromobenzene	Ave	0.7038	0.7057		10.0	10.0	0.3	50.0
1,2,3-Trichloropropane	Ave	0.1939	0.1942		10.0	10.0	0.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1333	0.1342		20.1	20.0	0.7	50.0
n-Propylbenzene	Ave	0.7180	0.7632		10.6	10.0	6.3	50.0
2-Chlorotoluene	Ave	0.6360	0.6416		10.1	10.0	0.9	50.0
1,3,5-Trimethylbenzene	Ave	2.031	2.091		10.3	10.0	3.0	50.0
4-Chlorotoluene	Ave	0.6702	0.6782		10.1	10.0	1.2	50.0
tert-Butylbenzene	Ave	1.891	2.016		10.7	10.0	6.6	50.0
1,2,4-Trimethylbenzene	Ave	2.019	2.092		10.4	10.0	3.6	50.0
sec-Butylbenzene	Ave	2.280	2.320		10.2	10.0	1.8	50.0
1,3-Dichlorobenzene	Ave	1.224	1.214		9.92	10.0	-0.8	50.0
p-Isopropyltoluene	Ave	1.922	2.074		10.8	10.0	7.9	50.0
1,4-Dichlorobenzene	Ave	1.281	1.248		9.74	10.0	-2.6	50.0
n-Butylbenzene	Ave	1.472	1.516		10.3	10.0	3.0	50.0
1,2-Dichlorobenzene	Ave	1.107	1.089		9.84	10.0	-1.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0763	0.0707		9.26	10.0	-7.4	50.0
1,2,4-Trichlorobenzene	Ave	0.5852	0.4892		8.36	10.0	-16.4	50.0
Hexachlorobutadiene	Ave	0.2467	0.1951		7.91	10.0	-20.9	50.0
Naphthalene	Ave	1.227	0.9189		7.49	10.0	-25.1	50.0
1,2,3-Trichlorobenzene	Qua		0.3820		7.15	10.0	-28.5	50.0
Dibromofluoromethane (Surr)	Ave	0.1929	0.1888		11.8	12.0	-2.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2329	0.2306		11.9	12.0	-1.0	50.0
Toluene-d8 (Surr)	Ave	1.110	1.133		12.3	12.0	2.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3701	0.3759		12.2	12.0	1.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-49387/14 Calibration Date: 06/29/2012 13:37

Instrument ID: A3UX10 Calib Start Date: 06/29/2012 11:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/29/2012 13:15

Lab File ID: UXX7465.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.1598	0.1748		10.9	10.0	9.4	50.0
Diisopropyl ether	Ave	0.1935	0.2059		10.6	10.0	6.4	50.0
Isobutyl alcohol	Ave	0.0066	0.0067		505	500	1.1	50.0
Cyclohexanone	Ave	0.0313	0.0074		46.9	200	-76.5*	50.0
1,2,3-Trimethylbenzene	Ave	1.927	2.017		10.5	10.0	4.7	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: BFB4840.D BFB Injection Date: 07/13/2012

Instrument ID: A3UX10 BFB Injection Time: 14:08

Analysis Batch No.: 50786

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.1	
75	30.0 - 60.0 % of mass 95	44.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	90.8	
175	5.0 - 9.0 % of mass 174	6.6	(7.3)1
176	95.0 - 101.0 % of mass 174	87.4	(96.2)1
177	5.0 - 9.0 % of mass 176	5.3	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-50786/2	UXX7799.D	07/13/2012	14:45
	CCV 240-50786/3	UXX7800.D	07/13/2012	15:07
	LCS 240-50786/4	UXX7801.D	07/13/2012	15:28
	MB 240-50786/5	UXX7802.D	07/13/2012	15:49
	240-13086-E-8 MS	UXX7811.D	07/13/2012	19:14
	240-13086-D-8 MSD	UXX7812.D	07/13/2012	19:35
TB-070912	240-13043-1	UXX7821.D	07/13/2012	22:46

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCVIS 240-50786/2 Calibration Date: 07/13/2012 14:45

Instrument ID: A3UX10 Calib Start Date: 06/29/2012 09:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/29/2012 11:06

Lab File ID: UXX7799.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1883	0.1909		10.1	10.0	1.4	50.0
Chloromethane	Ave	0.2296	0.2272	0.1000	9.90	10.0	-1.0	50.0
Vinyl chloride	Ave	0.2207	0.2268		10.3	10.0	2.8	20.0
Bromomethane	Ave	0.1248	0.1321		10.6	10.0	5.9	50.0
Chloroethane	Ave	0.1459	0.1514		10.4	10.0	3.8	50.0
Trichlorofluoromethane	Ave	0.2412	0.2637		10.9	10.0	9.3	50.0
~~Acrolein~~	Ave	0.0315	~~0.0152~~		48.2	100	~~-51.8~~	50.0
1,1-Dichloroethene	Ave	0.2009	0.1860		9.26	10.0	-7.4	20.0
Acetone	Lin1		0.0427		16.1	20.0	-19.5	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1693	0.1593		9.41	10.0	-5.9	50.0
Iodomethane	Ave	0.3449	0.3299		9.56	10.0	-4.4	50.0
Carbon disulfide	Ave	0.6743	0.6458		9.58	10.0	-4.2	50.0
~~Acetonitrile~~	Ave	0.0148	~~0.0112~~		75.9	100	~~-24.1~~	50.0
Methyl acetate	Ave	0.1300	0.1403		21.6	20.0	8.0	50.0
Methylene Chloride	Lin1		0.2360		8.84	10.0	-11.6	50.0
tert-Butyl alcohol	Ave	0.0124	0.0084		136	200	-32.1	50.0
Acrylonitrile	Ave	0.0699	0.0697		19.9	20.0	-0.3	50.0
Methyl tert-butyl ether	Ave	0.6000	0.5669		9.45	10.0	-5.5	50.0
trans-1,2-Dichloroethene	Ave	0.2296	0.2267		9.87	10.0	-1.3	50.0
Hexane	Ave	0.0519	0.0509		9.82	10.0	-1.8	20.0
1,1-Dichloroethane	Ave	0.3694	0.3592	0.1000	9.72	10.0	-2.8	50.0
Vinyl acetate	Lin1		0.0298		6.75	10.0	-32.5	50.0
2-Butanone	Ave	0.0724	0.0703		19.4	20.0	-2.8	50.0
cis-1,2-Dichloroethene	Ave	0.2424	0.2316		9.55	10.0	-4.5	50.0
2,2-Dichloropropane	Ave	0.2343	0.2396		10.2	10.0	2.2	50.0
Bromochloromethane	Ave	0.1162	0.1128		9.70	10.0	-3.0	50.0
Tetrahydrofuran	Ave	0.0489	0.0513		10.5	10.0	5.0	50.0
Chloroform	Ave	0.3776	0.3617		9.58	10.0	-4.2	20.0
1,1,1-Trichloroethane	Ave	0.3004	0.3018		10.0	10.0	0.5	50.0
Cyclohexane	Ave	0.3584	0.3505		9.78	10.0	-2.2	50.0
1,1-Dichloropropene	Ave	0.2920	0.2834		9.71	10.0	-2.9	50.0
Carbon tetrachloride	Ave	0.2563	0.2749		10.7	10.0	7.2	50.0
1,2-Dichloroethane	Ave	0.2748	0.2575		9.37	10.0	-6.3	50.0
Benzene	Ave	0.8916	0.8677		9.73	10.0	-2.7	50.0
Trichloroethene	Ave	0.2412	0.2362		9.79	10.0	-2.1	50.0
1,2-Dichloropropane	Ave	0.2012	0.1999		9.94	10.0	-0.6	20.0
Methylcyclohexane	Ave	0.3574	0.3500		9.79	10.0	-2.1	50.0
~~1,4-Dioxane~~	Qua		~~0.0008~~		319	500	~~-36.1~~	50.0
Dibromomethane	Ave	0.1174	0.1142		9.72	10.0	-2.8	50.0
Bromodichloromethane	Ave	0.2468	0.2510		10.2	10.0	1.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCVIS 240-50786/2 Calibration Date: 07/13/2012 14:45

Instrument ID: A3UX10 Calib Start Date: 06/29/2012 09:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/29/2012 11:06

Lab File ID: UXX7799.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1104	0.1092		19.8	20.0	-1.1	50.0
cis-1,3-Dichloropropene	Ave	0.3014	0.3013		10.0	10.0	-0.0	50.0
4-Methyl-2-pentanone	Ave	0.1457	0.1381		19.0	20.0	-5.2	50.0
Toluene	Ave	1.334	1.348		10.1	10.0	1.1	20.0
trans-1,3-Dichloropropene	Ave	0.3654	0.3705		10.1	10.0	1.4	50.0
Ethyl methacrylate	Ave	0.3235	0.3101		9.59	10.0	-4.1	50.0
1,1,2-Trichloroethane	Ave	0.2436	0.2438		10.0	10.0	0.0	50.0
1,3-Dichloropropane	Ave	0.4485	0.4285		9.55	10.0	-4.5	50.0
Tetrachloroethene	Ave	0.2822	0.2852		10.1	10.0	1.1	50.0
2-Hexanone	Ave	0.1295	0.1243		19.2	20.0	-4.0	50.0
Dibromochloromethane	Ave	0.2485	0.2644		10.6	10.0	6.4	50.0
1,2-Dibromoethane	Ave	0.2411	0.2330		9.66	10.0	-3.4	50.0
Chlorobenzene	Ave	0.8688	0.8302	0.3000	9.56	10.0	-4.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2769	0.2882		10.4	10.0	4.1	50.0
Ethylbenzene	Ave	0.4528	0.4408		9.74	10.0	-2.6	20.0
m-Xylene & p-Xylene	Ave	0.5668	0.5584		19.7	20.0	-1.5	50.0
o-Xylene	Ave	0.5349	0.5173		9.67	10.0	-3.3	50.0
Styrene	Ave	0.8702	0.8590		9.87	10.0	-1.3	50.0
Bromoform	Ave	0.1434	0.1561	0.1000	10.9	10.0	8.9	50.0
Isopropylbenzene	Ave	1.312	1.257		9.58	10.0	-4.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5639	0.4973	0.3000	8.82	10.0	-11.8	50.0
Bromobenzene	Ave	0.7038	0.6751		9.59	10.0	-4.1	50.0
1,2,3-Trichloropropane	Ave	0.1939	0.1790		9.23	10.0	-7.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1333	0.1212		9.09	10.0	-9.1	50.0
n-Propylbenzene	Ave	0.7180	0.6800		9.47	10.0	-5.3	50.0
2-Chlorotoluene	Ave	0.6360	0.5952		9.36	10.0	-6.4	50.0
1,3,5-Trimethylbenzene	Ave	2.031	1.905		9.38	10.0	-6.2	50.0
4-Chlorotoluene	Ave	0.6702	0.6460		9.64	10.0	-3.6	50.0
tert-Butylbenzene	Ave	1.891	1.638		8.66	10.0	-13.4	50.0
1,2,4-Trimethylbenzene	Ave	2.019	1.880		9.31	10.0	-6.9	50.0
sec-Butylbenzene	Ave	2.280	2.082		9.13	10.0	-8.7	50.0
1,3-Dichlorobenzene	Ave	1.224	1.138		9.30	10.0	-7.0	50.0
p-Isopropyltoluene	Ave	1.922	1.797		9.35	10.0	-6.5	50.0
1,4-Dichlorobenzene	Ave	1.281	1.208		9.43	10.0	-5.7	50.0
n-Butylbenzene	Ave	1.472	1.343		9.12	10.0	-8.8	50.0
1,2-Dichlorobenzene	Ave	1.107	1.019		9.21	10.0	-7.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0763	0.0691		9.06	10.0	-9.4	50.0
1,3,5-Trichlorobenzene	Ave	0.6937	0.5964		8.60	10.0	-14.0	50.0
1,2,4-Trichlorobenzene	Ave	0.5852	0.4437		7.58	10.0	-24.2	50.0
Hexachlorobutadiene	Ave	0.2467	0.1908		7.74	10.0	-22.6	50.0
Naphthalene	Ave	1.227	0.7502		6.12	10.0	-38.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCVIS 240-50786/2 Calibration Date: 07/13/2012 14:45

Instrument ID: A3UX10 Calib Start Date: 06/29/2012 09:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/29/2012 11:06

Lab File ID: UXX7799.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.3313		6.12	10.0	-38.8	50.0
Dibromofluoromethane (Surr)	Ave	0.1929	0.1905		11.9	12.0	-1.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2329	0.2235		11.6	12.0	-4.0	50.0
Toluene-d8 (Surr)	Ave	1.110	1.147		12.4	12.0	3.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.3701	0.3642		11.8	12.0	-1.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-50786/3 Calibration Date: 07/13/2012 15:07

Instrument ID: A3UX10 Calib Start Date: 06/29/2012 11:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/29/2012 13:15

Lab File ID: UXX7800.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3292	0.3029		9.20	10.0	-8.0	50.0
Ethyl ether	Ave	0.1598	0.1600		10.0	10.0	0.1	50.0
3-Chloro-1-propene	Ave	0.1100	0.1067		9.70	10.0	-3.0	50.0
Diisopropyl ether	Ave	0.1935	0.1968		50.8	50.0	1.7	50.0
2-Chloro-1,3-butadiene	Ave	0.3017	0.2856		9.47	10.0	-5.3	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.5683	0.5552		9.77	10.0	-2.3	50.0
Ethyl acetate	Ave	0.1437	0.1375		19.1	20.0	-4.3	50.0
Propionitrile	Ave	0.0216	0.0190		17.6	20.0	-12.0	50.0
Methacrylonitrile	Ave	0.0980	0.0885		9.03	10.0	-9.7	50.0
Isobutyl alcohol	Ave	0.0066	0.0055		165	200	-17.5	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5241	0.5154		9.83	10.0	-1.7	50.0
n-Heptane	Ave	0.0451	0.0451		10.0	10.0	0.0	50.0
n-Butanol	Qua		0.0043		136	200	-31.9	50.0
Methyl methacrylate	Ave	0.1299	0.1250		9.62	10.0	-3.8	50.0
2-Nitropropane	Linl		0.0299		18.4	20.0	-8.0	50.0
Cyclohexanone	Ave	0.0313	0.0276		88.3	100	-11.7	50.0
1,2,3-Trimethylbenzene	Ave	1.927	1.998		10.4	10.0	3.7	50.0
2-Methylnaphthalene	Ave	0.5054	0.1389		5.50	20.0	-72.5	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: UXX7802.D Lab Sample ID: MB 240-50786/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX10 Date Analyzed: 07/13/2012 15:49

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-50786/4	UXX7801.D	07/13/2012 15:28
	240-13086-E-8 MS	UXX7811.D	07/13/2012 19:14
	240-13086-D-8 MSD	UXX7812.D	07/13/2012 19:35
TB-070912	240-13043-1	UXX7821.D	07/13/2012 22:46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50786/5

Matrix: Water | Lab File ID: UXX7802.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/13/2012 15:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50786 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	0.580	J	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50786/5

Matrix: Water Lab File ID: UXX7802.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/13/2012 15:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	0.761	J	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
75-65-0	tert-Butyl alcohol	4.05	J	50	3.9
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50786/5

Matrix: Water Lab File ID: UXX7802.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/13/2012 15:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50786 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-129
460-00-4	4-Bromofluorobenzene (Surr)	94		66-117
2037-26-5	Toluene-d8 (Surr)	100		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50786/5

Matrix: Water | Lab File ID: UXX7802.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/13/2012 15:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50786 | Units: ug/L

Number TICs Found: 3 | TIC Result Total: 19.94

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.50	2.10	J
108-94-1	Cyclohexanone	8.93	17.2	J
91-57-6	2-Methylnaphthalene	13.68	0.640	J

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX7801.D

Lab ID: LCS 240-50786/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.75	98	72-116	
1,1,1-Trichloroethane	10.0	9.54	95	74-118	
1,1,2,2-Tetrachloroethane	10.0	8.34	83	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.41	94	74-151	
1,1-Dichloroethane	10.0	9.54	95	82-115	
1,1-Dichloroethene	10.0	9.17	92	78-131	
1,1-Dichloropropene	10.0	9.22	92	83-114	
1,2,3-Trichlorobenzene	10.0	6.09	61	54-126	
1,2,3-Trichloropropane	10.0	8.89	89	73-129	
1,2,3-Trimethylbenzene	10.0	8.90	89	70-130	
1,2,4-Trichlorobenzene	10.0	7.07	71	48-135	
1,2,4-Trimethylbenzene	10.0	8.86	89	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.94	89	42-136	
1,2-Dichlorobenzene	10.0	8.79	88	81-110	
1,2-Dichloroethane	10.0	8.96	90	71-127	
1,2-Dichloropropane	10.0	9.53	95	81-115	
1,3-Dichlorobenzene	10.0	8.92	89	80-110	
1,3-Dichloropropane	10.0	9.34	93	79-116	
1,4-Dichlorobenzene	10.0	8.92	89	82-110	
2,2-Dichloropropane	10.0	9.72	97	50-129	
2-Chloroethyl vinyl ether	10.0	7.90 J	79	52-131	
2-Chlorotoluene	10.0	8.95	90	76-116	
2-Hexanone	20.0	17.0	85	55-133	
4-Chlorotoluene	10.0	9.19	92	77-115	
Acetone	20.0	18.2	91	43-136	
Benzene	10.0	9.49	95	83-112	
Bromobenzene	10.0	9.09	91	76-115	
Bromochloromethane	10.0	9.02	90	77-120	
Bromoform	10.0	10.2	102	40-131	
Bromomethane	10.0	8.86	89	11-185	
Carbon disulfide	10.0	8.45	85	62-142	
Carbon tetrachloride	10.0	9.98	100	66-128	
Chlorobenzene	10.0	9.07	91	85-110	
Chloroethane	10.0	8.47	85	25-153	
Chloroform	10.0	8.90	89	79-117	
Chloromethane	10.0	8.09	81	44-126	
cis-1,2-Dichloroethene	10.0	8.97	90	80-113	
Bromodichloromethane	10.0	9.74	97	72-121	
cis-1,3-Dichloropropene	10.0	9.13	91	61-115	
1,2-Dibromoethane	10.0	9.24	92	79-113	
Dibromomethane	10.0	9.56	96	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX7801.D

Lab ID: LCS 240-50786/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	6.02	60	19-129	
Diisopropyl ether	10.0	9.93 J	99	77-118	
Ethylbenzene	10.0	9.24	92	83-112	
Hexachlorobutadiene	10.0	6.63	66	36-134	
Isopropylbenzene	10.0	9.03	90	75-114	
2-Butanone	20.0	17.8	89	60-126	
4-Methyl-2-pentanone	20.0	17.1	86	63-128	
m-Xylene & p-Xylene	20.0	18.5	93	83-113	
Methyl tert-butyl ether	10.0	8.99	90	52-144	
Naphthalene	10.0	6.03	60	32-141	
n-Butylbenzene	10.0	8.66	87	66-125	
Methylene Chloride	10.0	8.24	82	66-131	
n-Propylbenzene	10.0	9.30	93	74-121	
o-Xylene	10.0	9.11	91	83-113	
p-Isopropyltoluene	10.0	9.07	91	74-120	
sec-Butylbenzene	10.0	8.56	86	70-117	
Styrene	10.0	9.43	94	79-114	
tert-Butylbenzene	10.0	8.20	82	71-115	
Tetrachloroethene	10.0	9.50	95	79-114	
Toluene	10.0	9.54	95	84-111	
trans-1,2-Dichloroethene	10.0	9.31	93	83-117	
trans-1,3-Dichloropropene	10.0	9.55	96	58-117	
Trichloroethene	10.0	9.60	96	76-117	
Trichlorofluoromethane	10.0	10.1	101	49-157	
tert-Butyl alcohol	200	151	75	70-130	
Vinyl acetate	10.0	7.40	74	46-161	
Vinyl chloride	10.0	8.18	82	53-127	
Dibromochloromethane	10.0	9.95	100	64-119	
Xylenes, Total	30.0	27.6	92	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: BFB8979.D BFB Injection Date: 06/01/2012

Instrument ID: A3UX8 BFB Injection Time: 01:25

Analysis Batch No.: 45924

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.5	
75	30.0 - 60.0 % of mass 95	38.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.6	(0.6)1
174	50.0 - 120.00 % of mass 95	96.3	
175	5.0 - 9.0 % of mass 174	7.1	(7.4)1
176	95.0 - 101.0 % of mass 174	94.2	(97.8)1
177	5.0 - 9.0 % of mass 176	6.0	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-45924/3	UX88957.D	06/01/2012	02:08
	STD8260 240-45924/4	UX88958.D	06/01/2012	02:29
	STD8260 240-45924/5	UX88959.D	06/01/2012	02:51
	STD8260 240-45924/6	UX88960.D	06/01/2012	03:12
	STD8260 240-45924/7	UX88961.D	06/01/2012	03:33
	STD8260 240-45924/8	UX88962.D	06/01/2012	03:54
	STD8260 240-45924/9	UX88963.D	06/01/2012	04:15
	STD8260 240-45924/10	UX88964.D	06/01/2012	04:37
	STDA9 240-45924/11	UX88965.D	06/01/2012	04:58
	STDA9 240-45924/12	UX88966.D	06/01/2012	05:19
	STDA9 240-45924/13	UX88967.D	06/01/2012	05:40
	STDA9 240-45924/14	UX88968.D	06/01/2012	06:01
	STDA9 240-45924/15	UX88969.D	06/01/2012	06:23
	STDA9 240-45924/16	UX88970.D	06/01/2012	06:44
	ICV 240-45924/17	UX88971.D	06/01/2012	07:05

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-45924/10	UX88964.D
Level 2	STD8260 240-45924/9	UX88963.D
Level 3	STD8260 240-45924/8	UX88962.D
Level 4	STD8260 240-45924/7	UX88961.D
Level 5	STD8260 240-45924/6	UX88960.D
Level 6	STD8260 240-45924/5	UX88959.D
Level 7	STD8260 240-45924/4	UX88958.D
Level 8	STD8260 240-45924/3	UX88957.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2715 0.1519	0.0808 0.1469	0.1647 0.1473	0.1475	0.1499	Lin1	0.0438	0.1473							0.9970		0.9900
Chloromethane	0.2944 0.2371	0.2022 0.2398	0.2565 0.2373	0.2436	0.2403	Ave		0.2439			0.1000	10.0		15.0			
Vinyl chloride	0.1402 0.1490	0.0988 0.1324	0.1439 0.1447	0.1518	0.1555	Ave		0.1396				13.0		15.0			
Bromomethane	0.1068 0.0780	0.0865	0.0979	0.0855	0.0857	Ave		0.0901				12.0		15.0			
Chloroethane	0.0780 0.0736	0.0739 0.0654	0.0814 0.0586	0.0714	0.0763	Ave		0.0723				10.0		15.0			
Trichlorofluoromethane	0.1876 0.1854	0.0985 0.1980	0.1938 0.1828	0.1674	0.1930	Lin1	-0.052	0.1880							0.9970		0.9900
~~Acrolein~~	0.0420 0.0488	0.0505 0.0467	0.0554 0.0487	0.0477	0.0488	Ave		~~0.0486~~				7.7		15.0			
1,1-Dichloroethene	0.1506 0.1897	0.1597 0.1900	0.1653 0.1918	0.1872	0.1812	Ave		0.1769				9.1		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.0639 0.1704	0.0805 0.1712	0.1507 0.1701	0.1725	0.1625	Lin1	-0.123	0.1716							1.0000		0.9900
Acetone	0.3830 0.0858	0.2341 0.0838	0.1413 0.0849	0.1131	0.0983	Lin1	0.6009	0.0822							1.0000		0.9900
Iodomethane	0.4228 0.4121	0.3761 0.4123	0.3853 0.4149	0.4167	0.3910	Ave		0.4039				4.3		15.0			
Carbon disulfide	0.4298 0.5937	0.4332 0.6034	0.4959 0.6194	0.5473	0.5403	Ave		0.5329				14.0		15.0			
~~Acetonitrile~~	0.0472 0.0392	0.0471 0.0382	0.0422 0.0394	0.0420	0.0402	Ave		~~0.0419~~				8.3		15.0			
Methyl acetate	0.2111 0.2059	0.2251 0.2057	0.2112 0.2240	0.2116	0.2169	Ave		0.2139				3.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Hexane	+++++ 0.0527	0.0287 0.0547	0.0457 0.0537	0.0517	0.0494	Lin1	-0.048	0.0542							1.0000		0.9900
Methylene Chloride	1.0778 0.2539	0.5879 0.2450	0.3860 0.2448	0.2968	0.2659	Lin1	0.7701	0.2383							0.9990		0.9900
Vinyl acetate	+++++ 0.0418	0.0204 0.0425	0.0355 0.0447	0.0356	0.0399	Lin1	-0.054	0.0440							0.9990		0.9900
tert-Butyl alcohol	0.0165 0.0195	0.0179 0.0197	0.0169 0.0189	0.0183	0.0214	Ave		0.0186				8.6		15.0			
Acrylonitrile	0.0940 0.1075	0.1089 0.1055	0.1067 0.1120	0.1100	0.1079	Ave		0.1066				5.1		15.0			
trans-1,2-Dichloroethene	0.2064 0.2322	0.2138 0.2330	0.2119 0.2321	0.2298	0.2227	Ave		0.2227				4.8		15.0			
Methyl tert-butyl ether	0.5598 0.5422	0.4979 0.5502	0.5399 0.5403	0.5369	0.5487	Ave		0.5395				3.4		15.0			
1,1-Dichloroethane	0.3476 0.3660	0.3521 0.3685	0.3506 0.3785	0.3579	0.3631	Ave		0.3605			0.1000	2.9		15.0			
2-Butanone	0.1499 0.1191	0.1465 0.1185	0.1320 0.1283	0.1310	0.1298	Ave		0.1319				8.6		15.0			
cis-1,2-Dichloroethene	0.2552 0.2578	0.2373 0.2565	0.2473 0.2606	0.2555	0.2545	Ave		0.2531				2.9		15.0			
2,2-Dichloropropane	0.0829 0.1686	0.1091 0.1688	0.1269 0.1554	0.1431	0.1530	Lin1	-0.097	0.1613							0.9980		0.9900
Bromochloromethane	0.1462 0.1444	0.1358 0.1462	0.1376 0.1488	0.1388	0.1411	Ave		0.1424				3.3		15.0			
Tetrahydrofuran	0.1222 0.0829	0.1113 0.0830	0.0884 0.0920	0.0860	0.0874	Ave		0.0942				15.0		15.0			
Chloroform	0.3784 0.3486	0.3230 0.3514	0.3287 0.3584	0.3491	0.3415	Ave		0.3474				5.0		15.0			
1,1,1-Trichloroethane	0.1829 0.2768	0.2162 0.2794	0.2184 0.2804	0.2566	0.2591	Ave		0.2462				15.0		15.0			
Cyclohexane	0.2388 0.4559	0.2636 0.4578	0.3910 0.4510	0.4282	0.4289	Lin1	-0.279	0.4551							1.0000		0.9900
1,1-Dichloropropene	0.1744 0.2435	0.1910 0.2486	0.2225 0.2518	0.2362	0.2373	Ave		0.2256				13.0		15.0			
Carbon tetrachloride	0.1474 0.2429	0.1485 0.2486	0.1774 0.2526	0.2238	0.2205	Lin1	-0.179	0.2498							0.9990		0.9900
1,2-Dichloroethane	0.2444 0.2465	0.2670 0.2549	0.2467 0.2615	0.2521	0.2514	Ave		0.2531				3.1		15.0			
Benzene	0.8105 0.7901	0.7798 0.8086	0.7550 0.8330	0.7969	0.7922	Ave		0.7958				2.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chloroethyl vinyl ether	++++++ 0.0238	0.0169 0.0267	0.0204 0.0313	0.0219	0.0233	Qua	-0.015	0.0220	0						1.0000		0.9900
Trichloroethene	0.2243 0.2513	0.2509 0.2603	0.2313 0.2649	0.2539	0.2532	Ave		0.2487				5.6		15.0			
Methylcyclohexane	0.2118 0.4003	0.1912 0.4082	0.3418 0.3981	0.3665	0.3811	Lin1	-0.277	0.4027							0.9990		0.9900
1,2-Dichloropropane	0.1805 0.2033	0.1843 0.2080	0.1938 0.2127	0.2041	0.2031	Ave		0.1987				5.7		15.0			
Dibromomethane	0.0952 0.1194	0.1175 0.1219	0.1139 0.1271	0.1138	0.1216	Ave		0.1163				8.2		15.0			
1,4-Dioxane	0.0025 0.0020	0.0025 0.0020	0.0020 0.0019	0.0021	0.0024	Ave		0.0022				10.0		15.0			
Bromodichloromethane	0.2015 0.2316	0.1911 0.2459	0.2026 0.2570	0.2127	0.2244	Ave		0.2208				10.0		15.0			
cis-1,3-Dichloropropene	0.1591 0.2647	0.1991 0.2829	0.2037 0.2992	0.2262	0.2547	Lin1	-0.224	0.2889							0.9970		0.9900
4-Methyl-2-pentanone	0.2036 0.2427	0.2289 0.2447	0.2315 0.2610	0.2391	0.2431	Ave		0.2368				7.0		15.0			
Toluene	1.2618 1.1963	1.0799 1.1982	1.1210 1.2635	1.2019	1.1935	Ave		1.1895				5.3		15.0			
trans-1,3-Dichloropropene	0.2005 0.2816	0.1787 0.3038	0.2057 0.3318	0.2370	0.2604	Qua	-0.299	0.2765	0.0003						1.0000		0.9900
Ethyl methacrylate	0.1819 0.2949	0.2235 0.3018	0.2312 0.3253	0.2658	0.2936	Lin1	-0.211	0.3144							0.9980		0.9900
1,1,2-Trichloroethane	0.2105 0.2310	0.2365 0.2316	0.2154 0.2478	0.2322	0.2385	Ave		0.2304				5.3		15.0			
1,3-Dichloropropane	0.3751 0.3653	0.3792 0.3653	0.3575 0.3841	0.3601	0.3777	Ave		0.3705				2.6		15.0			
Tetrachloroethene	0.1897 0.2669	0.2069 0.2690	0.2355 0.2762	0.2606	0.2664	Ave		0.2464				13.0		15.0			
2-Hexanone	0.1516 0.1976	0.1995 0.1883	0.1988 0.2091	0.2053	0.2036	Ave		0.1942				9.4		15.0			
Dibromochloromethane	0.1902 0.2816	0.1961 0.2914	0.2080 0.3169	0.2388	0.2644	Lin1	-0.234	0.3036							0.9960		0.9900
1,2-Dibromoethane	0.2149 0.2489	0.2178 0.2450	0.2240 0.2636	0.2394	0.2552	Ave		0.2386				7.5		15.0			
Chlorobenzene	0.8847 0.8463	0.7973 0.8554	0.8028 0.8959	0.8434	0.8568	Ave		0.8478			0.3000	4.1		15.0			
1,1,1,2-Tetrachloroethane	0.2543 0.3065	0.2260 0.3130	0.2496 0.3239	0.2668	0.2844	Ave		0.2781				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethylbenzene	0.4142 0.4439	0.3638 0.4438	0.3955 0.4588	0.4347	0.4397	Ave		0.4243				7.4		15.0			
m-Xylene & p-Xylene	0.4921 0.5460	0.4888 0.5409	0.4960 0.5602	0.5367	0.5378	Ave		0.5248				5.3		15.0			
o-Xylene	0.4749 0.5606	0.5308 0.5547	0.5157 0.5637	0.5323	0.5555	Ave		0.5360				5.6		15.0			
Styrene	0.7742 0.8892	0.7167 0.8998	0.7746 0.9351	0.8388	0.8626	Ave		0.8364				9.0		15.0			
Bromoform	0.1184 0.1644	0.0957 0.1794	0.1150 0.1991	0.1403	0.1524	Qua	-0.174	0.1600	0.0002		0.1000				1.0000		0.9900
Isopropylbenzene	1.1044 1.4032	1.1649 1.4211	1.1911 1.4401	1.3802	1.3880	Ave		1.3116				10.0		15.0			
1,1,2,2-Tetrachloroethane	0.4662 0.5554	0.5173 0.5475	0.4828 0.5697	0.5168	0.5600	Ave		0.5270			0.3000	7.2		15.0			
Bromobenzene	0.6822 0.7061	0.6506 0.7072	0.6338 0.7247	0.6754	0.7007	Ave		0.6851				4.5		15.0			
1,2,3-Trichloropropane	0.1711 0.1890	0.1891 0.1864	0.1805 0.1990	0.1934	0.2024	Ave		0.1889				5.3		15.0			
trans-1,4-Dichloro-2-butene	0.1465 0.1460	0.1163 0.1473	0.1187 0.1680	0.1383	0.1474	Ave		0.1411				12.0		15.0			
n-Propylbenzene	0.5153 0.7314	0.5764 0.7324	0.5939 0.7373	0.7018	0.7245	Ave		0.6641				13.0		15.0			
2-Chlorotoluene	0.5883 0.6594	0.5988 0.6608	0.5687 0.6596	0.6289	0.6570	Ave		0.6277				6.0		15.0			
1,3,5-Trimethylbenzene	1.7191 2.1538	1.6605 2.1740	1.7431 2.1687	2.0048	2.0561	Ave		1.9600				11.0		15.0			
4-Chlorotoluene	0.6006 0.6589	0.5360 0.6592	0.5626 0.6674	0.6332	0.6539	Ave		0.6215				8.0		15.0			
tert-Butylbenzene	1.5705 2.0166	1.7480 2.0549	1.6031 2.2606	1.9291	1.9642	Ave		1.8934				12.0		15.0			
1,2,4-Trimethylbenzene	1.8535 2.0979	1.7247 2.1538	1.7733 2.1567	2.0438	2.0648	Ave		1.9836				8.7		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1168	0.0852 0.1212	0.0767 0.1365	0.1031	0.1058	Qua	-0.086	0.1089	0.0001						1.0000		0.9900
sec-Butylbenzene	2.0045 2.7260	2.0790 2.7797	2.2388 2.8109	2.6536	2.6794	Ave		2.4965				13.0		15.0			
1,3-Dichlorobenzene	1.3000 1.3001	1.2227 1.3311	1.2063 1.3240	1.3321	1.3025	Ave		1.2898				3.8		15.0			
p-Isopropyltoluene	1.5785 2.2933	1.6839 2.3751	1.8924 2.3660	2.2210	2.2354	Ave		2.0807				15.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	1.4953 1.3015	1.2863 1.3366	1.2219 1.3535	1.3293	1.3269	Ave		1.3314				5.8		15.0			
n-Butylbenzene	1.3421 1.7901	1.3344 1.8782	1.4582 1.8437	1.7013	1.7507	Ave		1.6373				14.0		15.0			
1,2-Dichlorobenzene	1.3123 1.2645	1.2220 1.2905	1.2273 1.2717	1.2793	1.2978	Ave		1.2707				2.5		15.0			
1,3,5-Trichlorobenzene	0.8241 0.8583	0.7389 0.9213	0.7961 0.8972	0.8759	0.8615	Ave		0.8467				6.9		15.0			
1,2,4-Trichlorobenzene	0.7316 0.7458	0.6717 0.7965	0.7016 0.7761	0.7607	0.7493	Ave		0.7416				5.4		15.0			
Hexachlorobutadiene	0.3390 0.3450	0.2910 0.3755	0.3054 0.3594	0.3618	0.3529	Ave		0.3413				8.5		15.0			
Naphthalene	1.8722 1.9336	1.6971 1.9961	1.6862 2.0302	1.8762	1.9237	Ave		1.8769				6.7		15.0			
1,2,3-Trichlorobenzene	0.7759 0.6965	0.6685 0.7253	0.6486 0.7221	0.7254	0.7038	Ave		0.7083				5.5		15.0			
Dibromofluoromethane (Surr)	0.6325 0.2121	0.5228 0.2195	0.3540 0.2246	0.2853	0.2493	Lin1	0.5057	0.2184							0.9980		0.9900
1,2-Dichloroethane-d4 (Surr)	0.6532 0.1843	0.5210 0.1963	0.3468 0.2073	0.2653	0.2284	Lin1	0.5427	0.1974							0.9950		0.9900
Toluene-d8 (Surr)	3.2981 1.0653	2.5215 1.0269	1.6592 1.0698	1.3626	1.1344	Lin1	2.5691	1.0369							0.9990		0.9900
4-Bromofluorobenzene (Surr)	1.2187 0.3366	0.8567 0.3407	0.5913 0.3471	0.4766	0.4047	Lin1	0.9913	0.3380							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 04:58 Calibration End Date: 06/01/2012 06:44 Calibration ID: 9095

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-45924/16	UX88970.D
Level 2	STDA9 240-45924/15	UX88969.D
Level 3	STDA9 240-45924/14	UX88968.D
Level 4	STDA9 240-45924/13	UX88967.D
Level 5	STDA9 240-45924/12	UX88966.D
Level 6	STDA9 240-45924/11	UX88965.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.2205 0.1692	0.2328	0.2356	0.2036	0.1780	Ave		0.2066				14.0		15.0			
Ethyl ether	0.2031 0.2157	0.2100	0.2087	0.2092	0.1605	Ave		0.2012				10.0		15.0			
3-Chloro-1-propene	0.1035 0.1109	0.0992	0.0988	0.1000	0.1090	Ave		0.1036				5.1		15.0			
Diisopropyl ether	0.2048 0.2134	0.2111	0.2152	0.2145	0.2149	Ave		0.2123				1.9		15.0			
2-Chloro-1,3-butadiene	0.3288 0.3651	0.3299	0.3380	0.3414	0.3525	Ave		0.3426				4.1		15.0			
Ethyl-t-butyl ether (ETBE)	0.5823 0.6431	0.6101	0.6065	0.6280	0.6316	Ave		0.6169				3.5		15.0			
Ethyl acetate	0.1878 0.2251	0.1963	0.2011	0.2038	0.1962	Ave		0.2017				6.3		15.0			
Propionitrile	0.0310 0.0368	0.0360	0.0360	0.0362	0.0343	Ave		0.0351				6.1		15.0			
Methacrylonitrile	0.1366 0.1604	0.1528	0.1515	0.1483	0.1439	Ave		0.1489				5.5		15.0			
Isobutyl alcohol	0.0046 0.0068	0.0054	0.0065	0.0067	0.0065	Ave		0.0061				14.0		15.0			
Tert-amyl-methyl ether (TAME)	0.4422 0.5210	0.4561	0.4633	0.4969	0.5011	Ave		0.4801				6.4		15.0			
n-Heptane	0.0492 0.0584	0.0551	0.0549	0.0534	0.0555	Ave		0.0544				5.6		15.0			
n-Butanol	0.0035 0.0046	0.0041	0.0044	0.0046	0.0046	Ave		0.0043				11.0		15.0			
Ethyl acrylate	0.2016 0.2952	0.2213	0.2540	0.2592	0.2554	Ave		0.2478				13.0		15.0			
Methyl methacrylate	0.1765 0.2002	0.1806	0.1851	0.1832	0.1827	Ave		0.1847				4.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 04:58 Calibration End Date: 06/01/2012 06:44 Calibration ID: 9095

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Nitropropane	0.0204 0.0368	0.0227	0.0223	0.0249	0.0269	Qua	0.0941	0.0176	0						1.0000		0.9900
1-Chlorohexane	0.2889 0.3177	0.2812	0.2912	0.2894	0.3025	Ave		0.2951				4.4		15.0			
Cyclohexanone	0.0272 0.0394	0.0308	0.0348	0.0366	0.0340	Ave		0.0338				13.0		15.0			
1,2,3-Trimethylbenzene	1.9128 2.1903	1.9610	2.0239	2.1377	2.2074	Ave		2.0722				6.0		15.0			
Benzyl chloride	0.0374 0.0978	0.0454	0.0498	0.0631	0.0719	Qua	-0.042	0.0486	0.0002						1.0000		0.9900
2-Methylnaphthalene	0.8489 1.1243	0.9067	0.9899	1.0763	1.0994	Ave		1.0076				11.0		15.0			
n-Butyl acetate	0.2443 0.3241	0.2743	0.2794	0.2996	0.2866	Ave		0.2847				9.4		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-45924/10	UX88964.D
Level 2	STD8260 240-45924/9	UX88963.D
Level 3	STD8260 240-45924/8	UX88962.D
Level 4	STD8260 240-45924/7	UX88961.D
Level 5	STD8260 240-45924/6	UX88960.D
Level 6	STD8260 240-45924/5	UX88959.D
Level 7	STD8260 240-45924/4	UX88958.D
Level 8	STD8260 240-45924/3	UX88957.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Lin1	9108 271574	5685 534201	28440 1062022	52502	110341	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	9876 423829	14236 871723	44283 1710899	86731	176826	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	4702 266338	6959 481416	24849 1043218	54046	114472	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Ave	3584 139522	6088	16906	30452	63086	1.00 50.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	2616 131496	5200 237835	14046 422325	25403	56128	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Lin1	6294 331349	6935 719948	33458 1317785	59598	142012	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrolein	FB	Ave	14087 873113	35576 1696048	95632 3506978	169692	359387	10.0 500	20.0 1000	50.0 2000	100	200
1,1-Dichloroethene	FB	Ave	5052 339209	11241 690626	28534 1382777	66645	133387	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Lin1	2144 304694	5664 622285	26016 1226152	61417	119586	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Lin1	25697 306762	32956 609130	48775 1224376	80506	144671	2.00 100	4.00 200	10.0 400	20.0	40.0
Iodomethane	FB	Ave	14186 736788	26477 1498810	66526 2991052	148340	287729	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	14419 1061284	30498 2193590	85619 4465104	194841	397632	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetonitrile	FB	Ave	15821 701646	33183 1387624	72908 2842494	149535	295792	10.0 500	20.0 1000	50.0 2000	100	200
Methyl acetate	FB	Ave	14163 736124	31690 1495520	72913 3230091	150629	319269	2.00 100	4.00 200	10.0 400	20.0	40.0
Hexane	FB	Lin1	+++++ 94259	2023 198991	7894 387300	18407	36378	+++++ 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Methylene Chloride	FB	Lin1	36159 453908	41391 890567	66637 1764779	105669	195665	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Lin1	+++++ 74682	1438 154594	6121 322157	12689	29384	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butyl alcohol	FB	Ave	11038 696419	25271 1433760	58246 2724426	130023	314846	20.0 1000	40.0 2000	100 4000	200	400
Acrylonitrile	FB	Ave	6308 384286	15339 767258	36826 1614726	78310	158757	2.00 100	4.00 200	10.0 400	20.0	40.0
trans-1,2-Dichloroethene	FB	Ave	6925 415151	15052 847223	36579 1673396	81790	163874	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl tert-butyl ether	FB	Ave	18781 969284	35054 2000407	93214 3894396	191138	403818	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	11662 654267	24787 1339713	60527 2728450	127414	267228	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Butanone	FB	Ave	10055 425819	20630 861645	45564 1849297	93285	191069	2.00 100	4.00 200	10.0 400	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	8563 460878	16705 932690	42703 1878575	90939	187299	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Lin1	2782 301396	7684 613539	21910 1120548	50937	112566	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromochloromethane	FB	Ave	4905 258056	9562 531388	23758 1072823	49397	103872	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	4099 148265	7833 301889	15265 663413	30617	64321	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloroform	FB	Ave	12695 623227	22742 1277704	56756 2583285	124256	251322	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	6136 494806	15221 1015879	37713 2021379	91358	190692	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Lin1	8010 814974	18554 1664441	67501 3251293	152422	315639	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Ave	5851 435298	13446 903800	38406 1814932	84074	174624	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Lin1	4945 434277	10453 903668	30628 1820984	79658	162259	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane	FB	Ave	8200 440669	18798 926693	42584 1885134	89729	185041	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Benzene	FB	Ave	27191 1412503	54901 2939589	130345 6004651	283678	583020	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Qua	+++++ 85270	2382 194156	7036 451128	15564	34365	+++++ 100	4.00 200	10.0 400	20.0	40.0
Trichloroethene	FB	Ave	7525 449270	17661 946153	39927 1909294	90379	186313	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton | Job No.: 240-13043-1 | Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 | Calibration End Date: 06/01/2012 04:37 | Calibration ID: 9093

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Methylcyclohexane	FB	Lin1	7107 715683	13458 1483895	59012 2869404	130467	280452	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	6056 363447	12976 756127	33457 1533082	72646	149505	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromomethane	FB	Ave	3194 213386	8275 443107	19663 916432	40516	89460	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	4172 180795	8770 368071	17594 697561	37472	86564	50.0 2500	100 5000	250 10000	500	1000
Bromodichloromethane	FB	Ave	6759 414027	13451 894124	34983 1852364	75702	165138	1.00 50.0	2.00 100	5.00 200	10.0	20.0
cis-1,3-Dichloropropene	FB	Lin1	5337 473179	14019 1028525	35162 2157060	80513	187437	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	13662 867614	32222 1779512	79936 3762571	170224	357796	2.00 100	4.00 200	10.0 400	20.0	40.0
Toluene	CBZ	Ave	31686 1570128	56275 3290041	144291 6762236	316931	651361	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Qua	5034 369638	9311 834200	26481 1775483	62492	142097	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl methacrylate	CBZ	Lin1	4569 387014	11648 828817	29752 1741136	70082	160210	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	5287 303165	12324 635835	27722 1326234	61230	130181	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	9420 479464	19759 1003027	46017 2055884	94957	206143	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	CBZ	Ave	4763 350330	10780 738504	30312 1478437	68710	145381	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	CBZ	Ave	7613 518791	20794 1033942	51181 2238530	108254	222242	2.00 100	4.00 200	10.0 400	20.0	40.0
Dibromochloromethane	CBZ	Lin1	4776 369622	10221 800192	26766 1696160	62959	144316	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	5396 326646	11350 672651	28833 1410662	63121	139259	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chlorobenzene	CBZ	Ave	22215 1110743	41545 2348663	103333 4794546	222392	467607	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	6387 402247	11778 859564	32124 1733641	70349	155216	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBZ	Ave	10401 582609	18955 1218669	50904 2455422	114626	239972	1.00 50.0	2.00 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	24716 1433330	50947 2970365	127685 5996569	283038	587032	2.00 100	4.00 200	10.0 400	20.0	40.0
o-Xylene	CBZ	Ave	11925 735775	27658 1523019	66377 3016745	140369	303175	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Styrene	CBZ	Ave	19441 1167139	37345 2470720	99706 5004285	221199	470752	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBZ	Qua	2972 215747	4987 492715	14804 1065568	36999	83185	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isopropylbenzene	CBZ	Ave	27734 1841815	60701 3902037	153312 7707346	363962	757473	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	6406 388047	14832 806160	35211 1621761	75508	165736	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	DCB	Ave	9375 493271	18655 1041301	46224 2062789	98684	207384	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	2351 132030	5421 274509	13160 566504	28259	59908	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	2013 101980	3336 216935	8658 478098	20206	43635	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Propylbenzene	DCB	Ave	7081 510968	16529 1078336	43313 2098648	102551	214428	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chlorotoluene	DCB	Ave	8085 460662	17170 972858	41474 1877551	91889	194452	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	23624 1504667	47613 3200891	127117 6173317	292939	608516	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Chlorotoluene	DCB	Ave	8254 460326	15369 970519	41025 1899750	92528	193536	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butylbenzene	DCB	Ave	21582 1408870	50121 3025424	116905 6434827	281880	581311	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	25470 1465623	49454 3171085	129321 6139136	298634	611082	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Qua	+++++ 81624	2444 178464	5595 388518	15063	31299	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butylbenzene	DCB	Ave	27546 1904469	59613 4092669	163266 8001318	387736	792978	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	17864 908246	35061 1959832	87973 3768664	194645	385479	1.00 50.0	2.00 100	5.00 200	10.0	20.0
p-Isopropyltoluene	DCB	Ave	21692 1602135	48285 3496868	138002 6734779	324528	661573	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	20549 909278	36883 1967866	89111 3852872	194238	392689	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCB	Ave	18443 1250620	38262 2765364	106344 5248217	248589	518113	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	18033 883420	35041 1899991	89500 3619878	186922	384094	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	11325 599660	21188 1356408	58055 2554015	127986	254958	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2,4-Trichlorobenzene	DCB	Ave	10053 521009	19260 1172663	51163 2209295	111150	221744	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCB	Ave	4658 241023	8345 552930	22270 1022970	52865	104449	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCB	Ave	25728 1350857	48664 2938856	122970 5778881	274148	569323	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	10662 486573	19170 1067895	47301 2055547	105993	208282	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Linl	21220 379185	36802 797947	61122 1619190	101557	183475	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Linl	21913 329488	36681 713697	59867 1493976	94430	168065	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBZ	Linl	82819 1398283	131395 2819735	213564 5725255	359316	619096	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Linl	30604 441779	44643 935627	76114 1857563	125664	220857	1.00 50.0	2.00 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Linl = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 04:58 Calibration End Date: 06/01/2012 06:44 Calibration ID: 9095

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-45924/16	UX88970.D
Level 2	STDA9 240-45924/15	UX88969.D
Level 3	STDA9 240-45924/14	UX88968.D
Level 4	STDA9 240-45924/13	UX88967.D
Level 5	STDA9 240-45924/12	UX88966.D
Level 6	STDA9 240-45924/11	UX88965.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	37277 1120053	80793	165582	347123	602287	5.00 200	10.0	20.0	50.0	100
Ethyl ether	FB	Ave	34329 1428098	72895	146633	356680	542952	5.00 200	10.0	20.0	50.0	100
3-Chloro-1-propene	FB	Ave	17491 734230	34436	69456	170427	368696	5.00 200	10.0	20.0	50.0	100
Diisopropyl ether	FB	Ave	173090 7063746	366295	756234	1828805	3635752	25.0 1000	50.0	100	250	500
2-Chloro-1,3-butadiene	FB	Ave	55588 2417692	114473	237514	582021	1192625	5.00 200	10.0	20.0	50.0	100
Ethyl-t-butyl ether (ETBE)	FB	Ave	98431 4258542	211744	426187	1070587	2137152	5.00 200	10.0	20.0	50.0	100
Ethyl acetate	FB	Ave	63499 2981509	136275	282597	694974	1328128	10.0 400	20.0	40.0	100	200
Propionitrile	FB	Ave	10494 486820	25004	50653	123273	232275	10.0 400	20.0	40.0	100	200
Methacrylonitrile	FB	Ave	23086 1061937	53020	106424	252743	486871	5.00 200	10.0	20.0	50.0	100
Isobutyl alcohol	FB	Ave	15592 900817	37612	90690	228639	441057	100 4000	200	400	1000	2000
Tert-amyl-methyl ether (TAME)	FB	Ave	74753 3449637	158279	325530	847170	1695652	5.00 200	10.0	20.0	50.0	100
n-Heptane	FB	Ave	8309 386475	19108	38568	90994	187863	5.00 200	10.0	20.0	50.0	100
n-Butanol	FB	Ave	11705 611676	28129	61650	157159	309661	100 4000	200	400	1000	2000
Ethyl acrylate	FB	Ave	34083 1954471	76805	178448	441972	864151	5.00 200	10.0	20.0	50.0	100
Methyl methacrylate	FB	Ave	29841 1325426	62677	130062	312371	618354	5.00 200	10.0	20.0	50.0	100
2-Nitropropane	FB	Qua	6893 487251	15741	31365	84984	182170	10.0 400	20.0	40.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 04:58 Calibration End Date: 06/01/2012 06:44 Calibration ID: 9095

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1-Chlorohexane	CBZ	Ave	36578 1582962	73482	151587	367280	760767	5.00 200	10.0	20.0	50.0	100
Cyclohexanone	CBZ	Ave	34492 1962787	80421	180998	464494	854500	50.0 2000	100	200	500	1000
1,2,3-Trimethylbenzene	DCB	Ave	132998 6082779	273487	581705	1498829	3002187	5.00 200	10.0	20.0	50.0	100
Benzyl chloride	DCB	Qua	2603 271592	6330	14322	44211	97812	5.00 200	10.0	20.0	50.0	100
2-Methylnaphthalene	DCB	Ave	118048 6244906	252906	569038	1509276	2990535	10.0 400	20.0	40.0	100	200
n-Butyl acetate	FB	Ave	82603 4292074	190393	392640	1021596	1939615	10.0 400	20.0	40.0	100	200

Curve Type Legend:
Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-45924/17 Calibration Date: 06/01/2012 07:05

Instrument ID: A3UX8 Calib Start Date: 06/01/2012 02:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2012 04:37

Lab File ID: UX88971.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.1510		25.3	25.0	1.2	50.0
Chloromethane	Ave	0.2439	0.2671	0.1000	27.4	25.0	9.5	50.0
Vinyl chloride	Ave	0.1396	0.1527		27.4	25.0	9.4	20.0
Bromomethane	Ave	0.0901	0.1029		28.6	25.0	14.2	50.0
Chloroethane	Ave	0.0723	0.0934		32.3	25.0	29.2	50.0
Trichlorofluoromethane	Lin1		0.2150		28.9	25.0	15.6	50.0
Acrolein	Ave	0.0486	0.0250		38.6	75.0	-48.5	50.0
1,1-Dichloroethene	Ave	0.1769	0.1938		27.4	25.0	9.5	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1731		25.9	25.0	3.6	50.0
Acetone	Lin1		0.0893		47.0	50.0	-6.0	50.0
Iodomethane	Ave	0.4039	0.4325		26.8	25.0	7.1	50.0
Carbon disulfide	Ave	0.5329	0.5416		25.4	25.0	1.6	50.0
Acetonitrile	Ave	0.0419	0.0435		77.7	75.0	3.7	50.0
Methyl acetate	Ave	0.2139	0.2353		27.5	25.0	10.0	50.0
Methylene Chloride	Lin1		0.2734		25.4	25.0	1.6	50.0
tert-Butyl alcohol	Ave	0.0186	0.0170		457	500	-8.6	50.0
Acrylonitrile	Ave	0.1066	0.1124		79.1	75.0	5.5	50.0
Methyl tert-butyl ether	Ave	0.5395	0.5680		26.3	25.0	5.3	50.0
trans-1,2-Dichloroethene	Ave	0.2227	0.2312		26.0	25.0	3.8	50.0
Hexane	Lin1		0.0546		26.1	25.0	4.4	20.0
1,1-Dichloroethane	Ave	0.3605	0.3837	0.1000	26.6	25.0	6.4	50.0
Vinyl acetate	Lin1		0.0343		20.7	25.0	-17.2	50.0
2-Butanone	Ave	0.1319	0.1266		48.0	50.0	-4.0	50.0
cis-1,2-Dichloroethene	Ave	0.2531	0.2610		25.8	25.0	3.1	50.0
2,2-Dichloropropane	Lin1		0.1369		21.8	25.0	-12.8	50.0
Bromochloromethane	Ave	0.1424	0.1503		26.4	25.0	5.6	50.0
Tetrahydrofuran	Ave	0.0942	0.0880		23.4	25.0	-6.5	50.0
Chloroform	Ave	0.3474	0.3490		25.1	25.0	0.5	20.0
1,1,1-Trichloroethane	Ave	0.2462	0.2467		25.0	25.0	0.2	50.0
Cyclohexane	Lin1		0.4224		23.8	25.0	-4.8	50.0
1,1-Dichloropropene	Ave	0.2256	0.2368		26.2	25.0	4.9	50.0
Carbon tetrachloride	Lin1		0.1955		20.3	25.0	-18.8	50.0
1,2-Dichloroethane	Ave	0.2531	0.2662		26.3	25.0	5.2	50.0
Benzene	Ave	0.7958	0.8020		25.2	25.0	0.8	50.0
Trichloroethene	Ave	0.2487	0.2426		24.4	25.0	-2.5	50.0
Methylcyclohexane	Lin1		0.3636		23.3	25.0	-6.8	50.0
1,2-Dichloropropane	Ave	0.1987	0.2063		26.0	25.0	3.8	20.0
Dibromomethane	Ave	0.1163	0.1257		27.0	25.0	8.1	50.0
Bromodichloromethane	Ave	0.2208	0.2207		25.0	25.0	-0.0	50.0
2-Chloroethyl vinyl ether	Qua		0.0196		22.4	25.0	-10.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-45924/17 Calibration Date: 06/01/2012 07:05

Instrument ID: A3UX8 Calib Start Date: 06/01/2012 02:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2012 04:37

Lab File ID: UX88971.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.2314		20.8	25.0	-16.8	50.0
4-Methyl-2-pentanone	Ave	0.2368	0.2528		53.4	50.0	6.7	50.0
Toluene	Ave	1.190	1.146		24.1	25.0	-3.7	20.0
trans-1,3-Dichloropropene	Qua		0.2258		21.0	25.0	-16.0	50.0
1,1,2-Trichloroethane	Ave	0.2304	0.2425		26.3	25.0	5.2	50.0
1,3-Dichloropropane	Ave	0.3705	0.3826		25.8	25.0	3.2	50.0
Tetrachloroethene	Ave	0.2464	0.2403		24.4	25.0	-2.5	50.0
2-Hexanone	Ave	0.1942	0.1975		50.8	50.0	1.7	50.0
Dibromochloromethane	Lin1		0.2397		20.5	25.0	-18.0	50.0
1,2-Dibromoethane	Ave	0.2386	0.2360		24.7	25.0	-1.1	50.0
Chlorobenzene	Ave	0.8478	0.8289	0.3000	24.4	25.0	-2.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2781	0.2610		23.5	25.0	-6.1	50.0
Ethylbenzene	Ave	0.4243	0.4105		24.2	25.0	-3.2	20.0
m-Xylene & p-Xylene	Ave	0.5248	0.5136		48.9	50.0	-2.1	50.0
o-Xylene	Ave	0.5360	0.5395		25.2	25.0	0.6	50.0
Styrene	Ave	0.8364	0.8561		25.6	25.0	2.4	50.0
Bromoform	Qua		0.1345	0.1000	21.5	25.0	-14.0	50.0
Isopropylbenzene	Ave	1.312	1.311		25.0	25.0	-0.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5270	0.5435	0.3000	25.8	25.0	3.1	50.0
Bromobenzene	Ave	0.6851	0.7144		26.1	25.0	4.3	50.0
1,2,3-Trichloropropane	Ave	0.1889	0.1996		26.4	25.0	5.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1411	0.1386		49.1	50.0	-1.8	50.0
n-Propylbenzene	Ave	0.6641	0.6939		26.1	25.0	4.5	50.0
2-Chlorotoluene	Ave	0.6277	0.6274		25.0	25.0	-0.0	50.0
1,3,5-Trimethylbenzene	Ave	1.960	1.974		25.2	25.0	0.7	50.0
4-Chlorotoluene	Ave	0.6215	0.6144		24.7	25.0	-1.1	50.0
tert-Butylbenzene	Ave	1.893	1.870		24.7	25.0	-1.2	50.0
1,2,4-Trimethylbenzene	Ave	1.984	2.007		25.3	25.0	1.2	50.0
sec-Butylbenzene	Ave	2.496	2.515		25.2	25.0	0.7	50.0
1,3-Dichlorobenzene	Ave	1.290	1.243		24.1	25.0	-3.6	50.0
p-Isopropyltoluene	Ave	2.081	2.138		25.7	25.0	2.8	50.0
1,4-Dichlorobenzene	Ave	1.331	1.221		22.9	25.0	-8.3	50.0
n-Butylbenzene	Ave	1.637	1.577		24.1	25.0	-3.7	50.0
1,2-Dichlorobenzene	Ave	1.271	1.240		24.4	25.0	-2.4	50.0
1,2-Dibromo-3-Chloropropane	Qua		0.0902		20.9	25.0	-16.4	50.0
1,2,4-Trichlorobenzene	Ave	0.7416	0.6162		20.8	25.0	-16.9	50.0
Hexachlorobutadiene	Ave	0.3413	0.2944		21.6	25.0	-13.7	50.0
Naphthalene	Ave	1.877	1.700		22.6	25.0	-9.4	50.0
1,2,3-Trichlorobenzene	Ave	0.7083	0.6258		22.1	25.0	-11.6	50.0
Dibromofluoromethane (Surr)	Lin1		0.2116		46.1	50.0	-7.8	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.1847		44.0	50.0	-12.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-45924/17 Calibration Date: 06/01/2012 07:05

Instrument ID: A3UX8 Calib Start Date: 06/01/2012 02:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2012 04:37

Lab File ID: UX88971.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Lin1		1.018		46.6	50.0	-6.8	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.3308		46.0	50.0	-8.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-45924/17 Calibration Date: 06/01/2012 07:05

Instrument ID: A3UX8 Calib Start Date: 06/01/2012 04:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2012 06:44

Lab File ID: UX88971.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2012	0.2327		28.9	25.0	15.7	50.0
Diisopropyl ether	Ave	0.2123	0.2116		24.9	25.0	-0.3	50.0
Isobutyl alcohol	Ave	0.0061	0.0077		1590	1250	26.8	50.0
Cyclohexanone	Ave	0.0338	0.0095		140	500	-72.0*	50.0
1,2,3-Trimethylbenzene	Ave	2.072	2.066		24.9	25.0	-0.3	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: BFB8020.D BFB Injection Date: 07/11/2012

Instrument ID: A3UX8 BFB Injection Time: 22:55

Analysis Batch No.: 50546

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.4	
75	30.0 - 60.0 % of mass 95	39.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.8	(0.8)1
174	50.0 - 120.00 % of mass 95	99.3	
175	5.0 - 9.0 % of mass 174	7.0	(7.1)1
176	95.0 - 101.0 % of mass 174	95.3	(96.0)1
177	5.0 - 9.0 % of mass 176	6.5	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-50546/4	UX89754.D	07/11/2012	23:59
	CCVIS 240-50546/5	UX89755.D	07/12/2012	00:20
	LCS 240-50546/6	UX89756.D	07/12/2012	00:41
	MB 240-50546/7	UX89757.D	07/12/2012	01:02
MT-SS19-8-10	240-13043-3	UX89758.D	07/12/2012	01:53
MT-SS20-0-2	240-13043-4	UX89759.D	07/12/2012	02:14
MT-SS20-8-10	240-13043-5	UX89760.D	07/12/2012	02:35
MT-SS21-0-2	240-13043-6	UX89761.D	07/12/2012	02:57
MT-SS21-8-10	240-13043-7	UX89762.D	07/12/2012	03:18
MT-SS19-0-2	240-13043-2	UX89763.D	07/12/2012	03:39

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-50546/4 Calibration Date: 07/11/2012 23:59

Instrument ID: A3UX8 Calib Start Date: 06/01/2012 04:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2012 06:44

Lab File ID: UX89754.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.2066	0.1670		16.2	20.0	-19.2	50.0
Ethyl ether	Ave	0.2012	0.1972		19.6	20.0	-2.0	50.0
3-Chloro-1-propene	Ave	0.1036	0.0967		18.7	20.0	-6.7	50.0
Diisopropyl ether	Ave	0.2123	0.1940		91.4	100	-8.6	50.0
2-Chloro-1,3-butadiene	Ave	0.3426	0.3307		19.3	20.0	-3.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6169	0.5633		18.3	20.0	-8.7	50.0
~~Ethyl acetate~~	Ave	0.2017	0.2459		48.8	40.0	~~21.9~~	50.0
~~Propionitrile~~	Ave	0.0351	~~0.0396~~		45.2	40.0	12.9	50.0
Methacrylonitrile	Ave	0.1489	0.1624		21.8	20.0	9.1	50.0
Isobutyl ~~alcohol~~	Ave	0.0061	~~0.0084~~		553	400	~~38.4~~	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.4801	0.4390		18.3	20.0	-8.6	50.0
n-Heptane	Ave	0.0544	0.0590		21.7	20.0	8.4	50.0
~~n-Butanol~~	Ave	0.0043	~~0.0063~~		589	400	~~47.3~~	50.0
Methyl methacrylate	Ave	0.1847	0.2077		22.5	20.0	12.4	50.0
~~2-Nitropropane~~	Qua		~~0.0443~~		78.7	40.0	~~96.8~~*	50.0
~~Cyclohexanone~~	Ave	0.0338	~~0.0424~~		251	200	~~25.5~~	50.0
1,2,3-Trimethylbenzene	Ave	2.072	2.072		20.0	20.0	0.0	50.0
2-Methylnaphthalene	Ave	1.008	0.8308		33.0	40.0	-17.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCVIS 240-50546/5 Calibration Date: 07/12/2012 00:20

Instrument ID: A3UX8 Calib Start Date: 06/01/2012 02:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2012 04:37

Lab File ID: UX89755.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.1819		24.4	20.0	22.0	50.0
Chloromethane	Ave	0.2439	0.2021	0.1000	16.6	20.0	-17.1	50.0
Vinyl chloride	Ave	0.1396	0.1254		18.0	20.0	-10.1	20.0
Bromomethane	Ave	0.0901	0.0886		19.7	20.0	-1.7	50.0
Chloroethane	Ave	0.0723	0.0788		21.8	20.0	9.0	50.0
Trichlorofluoromethane	Lin1		0.2194		23.6	20.0	18.0	50.0
~~Acrolein~~	Ave	~~0.0486~~	~~0.0316~~		130	200	~~-34.9~~	50.0
1,1-Dichloroethene	Ave	0.1769	0.2073		23.4	20.0	17.1	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.1860		22.4	20.0	12.0	50.0
Acetone	Lin1		0.1096		46.0	40.0	15.0	50.0
Iodomethane	Ave	0.4039	0.4371		21.6	20.0	8.2	50.0
Carbon disulfide	Ave	0.5329	0.6048		22.7	20.0	13.5	50.0
~~Acetonitrile~~	Ave	0.0419	~~0.0425~~		203	200	1.3	50.0
Methyl acetate	Ave	0.2139	0.2492		46.6	40.0	16.5	50.0
Methylene Chloride	Lin1		0.3447		25.7	20.0	28.5	50.0
tert-Butyl alcohol	Ave	0.0186	0.0204		438	400	9.5	50.0
Acrylonitrile	Ave	0.1066	0.1142		42.9	40.0	7.2	50.0
trans-1,2-Dichloroethene	Ave	0.2227	0.2524		22.7	20.0	13.3	50.0
Methyl tert-butyl ether	Ave	0.5395	0.5721		21.2	20.0	6.0	50.0
Hexane	Lin1		0.0612		23.5	20.0	17.5	20.0
1,1-Dichloroethane	Ave	0.3605	0.3912	0.1000	21.7	20.0	8.5	50.0
Vinyl acetate	Lin1		0.0305		15.1	20.0	-24.5	50.0
2-Butanone	Ave	0.1319	0.1424		43.2	40.0	8.0	50.0
cis-1,2-Dichloroethene	Ave	0.2531	0.2799		22.1	20.0	10.6	50.0
2,2-Dichloropropane	Lin1		0.1570		20.1	20.0	0.5	50.0
Bromochloromethane	Ave	0.1424	0.1536		21.6	20.0	7.9	50.0
Tetrahydrofuran	Ave	0.0942	0.0971		20.6	20.0	3.1	50.0
Chloroform	Ave	0.3474	0.3732		21.5	20.0	7.4	20.0
1,1,1-Trichloroethane	Ave	0.2462	0.2957		24.0	20.0	20.1	50.0
Cyclohexane	Lin1		0.4759		21.5	20.0	7.5	50.0
1,1-Dichloropropene	Ave	0.2256	0.2734		24.2	20.0	21.2	50.0
Carbon tetrachloride	Lin1		0.2727		22.5	20.0	12.5	50.0
1,2-Dichloroethane	Ave	0.2531	0.2683		21.2	20.0	6.0	50.0
Benzene	Ave	0.7958	0.8623		21.7	20.0	8.4	50.0
Trichloroethene	Ave	0.2487	0.2871		23.1	20.0	15.4	50.0
Methylcyclohexane	Lin1		0.4273		21.9	20.0	9.5	50.0
1,2-Dichloropropane	Ave	0.1987	0.2210		22.2	20.0	11.2	20.0
~~1,4-Dioxane~~	Ave	0.0022	~~0.0025~~		1140	1000	14.2	50.0
Dibromomethane	Ave	0.1163	0.1319		22.7	20.0	13.4	50.0
Bromodichloromethane	Ave	0.2208	0.2516		22.8	20.0	13.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCVIS 240-50546/5 Calibration Date: 07/12/2012 00:20

Instrument ID: A3UX8 Calib Start Date: 06/01/2012 02:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2012 04:37

Lab File ID: UX89755.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Qua		0.0358		61.6	40.0	54.0*	50.0
cis-1,3-Dichloropropene	Lin1		0.2832		20.4	20.0	2.0	50.0
4-Methyl-2-pentanone	Ave	0.2368	0.2763		46.7	40.0	16.7	50.0
Toluene	Ave	1.190	1.305		21.9	20.0	9.7	20.0
trans-1,3-Dichloropropene	Qua		0.2720		20.3	20.0	1.5	50.0
Ethyl methacrylate	Lin1		0.3013		19.8	20.0	-1.0	50.0
1,1,2-Trichloroethane	Ave	0.2304	0.2570		22.3	20.0	11.5	50.0
1,3-Dichloropropane	Ave	0.3705	0.3910		21.1	20.0	5.5	50.0
Tetrachloroethene	Ave	0.2464	0.2984		24.2	20.0	21.1	50.0
2-Hexanone	Ave	0.1942	0.2295		47.3	40.0	18.1	50.0
Dibromochloromethane	Lin1		0.2910		19.9	20.0	-0.5	50.0
1,2-Dibromoethane	Ave	0.2386	0.2655		22.3	20.0	11.3	50.0
Chlorobenzene	Ave	0.8478	0.9325	0.3000	22.0	20.0	10.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2781	0.3064		22.0	20.0	10.2	50.0
Ethylbenzene	Ave	0.4243	0.4860		22.9	20.0	14.5	20.0
m-Xylene & p-Xylene	Ave	0.5248	0.5993		45.7	40.0	14.2	50.0
o-Xylene	Ave	0.5360	0.5877		21.9	20.0	9.6	50.0
Styrene	Ave	0.8364	0.9272		22.2	20.0	10.9	50.0
Bromoform	Qua		0.1745	0.1000	22.3	20.0	11.5	50.0
Isopropylbenzene	Ave	1.312	1.484		22.6	20.0	13.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5270	0.5599	0.3000	21.3	20.0	6.3	50.0
Bromobenzene	Ave	0.6851	0.7563		22.1	20.0	10.4	50.0
1,2,3-Trichloropropane	Ave	0.1889	0.2182		23.1	20.0	15.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1411	0.1563		22.2	20.0	10.8	50.0
n-Propylbenzene	Ave	0.6641	0.8145		24.5	20.0	22.6	50.0
2-Chlorotoluene	Ave	0.6277	0.7104		22.6	20.0	13.2	50.0
1,3,5-Trimethylbenzene	Ave	1.960	2.247		22.9	20.0	14.6	50.0
4-Chlorotoluene	Ave	0.6215	0.7454		24.0	20.0	19.9	50.0
tert-Butylbenzene	Ave	1.893	2.167		22.9	20.0	14.5	50.0
1,2,4-Trimethylbenzene	Ave	1.984	2.231		22.5	20.0	12.5	50.0
sec-Butylbenzene	Ave	2.496	2.935		23.5	20.0	17.5	50.0
1,3-Dichlorobenzene	Ave	1.290	1.417		22.0	20.0	9.9	50.0
p-Isopropyltoluene	Ave	2.081	2.509		24.1	20.0	20.6	50.0
1,4-Dichlorobenzene	Ave	1.331	1.412		21.2	20.0	6.0	50.0
n-Butylbenzene	Ave	1.637	1.982		24.2	20.0	21.1	50.0
1,2-Dichlorobenzene	Ave	1.271	1.362		21.4	20.0	7.2	50.0
1,2-Dibromo-3-Chloropropane	Qua		0.1172		21.7	20.0	8.5	50.0
1,3,5-Trichlorobenzene	Ave	0.8467	0.9678		22.9	20.0	14.3	50.0
1,2,4-Trichlorobenzene	Ave	0.7416	0.8150		22.0	20.0	9.9	50.0
Hexachlorobutadiene	Ave	0.3413	0.3967		23.2	20.0	16.2	50.0
Naphthalene	Ave	1.877	1.918		20.4	20.0	2.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCVIS 240-50546/5 Calibration Date: 07/12/2012 00:20

Instrument ID: A3UX8 Calib Start Date: 06/01/2012 02:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/01/2012 04:37

Lab File ID: UX89755.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.7083	0.7266		20.5	20.0	2.6	50.0
Dibromofluoromethane (Surr)	Lin1		0.2010		43.7	50.0	-12.6	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.1776		42.2	50.0	-15.6	50.0
Toluene-d8 (Surr)	Lin1		0.9386		42.8	50.0	-14.4	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.3090		42.8	50.0	-14.4	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: UX89757.D Lab Sample ID: MB 240-50546/7

Matrix: Solid Heated Purge: (Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 07/12/2012 01:02

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-50546/6	UX89756.D	07/12/2012 00:41
MT-SS19-8-10	240-13043-3	UX89758.D	07/12/2012 01:53
MT-SS20-0-2	240-13043-4	UX89759.D	07/12/2012 02:14
MT-SS20-8-10	240-13043-5	UX89760.D	07/12/2012 02:35
MT-SS21-0-2	240-13043-6	UX89761.D	07/12/2012 02:57
MT-SS21-8-10	240-13043-7	UX89762.D	07/12/2012 03:18
MT-SS19-0-2	240-13043-2	UX89763.D	07/12/2012 03:39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50546/7

Matrix: Solid Lab File ID: UX89757.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/12/2012 01:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.62
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.3
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.36
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.52
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.30
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.38
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.17
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.27
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.3
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.36
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.34
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.69
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.35
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.34
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.66
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.94
110-75-8	2-Chloroethyl vinyl ether	50	U	50	1.4
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.40
591-78-6	2-Hexanone	20	U	20	0.63
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.41
67-64-1	Acetone	6.35	J	20	6.3
71-43-2	Benzene	5.0	U	5.0	0.23
108-86-1	Bromobenzene	5.0	U	5.0	0.33
74-97-5	Bromochloromethane	5.0	U	5.0	0.71
75-25-2	Bromoform	5.0	U	5.0	0.33
74-83-9	Bromomethane	5.0	U	5.0	0.54
75-15-0	Carbon disulfide	5.0	U	5.0	0.44
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.37
108-90-7	Chlorobenzene	5.0	U	5.0	0.33
75-00-3	Chloroethane	5.0	U	5.0	0.86
67-66-3	Chloroform	5.0	U	5.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50546/7

Matrix: Solid Lab File ID: UX89757.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/12/2012 01:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U	5.0	0.41
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.36
75-27-4	Bromodichloromethane	5.0	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.34
106-93-4	1,2-Dibromoethane	5.0	U	5.0	0.50
74-95-3	Dibromomethane	5.0	U	5.0	0.63
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.50
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	5.0	U	5.0	0.26
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.2
98-82-8	Isopropylbenzene	5.0	U	5.0	0.16
78-93-3	2-Butanone	20	U	20	1.4
108-10-1	4-Methyl-2-pentanone	20	U	20	0.54
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
1634-04-4	Methyl tert-butyl ether	20	U	20	0.43
91-20-3	Naphthalene	0.505	J	5.0	0.19
104-51-8	n-Butylbenzene	5.0	U	5.0	0.23
75-09-2	Methylene Chloride	3.62	J	5.0	0.67
103-65-1	n-Propylbenzene	5.0	U	5.0	0.40
95-47-6	o-Xylene	5.0	U	5.0	0.35
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.21
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.18
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.22
100-42-5	Styrene	5.0	U	5.0	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.37
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.29
127-18-4	Tetrachloroethene	5.0	U	5.0	0.52
108-88-3	Toluene	5.0	U	5.0	0.27
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.41
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.54
79-01-6	Trichloroethene	5.0	U	5.0	0.42
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.34
75-65-0	tert-Butyl alcohol	200	U	200	7.6
108-05-4	Vinyl acetate	10	U	10	0.25
75-01-4	Vinyl chloride	5.0	U	5.0	0.39
124-48-1	Dibromochloromethane	5.0	U	5.0	0.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50546/7

Matrix: Solid | Lab File ID: UX89757.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 07/12/2012 01:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50546 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	10	U	10	0.67

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		58-123
460-00-4	4-Bromofluorobenzene (Surr)	89		52-136
2037-26-5	Toluene-d8 (Surr)	90		67-125
1868-53-7	Dibromofluoromethane (Surr)	85		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50546/7

Matrix: Solid Lab File ID: UX89757.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/12/2012 01:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX89756.D

Lab ID: LCS 240-50546/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	25.0	26.0	104	81-119	
1,1,1-Trichloroethane	25.0	27.0	108	77-126	
1,1,2,2-Tetrachloroethane	25.0	27.3	109	77-123	
1,1,2-Trichloro-1,2,2-trichfluoroethane	25.0	26.0	104	82-138	
1,1-Dichloroethane	25.0	25.6	102	76-115	
1,1-Dichloroethene	25.0	27.3	109	75-135	
1,1-Dichloropropene	25.0	26.8	107	80-120	
1,2,3-Trichlorobenzene	25.0	23.4	94	61-121	
1,2,3-Trichloropropane	25.0	28.3	113	84-126	
1,2,3-Trimethylbenzene	25.0	25.5	102	70-130	
1,2,4-Trichlorobenzene	25.0	23.6	94	64-124	
1,2,4-Trimethylbenzene	25.0	25.9	104	80-129	
1,2-Dibromo-3-Chloropropane	25.0	27.7	111	61-132	
1,2-Dichlorobenzene	25.0	25.3	101	76-110	
1,2-Dichloroethane	25.0	26.6	106	72-120	
1,2-Dichloropropane	25.0	27.5	110	87-113	
1,3-Dichlorobenzene	25.0	25.8	103	78-111	
1,3-Dichloropropane	25.0	26.6	106	82-118	
1,4-Dichlorobenzene	25.0	24.8	99	75-110	
2,2-Dichloropropane	25.0	23.9	96	69-135	
2-Chloroethyl vinyl ether	25.0	37.0 J	148	28-173	
2-Chlorotoluene	25.0	26.6	106	78-119	
2-Hexanone	50.0	58.3	117	64-136	
4-Chlorotoluene	25.0	26.3	105	79-118	
Acetone	50.0	71.7	143	41-137	*
Benzene	25.0	25.6	102	79-112	
Bromobenzene	25.0	27.1	108	81-115	
Bromochloromethane	25.0	26.0	104	79-111	
Bromoform	25.0	27.0	108	62-133	
Bromomethane	25.0	21.5	86	42-136	
Carbon disulfide	25.0	24.5	98	62-146	
Carbon tetrachloride	25.0	25.2	101	71-129	
Chlorobenzene	25.0	25.7	103	78-110	
Chloroethane	25.0	23.2	93	58-117	
Chloroform	25.0	24.6	98	77-114	
Chloromethane	25.0	16.5	66	50-110	
cis-1,2-Dichloroethene	25.0	26.0	104	76-113	
Bromodichloromethane	25.0	28.0	112	84-122	
cis-1,3-Dichloropropene	25.0	23.7	95	74-128	
1,2-Dibromoethane	25.0	27.3	109	83-117	
Dibromomethane	25.0	28.3	113	85-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX89756.D

Lab ID: LCS 240-50546/6 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	25.0	17.3	69	26-113	
Diisopropyl ether	25.0	24.9	100	82-119	
Ethylbenzene	25.0	25.9	104	79-117	
Hexachlorobutadiene	25.0	24.4	98	54-131	
Isopropylbenzene	25.0	24.9	100	76-122	
2-Butanone	50.0	54.7	109	52-131	
4-Methyl-2-pentanone	50.0	57.4	115	67-135	
m-Xylene & p-Xylene	50.0	50.6	101	80-117	
Methyl tert-butyl ether	25.0	25.6	102	49-165	
Naphthalene	25.0	24.6	98	65-123	
n-Butylbenzene	25.0	26.4	106	68-135	
Methylene Chloride	25.0	29.3	117	75-118	
n-Propylbenzene	25.0	27.4	110	81-129	
o-Xylene	25.0	25.3	101	80-120	
p-Isopropyltoluene	25.0	27.7	111	77-131	
sec-Butylbenzene	25.0	26.2	105	74-129	
Styrene	25.0	26.5	106	87-117	
tert-Butylbenzene	25.0	25.5	102	76-126	
Tetrachloroethene	25.0	25.5	102	79-114	
Toluene	25.0	24.6	98	75-111	
trans-1,2-Dichloroethene	25.0	25.5	102	78-117	
trans-1,3-Dichloropropene	25.0	25.5	102	73-131	
Trichloroethene	25.0	26.5	106	79-113	
Trichlorofluoromethane	25.0	26.3	105	57-146	
tert-Butyl alcohol	500	543	109	60-125	
Vinyl acetate	25.0	21.2	85	70-130	
Vinyl chloride	25.0	17.8	71	57-114	
Dibromochloromethane	25.0	24.1	96	72-127	
Xylenes, Total	75.0	75.9	101	80-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX7811.D

Lab ID: 240-13086-E-8 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	1.0 U	9.20	92	64-118	
1,1,1-Trichloroethane	10.0	0.66 J	9.53	89	68-121	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	8.16	82	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	9.43	94	70-152	
1,1-Dichloroethane	10.0	1.0 U	9.40	94	79-116	
1,1-Dichloroethene	10.0	1.0 U	9.04	90	74-135	
1,1-Dichloropropene	10.0	1.0 U	8.97	90	80-114	
1,2,3-Trichlorobenzene	10.0	1.0 U	5.39	54	45-129	
1,2,3-Trichloropropane	10.0	1.0 U	8.47	85	67-132	
1,2,3-Trimethylbenzene	10.0	5.0 U	8.28	83	70-130	
1,2,4-Trichlorobenzene	10.0	1.0 U	6.45	65	38-138	
1,2,4-Trimethylbenzene	10.0	1.0 U	8.34	83	67-124	
1,2-Dibromo-3-Chloropropane	10.0	2.0 U	7.68	77	32-139	
1,2-Dichlorobenzene	10.0	1.0 U	8.30	83	75-111	
1,2-Dichloroethane	10.0	1.0 U	8.60	86	68-129	
1,2-Dichloropropane	10.0	1.0 U	8.95	90	78-115	
1,3-Dichlorobenzene	10.0	1.0 U	8.38	84	73-110	
1,3-Dichloropropane	10.0	1.0 U	8.86	89	74-118	
1,4-Dichlorobenzene	10.0	1.0 U	8.36	84	75-110	
2,2-Dichloropropane	10.0	1.0 U	8.64	86	38-127	
2-Chloroethyl vinyl ether	10.0	10 U	10 U	0	10-150	F
2-Chlorotoluene	10.0	1.0 U	8.50	85	69-117	
2-Hexanone	20.0	10 U	17.0	85	47-139	
4-Chlorotoluene	10.0	1.0 U	8.60	86	71-116	
Acetone	20.0	10 U	13.5	68	33-145	
Benzene	10.0	1.0 U	8.98	90	72-121	
Bromobenzene	10.0	1.0 U	8.77	88	71-116	
Bromochloromethane	10.0	1.0 U	8.59	86	73-121	
Bromoform	10.0	1.0 U	9.03	90	32-128	
Bromomethane	10.0	1.0 U	8.31	83	10-186	
Carbon disulfide	10.0	1.0 U	7.77	78	57-147	
Carbon tetrachloride	10.0	1.0 U	9.28	93	59-129	
Chlorobenzene	10.0	1.0 U	8.65	87	80-110	
Chloroethane	10.0	1.0 U	7.84	78	21-165	
Chloroform	10.0	1.0 U	8.67	87	76-118	
Chloromethane	10.0	1.0 U	7.69	77	33-132	
cis-1,2-Dichloroethene	10.0	2.2	10.9	87	70-120	
Bromodichloromethane	10.0	1.0 U	9.03	90	67-120	
cis-1,3-Dichloropropene	10.0	1.0 U	8.29	83	51-110	
1,2-Dibromoethane	10.0	1.0 U	8.72	87	74-113	
Dibromomethane	10.0	1.0 U	8.98	90	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX7811.D

Lab ID: 240-13086-E-8 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	1.0 U	5.71	57	17-128	
Diisopropyl ether	10.0	10 U	9.02 J	90	73-118	
Ethylbenzene	10.0	1.0 U	8.76	88	75-116	
Hexachlorobutadiene	10.0	1.0 U	6.29	63	27-132	
Isopropylbenzene	10.0	1.0 U	8.44	84	68-116	
2-Butanone	20.0	10 U	15.1	76	54-129	
4-Methyl-2-pentanone	20.0	10 U	16.0	80	56-131	
m-Xylene & p-Xylene	20.0	2.0 U	17.5	88	75-117	
Methyl tert-butyl ether	10.0	5.0 U	8.33	83	46-144	
Naphthalene	10.0	1.0 U	5.64	56	15-158	
n-Butylbenzene	10.0	1.0 U	8.00	80	56-127	
Methylene Chloride	10.0	1.0 U	7.69	77	63-128	
n-Propylbenzene	10.0	1.0 U	8.79	88	64-124	
o-Xylene	10.0	1.0 U	8.65	87	76-116	
p-Isopropyltoluene	10.0	1.0 U	8.43	84	64-122	
sec-Butylbenzene	10.0	1.0 U	8.15	82	60-119	
Styrene	10.0	1.0 U	8.79	88	71-117	
tert-Butylbenzene	10.0	1.0 U	7.88	79	61-119	
Tetrachloroethene	10.0	21	30.6	93	70-117	
Toluene	10.0	1.0 U	9.06	91	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	8.81	88	80-119	
trans-1,3-Dichloropropene	10.0	1.0 U	8.80	88	46-116	
Trichloroethene	10.0	9.7	18.4	88	66-120	
Trichlorofluoromethane	10.0	1.0 U	8.80	88	46-157	
tert-Butyl alcohol	200	50 U	122	61	70-130	F
Vinyl acetate	10.0	2.0 U	6.68	67	43-157	
Vinyl chloride	10.0	1.0 U	7.73	77	49-130	
Dibromochloromethane	10.0	1.0 U	9.16	92	56-118	
Xylenes, Total	30.0	2.0 U	26.2	87	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX7812.D

Lab ID: 240-13086-D-8 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.87	99	7	30	64-118	
1,1,1-Trichloroethane	10.0	10.1	94	6	30	68-121	
1,1,2,2-Tetrachloroethane	10.0	8.97	90	9	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	9.55	96	1	30	70-152	
1,1-Dichloroethane	10.0	9.98	100	6	30	79-116	
1,1-Dichloroethene	10.0	9.17	92	1	30	74-135	
1,1-Dichloropropene	10.0	9.42	94	5	30	80-114	
1,2,3-Trichlorobenzene	10.0	6.15	62	13	30	45-129	
1,2,3-Trichloropropane	10.0	8.98	90	6	30	67-132	
1,2,3-Trimethylbenzene	10.0	9.13	91	10	30	70-130	
1,2,4-Trichlorobenzene	10.0	7.13	71	10	30	38-138	
1,2,4-Trimethylbenzene	10.0	9.15	92	9	30	67-124	
1,2-Dibromo-3-Chloropropane	10.0	8.89	89	15	30	32-139	
1,2-Dichlorobenzene	10.0	9.00	90	8	30	75-111	
1,2-Dichloroethane	10.0	9.01	90	5	30	68-129	
1,2-Dichloropropane	10.0	9.94	99	10	30	78-115	
1,3-Dichlorobenzene	10.0	9.29	93	10	30	73-110	
1,3-Dichloropropane	10.0	9.59	96	8	30	74-118	
1,4-Dichlorobenzene	10.0	8.85	89	6	30	75-110	
2,2-Dichloropropane	10.0	9.12	91	5	30	38-127	
2-Chloroethyl vinyl ether	10.0	10 U	0	NC	30	10-150	F
2-Chlorotoluene	10.0	9.12	91	7	30	69-117	
2-Hexanone	20.0	19.1	96	12	30	47-139	
4-Chlorotoluene	10.0	9.28	93	8	30	71-116	
Acetone	20.0	13.1	66	3	30	33-145	
Benzene	10.0	9.53	95	6	30	72-121	
Bromobenzene	10.0	9.19	92	5	30	71-116	
Bromochloromethane	10.0	9.11	91	6	30	73-121	
Bromoform	10.0	10.1	101	11	30	32-128	
Bromomethane	10.0	7.92	79	5	30	10-186	
Carbon disulfide	10.0	8.27	83	6	30	57-147	
Carbon tetrachloride	10.0	9.91	99	7	30	59-129	
Chlorobenzene	10.0	9.21	92	6	30	80-110	
Chloroethane	10.0	7.95	80	1	30	21-165	
Chloroform	10.0	9.11	91	5	30	76-118	
Chloromethane	10.0	7.59	76	1	30	33-132	
cis-1,2-Dichloroethene	10.0	11.3	91	4	30	70-120	
Bromodichloromethane	10.0	10.1	101	11	30	67-120	
cis-1,3-Dichloropropene	10.0	9.11	91	9	30	51-110	
1,2-Dibromoethane	10.0	9.37	94	7	30	74-113	
Dibromomethane	10.0	9.61	96	7	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX7812.D

Lab ID: 240-13086-D-8 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	6.26	63	9	30	17-128	
Diisopropyl ether	10.0	9.51 J	95	5	30	73-118	
Ethylbenzene	10.0	9.32	93	6	30	75-116	
Hexachlorobutadiene	10.0	7.49	75	17	30	27-132	
Isopropylbenzene	10.0	9.17	92	8	30	68-116	
2-Butanone	20.0	15.7	79	4	30	54-129	
4-Methyl-2-pentanone	20.0	17.9	90	11	30	56-131	
m-Xylene & p-Xylene	20.0	18.8	94	7	30	75-117	
Methyl tert-butyl ether	10.0	8.85	89	6	30	46-144	
Naphthalene	10.0	6.67	67	17	30	15-158	
n-Butylbenzene	10.0	9.00	90	12	30	56-127	
Methylene Chloride	10.0	7.91	79	3	30	63-128	
n-Propylbenzene	10.0	9.38	94	6	30	64-124	
o-Xylene	10.0	9.41	94	8	30	76-116	
p-Isopropyltoluene	10.0	9.37	94	11	30	64-122	
sec-Butylbenzene	10.0	8.86	89	8	30	60-119	
Styrene	10.0	9.58	96	9	30	71-117	
tert-Butylbenzene	10.0	9.30	93	17	30	61-119	
Tetrachloroethene	10.0	30.6	93	0	30	70-117	
Toluene	10.0	9.59	96	6	30	78-114	
trans-1,2-Dichloroethene	10.0	9.25	93	5	30	80-119	
trans-1,3-Dichloropropene	10.0	9.64	96	9	30	46-116	
Trichloroethene	10.0	18.5	89	1	30	66-120	
Trichlorofluoromethane	10.0	9.14	91	4	30	46-157	
tert-Butyl alcohol	200	136	68	11	30	70-130	F
Vinyl acetate	10.0	7.05	71	5	30	43-157	
Vinyl chloride	10.0	8.07	81	4	30	49-130	
Dibromochloromethane	10.0	9.97	100	8	30	56-118	
Xylenes, Total	30.0	28.2	94	8	30	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-070912	240-13043-1	100	96	100	92
	MB 240-50786/5	97	92	100	94
	LCS 240-50786/4	96	96	105	100
	240-13086-E-8 MS	99	96	104	100
	240-13086-D-8 MSD	96	94	103	100

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MT-SS19-0-2	240-13043-2	87	92	85	84
MT-SS19-8-10	240-13043-3	88	91	84	88
MT-SS20-0-2	240-13043-4	88	86	92	88
MT-SS20-8-10	240-13043-5	89	91	90	89
MT-SS21-0-2	240-13043-6	90	95	88	91
MT-SS21-8-10	240-13043-7	89	91	89	92
	MB 240-50546/7	85	84	90	89
	LCS 240-50546/6	86	85	87	87

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	37-132
DCA = 1,2-Dichloroethane-d4 (Surr)	58-123
TOL = Toluene-d8 (Surr)	67-125
BFB = 4-Bromofluorobenzene (Surr)	52-136

Column to be used to flag recovery values

FORM II 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: STD8260 240-49387/4 Date Analyzed: 06/29/2012 10:02

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX7455.D Heated Purge: (Y/N) N

Calibration ID: 9788

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1489647	5.21	1053937	7.88	524383	10.13
UPPER LIMIT		2979294	5.71	2107874	8.38	1048766	10.63
LOWER LIMIT		744824	4.71	526969	7.38	262192	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-49387/14		1494958	5.20	1043859	7.88	534450	10.13
CCVIS 240-50786/2		1190893	5.21	802286	7.88	403707	10.13

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCVIS 240-50786/2 Date Analyzed: 07/13/2012 14:45

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX7799.D Heated Purge: (Y/N) N

Calibration ID: 9790

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1190893	5.21	802286	7.88	403707	10.13
UPPER LIMIT		2381786	5.71	1604572	8.38	807414	10.63
LOWER LIMIT		595447	4.71	401143	7.38	201854	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-50786/3		1171120	5.21	770787	7.88	364968	10.13
LCS 240-50786/4		1205135	5.21	810371	7.88	404771	10.13
MB 240-50786/5		1147540	5.21	766896	7.88	366794	10.13
240-13086-E-8 MS		1216691	5.21	818595	7.88	403387	10.13
240-13086-D-8 MSD		1182109	5.22	803599	7.88	405279	10.13
240-13043-1	TB-070912	1118004	5.21	757654	7.88	359643	10.13

FB = Fluorobenzene
FB = Fluorobenzene
CBZ = Chlorobenzene-d5
CBZ = Chlorobenzene-d5
Area Limit = 50%-200% of internal standard area
DCB = 1,4-Dichlorobenzene-d4
RT Limit = ± 0.5 minutes of internal standard RT
DCB = 1,4-Dichlorobenzene-d4

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: STD8260 240-45924/6 Date Analyzed: 06/01/2012 03:12

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX88960.D Heated Purge: (Y/N) Y

Calibration ID: 9093

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1839866	5.16	1364346	7.69	739881	9.88
UPPER LIMIT		3679732	5.66	2728692	8.19	1479762	10.38
LOWER LIMIT		919933	4.66	682173	7.19	369941	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-45924/17		1829164	5.16	1383331	7.67	734578	9.87
CCVIS 240-50546/5		1288071	5.16	1039049	7.68	547797	9.88

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCVIS 240-50546/5 Date Analyzed: 07/12/2012 00:20

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX89755.D Heated Purge: (Y/N) Y

Calibration ID: 9095

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1288071	5.16	1039049	7.68	547797	9.88
UPPER LIMIT		2576142	5.66	2078098	8.18	1095594	10.38
LOWER LIMIT		644036	4.66	519525	7.18	273899	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-50546/4		1363221	5.16	1054904	7.68	544626	9.88
LCS 240-50546/6		1268918	5.16	1014533	7.68	532590	9.88
MB 240-50546/7		1292904	5.16	1032304	7.68	552941	9.88
240-13043-3	MT-SS19-8-10	1335916	5.16	1025660	7.69	606336	9.87
240-13043-4	MT-SS20-0-2	1208836	5.16	946212	7.68	491504	9.88
240-13043-5	MT-SS20-8-10	1305535	5.16	1036471	7.69	544368	9.88
240-13043-6	MT-SS21-0-2	1337861	5.16	1084657	7.68	585385	9.88
240-13043-7	MT-SS21-8-10	1307494	5.16	1050784	7.69	577934	9.88
240-13043-2	MT-SS19-0-2	1333001	5.16	1057063	7.69	559332	9.88

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4
Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: 20711001.D DFTPP Injection Date: 07/11/2012

Instrument ID: A4HP7 DFTPP Injection Time: 11:01

Analysis Batch No.: 50462

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	77.0	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	53.3	
70	Less than 2.0% of mass 69	0.2	(0.3)1
127	25.0 - 75.0% of mass 198	62.1	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.8	
275	10.0- 30.0% of mass 198	24.8	
365	Greater than 0.75% of mass 198	2.5	
441	Present, but less than mass 443	13.9	
442	40.0 - 110.0% of mass 198	91.6	
443	15.0 - 24.0% of mass 442	17.9	(19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-50462/2	20711002.D	07/11/2012	11:20
	STD4 240-50462/3	20711003.D	07/11/2012	11:39
	STD3 240-50462/4	20711004.D	07/11/2012	11:58
	STD2 240-50462/5	20711005.D	07/11/2012	12:17
	STD1 240-50462/6	20711006.D	07/11/2012	12:36
	STD9 240-50462/7	20711007.D	07/11/2012	12:55
	STD8 240-50462/8	20711008.D	07/11/2012	13:13
	STD7 240-50462/9	20711009.D	07/11/2012	13:32
	STD6 240-50462/10	20711010.D	07/11/2012	13:51
	ICV 240-50462/11	20711011.D	07/11/2012	14:10

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-50462/6	20711006.D
Level 2	STD2 240-50462/5	20711005.D
Level 3	STD3 240-50462/4	20711004.D
Level 4	STD4 240-50462/3	20711003.D
Level 5	STD5 240-50462/2	20711002.D
Level 6	STD6 240-50462/10	20711010.D
Level 7	STD7 240-50462/9	20711009.D
Level 8	STD8 240-50462/8	20711008.D
Level 9	STD9 240-50462/7	20711007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.5236	0.6038 0.5559	0.6654 0.5765	0.5689 0.4823	0.5254	Ave		0.5627				9.9		20.0			
N-Nitrosodimethylamine	0.8428	0.8244 0.8909	0.8912 0.8785	0.8764 0.9059	0.8570	Ave		0.8709				3.2		20.0			
Pyridine	1.3920	1.2499 1.5306	1.2946 1.4699	1.4105 1.5233	1.3927	Ave		1.4079				7.1		20.0			
Malononitrile	1.9137	1.7765 1.8549	1.9538 1.6758	1.9720 +++++	1.9538	Ave		1.8715				5.9		20.0			
Ethyl methacrylate	1.1336	1.0811 1.1710	1.1129 1.0410	1.1221 1.2053	1.1009	Ave		1.1210				4.6		20.0			
3-Chloropropionitrile	1.3693	1.2141 1.4204	1.2759 1.3115	1.3765 1.2873	1.3426	Ave		1.3247				5.0		20.0			
Benzaldehyde	1.4767 0.9864	1.6465 0.7080	1.2548 +++++	1.1765 +++++	1.1447	Ave		1.1991			0.0100	26.0	*	20.0			
Phenol	1.7286	1.5557 1.8350	1.6370 1.7735	1.7005 1.8536	1.6876	Ave		1.7214			0.8000	5.8		20.0			
Aniline	2.3543	1.8614 2.2654	2.0894 2.2535	2.0818 2.3031	2.0695	Ave		2.1598				7.6		20.0			
Bis(2-chloroethyl)ether	1.5890	1.5760 1.7230	1.5835 1.7469	1.5670 1.8101	1.6006	Ave		1.6495			0.7000	5.8		20.0			
2-Chlorophenol	1.4860	1.3254 1.5064	1.3967 1.4953	1.4365 1.5662	1.4217	Ave		1.4543			0.8000	5.1		20.0			
1,3-Dichlorobenzene	1.7429	1.6256 1.7585	1.7650 1.7529	1.6637 1.8063	1.6795	Ave		1.7243				3.5		20.0			
1,4-Dichlorobenzene	1.6137	1.5165 1.6475	1.5730 1.6152	1.5596 1.6625	1.5388	Ave		1.5908				3.3		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Benzyl alcohol	0.8876	0.7046 0.9285	0.7754 0.9533	0.9437 0.9741	0.9081	Ave		0.8844				11.0		20.0			
1,2-Dichlorobenzene	1.6824	1.4869 1.6650	1.6119 1.6668	1.5753 1.7310	1.5932	Ave		1.6266				4.7		20.0			
2-Methylphenol	1.3146	1.0931 1.3400	1.2207 1.3551	1.2864 1.3961	1.2566	Ave		1.2828			0.7000	7.4		20.0			
Benzoic acid	0.2237	+++++ 0.2200	0.0894 0.2464	0.1525 0.2434	0.1967	Qua	-0.283	0.2212	0.0006						0.9980		0.9900
2,2'-oxybis[1-chloropropane]	3.0298	2.7963 3.0279	2.7815 3.0649	2.7753 3.1860	2.8219	Ave		2.9354				5.4		20.0			
3 & 4 Methylphenol	1.3718	1.2692 1.4150	1.3230 1.4423	1.3719 1.4909	1.3064	Ave		1.3738				5.4		20.0			
N-Nitrosodi-n-propylamine	0.9736	0.8702 0.9585	0.8893 1.0163	0.9428 1.0486	0.9322	Ave		0.9539			0.5000	6.3		20.0			
Acetophenone	1.8548	1.5842 1.8729	1.7166 1.9261	1.7622 1.9900	1.7626	Ave		1.8087			0.0100	7.1		20.0			
Hexachloroethane	0.5890	0.5104 0.5991	0.5428 0.5982	0.5626 0.6045	0.5629	Ave		0.5712			0.3000	5.8		20.0			
Nitrobenzene	0.3792	0.3450 0.3915	0.3751 0.3946	0.3668 0.3972	0.3681	Ave		0.3772			0.2000	4.6		20.0			
2,4-Toluene diamine	0.1861	0.2194 0.1358	0.2380 +++++	0.2352 +++++	0.1967	Ave		0.2018				19.0		20.0			
Isophorone	0.6135	0.5498 0.6308	0.5931 0.6517	0.5714 0.6623	0.5853	Ave		0.6072			0.4000	6.5		20.0			
2,4-Dimethylphenol	0.3306	0.3000 0.3425	0.3119 0.3454	0.3218 0.3495	0.3230	Ave		0.3281			0.2000	5.3		20.0			
2-Nitrophenol	0.1991	0.1822 0.2102	0.1813 0.2104	0.1783 0.2116	0.1903	Ave		0.1954			0.1000	7.3		20.0			
1,3,5-Trichlorobenzene	0.3225	0.3248 0.3339	0.3152 0.3384	0.3110 0.3363	0.3121	Ave		0.3243				3.4		20.0			
Bis(2-chloroethoxy)methane	0.4288	0.3881 0.4415	0.4076 0.4569	0.4060 0.4582	0.4062	Ave		0.4242			0.3000	6.2		20.0			
2,4-Dichlorophenol	0.2651	0.2463 0.2748	0.2502 0.2815	0.2566 0.2840	0.2564	Ave		0.2644			0.2000	5.4		20.0			
1,2,4-Trichlorobenzene	0.3296	0.3170 0.3362	0.3171 0.3356	0.3193 0.3413	0.3091	Ave		0.3257				3.5		20.0			
Naphthalene	1.1082 1.0089	0.9329 1.0478	0.9386 1.0434	0.9523 1.0887	0.9483	Ave		1.0077			0.7000	6.7		20.0			
4-Chloroaniline	0.4187	0.3443 0.4837	0.4022 0.4893	0.4201 0.4987	0.4265	Ave		0.4354			0.0100	12.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1479	0.1449 0.1489	0.1436 0.1515	0.1395 0.1509	0.1401	Ave		0.1459			0.0100	3.2		20.0			
1,2,3-Trichlorobenzene	0.3059	0.2948 0.3135	0.3054 0.3153	0.2916 0.3149	0.2901	Ave		0.3039				3.5		20.0			
Caprolactam	0.1134	0.0792 0.1176	0.0913 0.1237	0.1085 0.1245	0.1064	Ave		0.1081			0.0100	15.0		20.0			
4-Chloro-3-methylphenol	0.2780	0.2719 0.2844	0.2626 0.3024	0.2760 0.3065	0.2640	Ave		0.2807			0.2000	5.8		20.0			
2-Methylnaphthalene	0.8495 0.6664	0.6465 0.6929	0.6261 0.7102	0.6109 0.7208	0.6427	Ave		0.6851			0.4000	11.0		20.0			
2,4-Dinitrophenol	0.2065	+++++ 0.2340	0.1385 0.2403	0.1834 0.2449	0.1956	Ave		0.2062			0.0100	18.0		20.0			
1-Methylnaphthalene	0.7413 0.6328	0.6210 0.6600	0.6146 0.6801	0.6149 0.6905	0.6061	Ave		0.6513				7.0		20.0			
1,2,3,5-Tetrachlorobenzene	0.5511	0.5289 0.5811	0.5248 0.5493	0.5109 0.5675	0.5150	Ave		0.5411				4.7		20.0			
Hexachlorocyclopentadiene	0.3376	0.2973 0.3529	0.2376 0.3349	0.3035 0.3446	0.3261	Ave		0.3168			0.0500	12.0		20.0			
2,4,6-Trichlorophenol	0.3422	0.3189 0.3539	0.3019 0.3578	0.3043 0.3595	0.3252	Ave		0.3330			0.2000	7.1		20.0			
2,4,5-Trichlorophenol	0.3592	0.2714 0.3916	0.3503 0.3785	0.3662 0.3880	0.3541	Ave		0.3574			0.2000	11.0		20.0			
1,1'-Biphenyl	1.6006 1.4906	1.3293 1.5415	1.3498 1.5377	1.4117 1.5681	1.3734	Ave		1.4670			0.0100	7.0		20.0			
1,2,3,4 -Tetrachlorobenzene	0.5267	0.4985 0.5480	0.5229 0.5292	0.4951 0.5500	0.5043	Ave		0.5218				4.0		20.0			
2-Chloronaphthalene	1.3707 1.2649	1.1492 1.3251	1.2059 1.2923	1.1935 1.3235	1.1823	Ave		1.2564			0.8000	6.1		20.0			
4,6-Dinitro-2-methylphenol	0.1619	+++++ 0.1730	0.1242 0.1756	0.1347 0.1788	0.1510	Ave		0.1570			0.0100	14.0		20.0			
2-Nitroaniline	0.3826	0.3352 0.3918	0.3572 0.4028	0.3693 0.4079	0.3580	Ave		0.3756			0.0100	6.7		20.0			
Dimethyl phthalate	1.2575	1.1536 1.2914	1.1724 1.3053	1.1700 1.3139	1.1644	Ave		1.2285			0.0100	5.7		20.0			
2,6-Dinitrotoluene	0.3365	0.2620 0.3543	0.3069 0.3604	0.2904 0.3708	0.3227	Ave		0.3255				12.0		20.0			
1,2-Dinitrobenzene	0.1716	0.1485 0.1803	0.1774 0.1798	0.1602 0.1799	0.1578	Ave		0.1694				7.3		20.0			
Acenaphthylene	2.1236 1.8896	1.7649 1.9838	1.7523 2.0019	1.8092 2.0351	1.7657	Ave		1.9029			0.9000	7.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
3-Nitroaniline	0.3544	0.3387 0.3775	0.3135 0.3748	0.3258 0.3857	0.3443	Ave		0.3518			0.0100	7.4		20.0			
Acenaphthene	1.2686 1.1487	1.0978 1.2054	1.0874 1.2001	1.1077 1.2164	1.0782	Ave		1.1567			0.9000	5.9		20.0			
4-Nitrophenol	0.1369	0.1024 0.1604	0.0962 0.1605	0.1404 0.1638	0.1402	Ave		0.1376				19.0		20.0			
2,4-Dinitrotoluene	0.4359	0.3495 0.4589	0.3852 0.4657	0.4164 0.4682	0.4139	Ave		0.4242			0.2000	9.9		20.0			
Dibenzofuran	1.6990 1.5350	1.4119 1.6258	1.4954 1.6253	1.4410 1.6357	1.4476	Ave		1.5463			0.8000	6.7		20.0			
2,3,5,6-Tetrachlorophenol	0.2800	0.2424 0.2936	0.2546 0.2954	0.2608 0.3027	0.2536	Ave		0.2729				8.4		20.0			
Diethyl phthalate	1.2194	1.1255 1.2744	1.1821 1.2948	1.1326 1.3103	1.1380	Ave		1.2097			0.0100	6.3		20.0			
4-Chlorophenyl phenyl ether	0.6530	0.5548 0.6757	0.5990 0.6743	0.6275 0.6969	0.5975	Ave		0.6348			0.4000	7.7		20.0			
4-Nitroaniline	0.3638	0.2968 0.3904	0.3172 0.3877	0.3426 0.3926	0.3572	Ave		0.3560			0.0100	10.0		20.0			
Fluorene	1.5111 1.2963	1.1546 1.3714	1.2120 1.3819	1.2674 1.4019	1.2364	Ave		1.3148			0.9000	8.5		20.0			
N-Nitrosodiphenylamine	0.6570	0.6069 0.6640	0.5679 0.6653	0.5845 0.6837	0.5870	Ave		0.6270			0.0100	7.2		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	0.8219	0.7424 0.8451	0.7294 0.8462	0.7490 0.8631	0.7608	Ave		0.7959				6.7		20.0			
Azobenzene	0.8219	0.7456 0.8451	0.7294 0.8466	0.7548 0.8631	0.7608	Ave		0.7959				6.7		20.0			
4-Bromophenyl phenyl ether	0.2173	0.1812 0.2176	0.2040 0.2170	0.2004 0.2231	0.2099	Ave		0.2088			0.1000	6.5		20.0			
Hexachlorobenzene	0.1940 0.1863	0.1792 0.1889	0.1644 0.1923	0.1760 0.1954	0.1714	Ave		0.1831			0.1000	6.0		20.0			
Atrazine	0.1836	0.1827 0.1709	0.1725 0.1726	0.1779 0.1646	0.1745	Ave		0.1749			0.0100	3.6		20.0			
Pentachlorophenol	0.1317	0.0963 0.1383	0.1043 0.1379	0.1210 0.1443	0.1272	Ave		0.1251			0.0500	14.0		20.0			
Phenanthrene	1.3269 1.1656	1.0822 1.2023	1.0646 1.2136	1.0385 1.2411	1.0949	Ave		1.1588			0.7000	8.3		20.0			
Anthracene	1.2679 1.2305	1.1050 1.2626	1.1071 1.2760	1.1434 1.3014	1.1489	Ave		1.2048			0.7000	6.5		20.0			
Carbazole	1.1386	1.0352 1.1892	1.1018 1.1888	1.0576 1.2136	1.0800	Ave		1.1256			0.0100	5.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Di-n-butyl phthalate	1.4260	1.2513 1.4546	1.2967 1.5232	1.3027 1.5561	1.3219	Ave		1.3916			0.0100	8.2		20.0			
Fluoranthene	1.2618 1.2036	1.0692 1.2519	1.0914 1.2835	1.0970 1.2990	1.1424	Ave		1.1889			0.6000	7.6		20.0			
Benzidine	0.8967	0.5991 0.9428	0.7101 0.9467	0.7877 0.8895	0.8398	Ave		0.8265				15.0		20.0			
Pyrene	1.6234 1.5151	1.3757 1.5985	1.4248 1.5824	1.4359 1.5893	1.4430	Ave		1.5098			0.6000	6.1		20.0			
Butyl benzyl phthalate	0.7372	0.6604 0.7629	0.6972 0.7800	0.6791 0.7929	0.6888	Ave		0.7248			0.0100	6.9		20.0			
3,3'-Dimethoxybenzidine	0.3657	0.2651 0.3719	0.3041 0.3966	0.3319 0.3815	0.3321	Ave		0.3436				13.0		20.0			
Bis(2-ethylhexyl) phthalate	1.0437	0.9151 1.0853	0.9744 1.1236	0.9521 1.1225	0.9886	Ave		1.0257			0.0100	7.8		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.2421	0.2136 0.2557	0.2141 0.2542	0.2276 0.2535	0.2309	Ave		0.2365				7.4		20.0			
3,3'-Dichlorobenzidine	0.4949	0.4212 0.5193	0.4528 0.5194	0.4761 0.5175	0.4662	Ave		0.4834			0.0100	7.4		20.0			
Benzo[a]anthracene	1.5240 1.3002	1.2124 1.3706	1.2613 1.3909	1.2513 1.3514	1.2177	Ave		1.3200			0.8000	7.6		20.0			
Chrysene	1.3481 1.1927	1.0893 1.2523	1.1720 1.2548	1.1316 1.2695	1.1429	Ave		1.2059			0.7000	6.8		20.0			
Di-n-octyl phthalate	2.4641	1.9599 2.4614	2.0026 2.5046	2.1302 2.5585	2.1712	Ave		2.2816			0.0100	11.0		20.0			
Benzo[b]fluoranthene	1.8902 1.7336	1.5916 1.8030	1.5360 1.6714	1.4475 1.7032	1.4914	Ave		1.6520			0.7000	8.9		20.0			
Benzo[k]fluoranthene	1.9194 1.6731	1.5271 1.6156	1.5589 1.7461	1.6421 1.7582	1.5905	Ave		1.6701			0.7000	7.3		20.0			
Benzo[a]pyrene	1.7881 1.5540	1.3265 1.5863	1.3993 1.5679	1.4289 1.5916	1.4233	Ave		1.5184			0.7000	9.1		20.0			
Indeno[1,2,3-cd]pyrene	1.7216 1.6482	1.4481 1.6636	1.4774 1.6591	1.5081 1.6792	1.5123	Ave		1.5909			0.5000	6.5		20.0			
Dibenzo(a,h)anthracene	1.4163 1.3976	1.2084 1.4077	1.2692 1.4108	1.2797 1.4486	1.2776	Ave		1.3462			0.4000	6.4		20.0			
Benzo[g,h,i]perylene	1.3167 1.3610	1.1949 1.3838	1.2769 1.3688	1.2434 1.4020	1.2535	Ave		1.3112			0.5000	5.5		20.0			
2-Fluorophenol (Surr)	1.3276	1.2657 1.3381	1.2857 1.3421	1.2753 1.3766	1.2655	Ave		1.3096				3.2		20.0			
Phenol-d5 (Surr)	1.6639	1.5486 1.6909	1.5495 1.6865	1.5830 1.7453	1.5895	Ave		1.6322				4.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Nitrobenzene-d5 (Surr)	0.4112 0.4054	0.3990 0.4136	0.3849 0.4086	0.3878 0.4175	0.3824	Ave		0.4011				3.3		20.0			
2-Fluorobiphenyl (Surr)	1.6989 1.4659	1.3875 1.5515	1.4089 1.5115	1.3907 1.5527	1.3930	Ave		1.4845				7.1		20.0			
2,4,6-Tribromophenol (Surr)	 0.1225	0.0767 0.1284	0.1171 0.1350	0.1200 0.1340	0.1094	Ave		0.1179				16.0		20.0			
Terphenyl-d14 (Surr)	1.0354 0.8691	0.7926 0.9065	0.8646 0.9086	0.8104 0.9178	0.8340	Ave		0.8821				8.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-50462/6	20711006.D
Level 2	STD2 240-50462/5	20711005.D
Level 3	STD3 240-50462/4	20711004.D
Level 4	STD4 240-50462/3	20711003.D
Level 5	STD5 240-50462/2	20711002.D
Level 6	STD6 240-50462/10	20711010.D
Level 7	STD7 240-50462/9	20711009.D
Level 8	STD8 240-50462/8	20711008.D
Level 9	STD9 240-50462/7	20711007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	316577	18123 533161	42463 601080	65233 505185	155939	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	509528	24745 854489	56872 916078	100504 948776	254366	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	841560	37518 1468015	82616 1532680	161741 1595458	413349	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Malononitrile	DCB	Ave	1156974	53323 1779050	124683 1747360	226138 +++++	579902	10.0	0.500 15.0	1.00 20.0	2.00 +++++	5.00
Ethyl methacrylate	DCB	Ave	685332	32449 1123129	71023 1085526	128673 1262396	326748	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Chloropropionitrile	DCB	Ave	827819	36443 1362255	81421 1367551	157845 1348301	398484	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	9219 596317	49422 679049	80076 +++++	134906 +++++	339743	0.100 10.0	0.500 15.0	1.00 +++++	2.00 +++++	5.00
Phenol	DCB	Ave	1045058	46695 1759951	104466 1849224	195001 1941363	500890	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1423305	55871 2172726	133334 2349828	238720 2412171	614238	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	960630	47306 1652470	101049 1821563	179691 1895814	475062	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	898378	39783 1444745	89129 1559165	164725 1640441	421957	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	1053694	48793 1686543	112632 1827787	190782 1891822	498471	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	975575	45518 1580115	100380 1684257	178837 1741222	456709	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzyl alcohol	DCB	Ave	536631	21150 890489	49484 994073	108215 1020276	269543	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,2-Dichlorobenzene	DCB	Ave	1017116	44631 1596881	102863 1737978	180647 1812983	472855	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCB	Ave	794792	32811 1285166	77902 1412967	147510 1462242	372971	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Qua	1128993	+++++ 1720409	45619 2133227	143606 2147481	480344	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	1831718	83932 2903976	177501 3195813	318244 3336869	837566	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3 & 4 Methylphenol	DCB	Ave	829374	38097 1357090	84430 1503923	157316 1561558	387732	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodi-n-propylamine	DCB	Ave	588597	26121 919283	56749 1059704	108118 1098252	276678	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCB	Ave	1121344	47551 1796287	109547 2008345	202073 2084306	523143	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCB	Ave	356104	15321 574563	34642 623710	64514 633142	167082	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	956830	41712 1530771	95683 1708438	172635 1752139	449396	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Toluene diamine	NPT	Ave	469475	26524 530957	60701 +++++	110703 +++++	240087	10.0	0.500 15.0	1.00 +++++	2.00 +++++	5.00
Isophorone	NPT	Ave	1548156	66470 2466418	151282 2821503	268962 2921804	714478	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	834097	36267 1339135	79561 1495540	151484 1541691	394255	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	502299	22026 822035	46237 910879	83922 933588	232288	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3,5-Trichlorobenzene	NPT	Ave	813861	39269 1305425	80410 1465088	146388 1483378	381046	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethoxy)methane	NPT	Ave	1081871	46923 1726178	103965 1978319	191112 2021347	495914	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	668915	29779 1074536	63832 1218674	120791 1252791	312969	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	831764	38328 1314756	80887 1452970	150272 1505604	377347	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	26980 2545685	112775 4097255	239421 4517524	448228 4802781	1157607	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	1056584	41618 1891233	102589 2118477	197732 2199918	520681	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	373308	17512 582374	36632 655961	65669 665525	171001	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,3-Trichlorobenzene	NPT	Ave	771853	35641 1225985	77892 1365069	137255 1389315	354185	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Caprolactam	NPT	Ave	286106	9578 459898	23286 535633	51055 549343	129944	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloro-3-methylphenol	NPT	Ave	701449	32867 1112108	66979 1309121	129931 1352042	322324	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylnaphthalene	NPT	Ave	20682 1681401	78156 2709321	159693 3074897	287534 3179943	784635	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrophenol	ANT	Ave	554462	+++++ 962687	38520 1174373	92240 1191104	256748	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
1-Methylnaphthalene	NPT	Ave	18048 1596632	75073 2580721	156777 2944392	289429 3046144	739929	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,3,5-Tetrachlorobenzene	ANT	Ave	739925	34380 1195310	72957 1342217	128481 1380184	337987	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorocyclopentadiene	ANT	Ave	453309	19325 725965	33035 818466	76331 838163	214004	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Trichlorophenol	ANT	Ave	459451	20728 728013	41968 874370	76520 874346	213469	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,5-Trichlorophenol	ANT	Ave	482271	17643 805451	48699 924891	92086 943654	232389	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,1'-Biphenyl	ANT	Ave	21073 2001372	86407 3170782	187666 3757715	355000 3813681	901380	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,3,4 -Tetrachlorobenzene	ANT	Ave	707192	32404 1127202	72700 1293163	124499 1337660	330997	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chloronaphthalene	ANT	Ave	18047 1698414	74696 2725603	167656 3158021	300130 3218922	775996	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,6-Dinitro-2-methylphenol	PHN	Ave	324743	+++++ 542179	26018 666898	51309 667241	148792	10.0	+++++ 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitroaniline	ANT	Ave	513772	21790 805937	49657 984362	92859 992042	234940	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dimethyl phthalate	ANT	Ave	1688390	74984 2656242	162993 3189879	294205 3195591	764205	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,6-Dinitrotoluene	ANT	Ave	451808	17032 728686	42664 880780	73036 901741	211789	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dinitrobenzene	ANT	Ave	230359	9651 370862	24670 439382	40285 437517	103581	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthylene	ANT	Ave	27959 2537108	114718 4080487	243623 4892186	454945 4949607	1158900	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Nitroaniline	ANT	Ave	475787	22013 776438	43589 915857	81917 937959	225960	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acenaphthene	ANT	Ave	16703 1542365	71359 2479479	151181 2932670	278552 2958406	707679	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitrophenol	ANT	Ave	183859	6655 329849	13376 392144	35306 398290	91990	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
2,4-Dinitrotoluene	ANT	Ave	585328	22720 943872	53551 1137933	104707 1138644	271630	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	22369 2060952	91777 3344129	207896 3971734	362369 3978024	950129	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,5,6-Tetrachlorophenol	ANT	Ave	376017	15753 604013	35403 721858	65585 736108	166467	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	1637257	73161 2621447	164352 3164125	284821 3186756	746884	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chlorophenyl phenyl ether	ANT	Ave	876820	36065 1389870	83273 1647782	157805 1694820	392129	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	488454	19292 802992	44094 947544	86141 954873	234462	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluorene	ANT	Ave	19895 1740570	75050 2820920	168509 3377103	318709 3409563	811508	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodiphenylamine	PHN	Ave	1317552	58739 2081499	118976 2526017	222668 2551821	578429	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	1648187	71855 2649086	152813 3213160	285342 3221572	749680	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	1648187	72162 2649086	152813 3214469	287539 3221572	749680	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	435715	17535 682083	42743 823902	76343 832637	206798	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Ave	3852 373551	17347 592098	34434 730148	67056 729484	168892	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	368261	17684 535667	36137 655272	67786 614351	171946	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pentachlorophenol	PHN	Ave	528375	18648 867352	43688 1046994	92214 1077295	250674	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	26340 2337482	104742 3768773	223019 4607936	395627 4632430	1078850	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	25170 2467582	106955 3957988	231925 4844879	435565 4857509	1132036	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	2283335	100193 3727672	230810 4514001	402894 4529698	1064171	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	2859531	121111 4559835	271647 5783345	496261 5808339	1302485	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	25048 2413589	103486 3924332	228642 4873242	417898 4848772	1125598	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Ave	1473808	47441 2386323	117686 2991250	242125 2800910	675274	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyrene	CRY	Ave	25807 2490234	108937 4046144	236152 4999849	441357 5004564	1160284	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Butyl benzyl phthalate	CRY	Ave	1211715	52297 1931058	115549 2464431	208723 2496753	553819	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dimethoxybenzidine	CRY	Ave	600999	20994 941460	50405 1253260	102017 1201334	267059	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-ethylhexyl) phthalate	CRY	Ave	1715458	72464 2747131	161494 3550103	292654 3534562	794930	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,4'-Methylene bis(2-chloroaniline)	CRY	Ave	397892	16911 647187	35490 803199	69955 798383	185672	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	813409	33353 1314457	75049 1641220	146336 1629506	374829	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]anthracene	CRY	Ave	24226 2136911	96006 3469167	209056 4394890	384626 4255378	979138	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	21430 1960286	86257 3169888	194258 3964620	347815 3997752	919005	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-octyl phthalate	PRY	Ave	2947870	113933 4731386	258998 6056399	495613 6072612	1335249	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	22954 2073879	92527 3465745	198652 4041645	336779 4042530	917231	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	23309 2001608	88777 3105528	201621 4222381	382053 4172952	978169	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	21714 1859045	77116 3049240	180976 3791378	332459 3777568	875348	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	20907 1971792	84184 3197800	191079 4012006	350885 3985486	930033	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzo(a,h)anthracene	PRY	Ave	17199 1671980	70249 2706010	164146 3411553	297734 3438151	785688	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	15990 1628220	69462 2660034	165145 3309884	289289 3327506	770920	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCB	Ave	802640	37991 1283378	82049 1399414	146242 1441851	375604	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCB	Ave	1005917	46482 1621687	98884 1758603	181527 1827996	471783	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	10011 1022972	48241 1617152	98176 1768980	182532 1841619	466763	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	22368 1968261	90188 3191443	195876 3693619	349710 3776335	914278	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	164420	4987 264199	16279 329989	30179 326017	71804	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	16459 1428362	62765 2294438	143303 2870816	249081 2890153	670580	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-50462/11 Calibration Date: 07/11/2012 14:10

Instrument ID: A4HP7 Calib Start Date: 07/11/2012 11:20

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/11/2012 13:51

Lab File ID: 20711011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5627	0.4958		8.81	10.0	-11.9	30.0
N-Nitrosodimethylamine	Ave	0.8709	0.8158		9.37	10.0	-6.3	30.0
Pyridine	Ave	1.408	1.372		9.74	10.0	-2.6	30.0
Ethyl methacrylate	Ave	1.121	1.086		9.69	10.0	-3.1	30.0
3-Chloropropionitrile	Ave	1.325	1.328		10.0	10.0	0.3	30.0
Malononitrile	Ave	1.872	1.897		10.1	10.0	1.3	30.0
Benzaldehyde	Ave	1.199	0.9738	0.0100	8.12	10.0	-18.8	30.0
Phenol	Ave	1.721	1.710	0.8000	9.93	10.0	-0.7	30.0
Aniline	Ave	2.160	2.312		10.7	10.0	7.1	30.0
Bis(2-chloroethyl)ether	Ave	1.650	1.594	0.7000	9.66	10.0	-3.4	30.0
2-Chlorophenol	Ave	1.454	1.473	0.8000	10.1	10.0	1.3	30.0
1,3-Dichlorobenzene	Ave	1.724	1.728		10.0	10.0	0.2	30.0
1,4-Dichlorobenzene	Ave	1.591	1.590		10.0	10.0	-0.0	30.0
Benzyl alcohol	Ave	0.8844	0.8964		10.1	10.0	1.4	30.0
1,2-Dichlorobenzene	Ave	1.627	1.650		10.1	10.0	1.4	30.0
2-Methylphenol	Ave	1.283	1.308	0.7000	10.2	10.0	1.9	30.0
2,2'-oxybis[1-chloropropane]	Ave	2.935	2.936		10.0	10.0	0.0	30.0
3 & 4 Methylphenol	Ave	1.374	1.388		10.1	10.0	1.0	30.0
N-Nitrosodi-n-propylamine	Ave	0.9539	0.9603	0.5000	10.1	10.0	0.7	30.0
Acetophenone	Ave	1.809	1.816	0.0100	10.0	10.0	0.4	30.0
Hexachloroethane	Ave	0.5712	0.5858	0.3000	10.3	10.0	2.6	30.0
Nitrobenzene	Ave	0.3772	0.3933	0.2000	10.4	10.0	4.3	30.0
Isophorone	Ave	0.6072	0.6396	0.4000	10.5	10.0	5.3	30.0
2,4-Dimethylphenol	Ave	0.3281	0.3462	0.2000	10.6	10.0	5.5	30.0
2-Nitrophenol	Ave	0.1954	0.2093	0.1000	10.7	10.0	7.1	30.0
1,3,5-Trichlorobenzene	Ave	0.3243	0.3354		10.3	10.0	3.4	30.0
Bis(2-chloroethoxy)methane	Ave	0.4242	0.4492	0.3000	10.6	10.0	5.9	30.0
Benzoic acid	Qua		0.2407		21.8	20.0	9.0	30.0
2,4-Dichlorophenol	Ave	0.2644	0.2750	0.2000	10.4	10.0	4.0	30.0
1,2,4-Trichlorobenzene	Ave	0.3257	0.3370		10.3	10.0	3.5	30.0
Naphthalene	Ave	1.008	1.031	0.7000	10.2	10.0	2.3	30.0
4-Chloroaniline	Ave	0.4354	0.4678	0.0100	10.7	10.0	7.4	30.0
Hexachlorobutadiene	Ave	0.1459	0.1533	0.0100	10.5	10.0	5.1	30.0
1,2,3-Trichlorobenzene	Ave	0.3039	0.3133		10.3	10.0	3.1	30.0
Caprolactam	Ave	0.1081	0.1222	0.0100	11.3	10.0	13.0	30.0
4-Chloro-3-methylphenol	Ave	0.2807	0.2918	0.2000	10.4	10.0	3.9	30.0
2-Methylnaphthalene	Ave	0.6851	0.7028	0.4000	10.3	10.0	2.6	30.0
1-Methylnaphthalene	Ave	0.6513	0.6608		10.1	10.0	1.5	30.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5411	0.5587		10.3	10.0	3.3	30.0
Hexachlorocyclopentadiene	Ave	0.3168	0.3336	0.0500	10.5	10.0	5.3	30.0
2,4,6-Trichlorophenol	Ave	0.3330	0.3515	0.2000	10.6	10.0	5.6	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-50462/11 Calibration Date: 07/11/2012 14:10

Instrument ID: A4HP7 Calib Start Date: 07/11/2012 11:20

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/11/2012 13:51

Lab File ID: 20711011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3574	0.3761	0.2000	10.5	10.0	5.2	30.0
2,4-Toluene diamine	Ave	0.2018	0.1955		9.69	10.0	-3.1	30.0
1,1'-Biphenyl	Ave	1.467	1.503	0.0100	10.2	10.0	2.5	30.0
1,2,3,4 -Tetrachlorobenzene	Ave	0.5218	0.5405		10.4	10.0	3.6	30.0
2-Chloronaphthalene	Ave	1.256	1.295	0.8000	10.3	10.0	3.1	30.0
2-Nitroaniline	Ave	0.3756	0.4013	0.0100	10.7	10.0	6.8	30.0
Dimethyl phthalate	Ave	1.229	1.310	0.0100	10.7	10.0	6.6	30.0
2,6-Dinitrotoluene	Ave	0.3255	0.3615		11.1	10.0	11.1	30.0
1,2-Dinitrobenzene	Ave	0.1694	0.1828		10.8	10.0	7.9	30.0
Acenaphthylene	Ave	1.903	1.974	0.9000	10.4	10.0	3.7	30.0
3-Nitroaniline	Ave	0.3518	0.3858	0.0100	11.0	10.0	9.7	30.0
2,4-Dinitrophenol	Ave	0.2062	0.2186	0.0100	21.2	20.0	6.0	30.0
Acenaphthene	Ave	1.157	1.180	0.9000	10.2	10.0	2.0	30.0
4-Nitrophenol	Ave	0.1376	0.1497		10.9	10.0	8.8	30.0
2,4-Dinitrotoluene	Ave	0.4242	0.4876	0.2000	11.5	10.0	14.9	30.0
Dibenzofuran	Ave	1.546	1.631	0.8000	10.5	10.0	5.5	30.0
2,3,5,6-Tetrachlorophenol	Ave	0.2729	0.2905		10.6	10.0	6.4	30.0
Diethyl phthalate	Ave	1.210	1.313	0.0100	10.9	10.0	8.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.6348	0.6860	0.4000	10.8	10.0	8.1	30.0
4-Nitroaniline	Ave	0.3560	0.3983	0.0100	11.2	10.0	11.9	30.0
Fluorene	Ave	1.315	1.373	0.9000	10.4	10.0	4.4	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1570	0.1640	0.0100	10.4	10.0	4.5	30.0
N-Nitrosodiphenylamine	Ave	0.6270	0.6630	0.0100	10.6	10.0	5.7	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7959	0.8241		10.4	10.0	3.5	30.0
Azobenzene	Ave	0.7959	0.8246		10.4	10.0	3.6	30.0
4-Bromophenyl phenyl ether	Ave	0.2088	0.2137	0.1000	10.2	10.0	2.4	30.0
Hexachlorobenzene	Ave	0.1831	0.1872	0.1000	10.2	10.0	2.2	30.0
Atrazine	Ave	0.1749	0.1799	0.0100	10.3	10.0	2.8	30.0
Pentachlorophenol	Ave	0.1251	0.1345	0.0500	21.5	20.0	7.5	30.0
Phenanthrene	Ave	1.159	1.202	0.7000	10.4	10.0	3.7	30.0
Anthracene	Ave	1.205	1.265	0.7000	10.5	10.0	5.0	30.0
Carbazole	Ave	1.126	1.196	0.0100	10.6	10.0	6.2	30.0
Di-n-butyl phthalate	Ave	1.392	1.485	0.0100	10.7	10.0	6.7	30.0
Fluoranthene	Ave	1.189	1.262	0.6000	10.6	10.0	6.2	30.0
Benzidine	Ave	0.8265	0.9151		11.1	10.0	10.7	30.0
Pyrene	Ave	1.510	1.555	0.6000	10.3	10.0	3.0	30.0
Butyl benzyl phthalate	Ave	0.7248	0.7620	0.0100	10.5	10.0	5.1	30.0
3,3'-Dimethoxybenzidine	Ave	0.3436	0.3801		11.1	10.0	10.6	30.0
Bis(2-ethylhexyl) phthalate	Ave	1.026	1.065	0.0100	10.4	10.0	3.8	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2365	0.2471		10.5	10.0	4.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-50462/11 Calibration Date: 07/11/2012 14:10

Instrument ID: A4HP7 Calib Start Date: 07/11/2012 11:20

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/11/2012 13:51

Lab File ID: 20711011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3,3'-Dichlorobenzidine	Ave	0.4834	0.5152	0.0100	10.7	10.0	6.6	30.0
Benzo[a]anthracene	Ave	1.320	1.359	0.8000	10.3	10.0	2.9	30.0
Chrysene	Ave	1.206	1.219	0.7000	10.1	10.0	1.1	30.0
Di-n-octyl phthalate	Ave	2.282	2.390	0.0100	10.5	10.0	4.8	30.0
Benzo[b]fluoranthene	Ave	1.652	1.612	0.7000	9.76	10.0	-2.4	30.0
Benzo[k]fluoranthene	Ave	1.670	1.739	0.7000	10.4	10.0	4.1	30.0
Benzo[a]pyrene	Ave	1.518	1.540	0.7000	10.1	10.0	1.4	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.591	1.611	0.5000	10.1	10.0	1.3	30.0
Dibenzo(a,h)anthracene	Ave	1.346	1.388	0.4000	10.3	10.0	3.1	30.0
Benzo[g,h,i]perylene	Ave	1.311	1.321	0.5000	10.1	10.0	0.7	30.0
2-Fluorophenol (Surr)	Ave	1.310	1.317		10.1	10.0	0.5	30.0
Phenol-d5 (Surr)	Ave	1.632	1.625		9.96	10.0	-0.4	30.0
Nitrobenzene-d5 (Surr)	Ave	0.4011	0.4149		10.3	10.0	3.4	30.0
2-Fluorobiphenyl (Surr)	Ave	1.485	1.491		10.0	10.0	0.4	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1179	0.1319		11.2	10.0	11.9	30.0
Terphenyl-d14 (Surr)	Ave	0.8821	0.9013		10.2	10.0	2.2	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: 20720001.D DFTPP Injection Date: 07/20/2012

Instrument ID: A4HP7 DFTPP Injection Time: 09:26

Analysis Batch No.: 51476

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	79.0	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	53.7	
70	Less than 2.0% of mass 69	0.4	(0.7)1
127	25.0 - 75.0% of mass 198	61.0	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.3	
275	10.0- 30.0% of mass 198	24.5	
365	Greater than 0.75% of mass 198	2.4	
441	Present, but less than mass 443	11.1	
442	40.0 - 110.0% of mass 198	68.8	
443	15.0 - 24.0% of mass 442	13.8	(20.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-51476/2	20720002.D	07/20/2012	09:45
	MB 240-51193/23-A	20720004.D	07/20/2012	10:27
	LCS 240-51193/24-A	20720005.D	07/20/2012	10:46
MT-SS19-8-10	240-13043-3	20720015.D	07/20/2012	13:56
MT-SS20-0-2	240-13043-4	20720016.D	07/20/2012	14:15
MT-SS21-0-2	240-13043-6	20720017.D	07/20/2012	14:34
MT-SS21-8-10	240-13043-7	20720018.D	07/20/2012	14:53
MT-SS20-8-10	240-13043-5	20720019.D	07/20/2012	15:12

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51476/2 Calibration Date: 07/20/2012 09:45

Instrument ID: A4HP7 Calib Start Date: 07/11/2012 11:20

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/11/2012 13:51

Lab File ID: 20720002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5627	0.6275		11.2	10.0	11.5	20.0
N-Nitrosodimethylamine	Ave	0.8709	0.9341		10.7	10.0	7.3	20.0
Pyridine	Ave	1.408	1.618		11.5	10.0	14.9	20.0
Ethyl methacrylate	Ave	1.121	1.270		11.3	10.0	13.3	20.0
3-Chloropropionitrile	Ave	1.325	1.487		11.2	10.0	12.3	20.0
Malononitrile	Ave	1.872	2.123		11.3	10.0	13.5	20.0
Benzaldehyde	Ave	1.199	1.090	0.0100		10.0	-9.1	20.0
Phenol	Ave	1.721	1.828	0.8000	10.6	10.0	6.2	20.0
Aniline	Ave	2.160	2.394		11.1	10.0	10.8	20.0
Bis(2-chloroethyl)ether	Ave	1.650	1.710	0.7000	10.4	10.0	3.7	20.0
2-Chlorophenol	Ave	1.454	1.509	0.8000	10.4	10.0	3.8	20.0
1,3-Dichlorobenzene	Ave	1.724	1.812		10.5	10.0	5.1	20.0
1,4-Dichlorobenzene	Ave	1.591	1.667		10.5	10.0	4.8	20.0
Benzyl alcohol	Ave	0.8844	0.8397		9.49	10.0	-5.1	20.0
1,2-Dichlorobenzene	Ave	1.627	1.712		10.5	10.0	5.3	20.0
2-Methylphenol	Ave	1.283	1.387	0.7000	10.8	10.0	8.1	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.935	3.243		11.0	10.0	10.5	20.0
3 & 4 Methylphenol	Ave	1.374	1.402		10.2	10.0	2.0	20.0
N-Nitrosodi-n-propylamine	Ave	0.9539	1.006	0.5000	10.5	10.0	5.5	20.0
Acetophenone	Ave	1.809	1.918	0.0100	10.6	10.0	6.0	20.0
Hexachloroethane	Ave	0.5712	0.6227	0.3000	10.9	10.0	9.0	20.0
Nitrobenzene	Ave	0.3772	0.4095	0.2000	10.9	10.0	8.6	20.0
Isophorone	Ave	0.6072	0.6442	0.4000	10.6	10.0	6.1	20.0
2,4-Dimethylphenol	Ave	0.3281	0.3565	0.2000	10.9	10.0	8.7	20.0
2-Nitrophenol	Ave	0.1954	0.2138	0.1000	10.9	10.0	9.4	20.0
1,3,5-Trichlorobenzene	Ave	0.3243	0.3471		10.7	10.0	7.0	20.0
Benzoic acid	Qua		0.1833		17.1	20.0	-14.5	20.0
Bis(2-chloroethoxy)methane	Ave	0.4242	0.4605	0.3000	10.9	10.0	8.6	20.0
2,4-Dichlorophenol	Ave	0.2644	0.2759	0.2000	10.4	10.0	4.4	20.0
1,2,4-Trichlorobenzene	Ave	0.3257	0.3363		10.3	10.0	3.3	20.0
Naphthalene	Ave	1.008	1.055	0.7000	10.5	10.0	4.7	20.0
4-Chloroaniline	Ave	0.4354	0.4636	0.0100	10.6	10.0	6.5	20.0
Hexachlorobutadiene	Ave	0.1459	0.1471	0.0100	10.1	10.0	0.8	20.0
1,2,3-Trichlorobenzene	Ave	0.3039	0.3141		10.3	10.0	3.4	20.0
Caprolactam	Ave	0.1081	0.1223	0.0100	11.3	10.0	13.1	20.0
4-Chloro-3-methylphenol	Ave	0.2807	0.2946	0.2000	10.5	10.0	4.9	20.0
2-Methylnaphthalene	Ave	0.6851	0.6803	0.4000	9.93	10.0	-0.7	20.0
1-Methylnaphthalene	Ave	0.6513	0.6568		10.1	10.0	0.9	20.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5411	0.5603		10.4	10.0	3.5	20.0
Hexachlorocyclopentadiene	Ave	0.3168	0.3154	0.0500	9.96	10.0	-0.4	20.0
2,4,6-Trichlorophenol	Ave	0.3330	0.3370	0.2000	10.1	10.0	1.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51476/2 Calibration Date: 07/20/2012 09:45

Instrument ID: A4HP7 Calib Start Date: 07/11/2012 11:20

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/11/2012 13:51

Lab File ID: 20720002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3574	0.3511	0.2000	9.82	10.0	-1.8	20.0
1,1'-Biphenyl	Ave	1.467	1.512	0.0100	10.3	10.0	3.1	20.0
1,2,3,4 -Tetrachlorobenzene	Ave	0.5218	0.5320		10.2	10.0	2.0	20.0
2-Chloronaphthalene	Ave	1.256	1.288	0.8000	10.3	10.0	2.5	20.0
2-Nitroaniline	Ave	0.3756	0.3976	0.0100	10.6	10.0	5.9	20.0
Dimethyl phthalate	Ave	1.229	1.232	0.0100	10.0	10.0	0.3	20.0
2,6-Dinitrotoluene	Ave	0.3255	0.3370		10.4	10.0	3.5	20.0
1,2-Dinitrobenzene	Ave	0.1694	0.1721		10.2	10.0	1.6	20.0
Acenaphthylene	Ave	1.903	1.949	0.9000	10.2	10.0	2.4	20.0
3-Nitroaniline	Ave	0.3518	0.3783	0.0100	10.8	10.0	7.5	20.0
2,4-Dinitrophenol	Ave	0.2062	0.1852	0.0100	18.0	20.0	-10.2	20.0
Acenaphthene	Ave	1.157	1.191	0.9000	10.3	10.0	3.0	20.0
4-Nitrophenol	Ave	0.1376	0.1428		10.4	10.0	3.8	20.0
2,4-Dinitrotoluene	Ave	0.4242	0.4528	0.2000	10.7	10.0	6.7	20.0
Dibenzofuran	Ave	1.546	1.597	0.8000	10.3	10.0	3.3	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.2729	0.2524		9.25	10.0	-7.5	20.0
Diethyl phthalate	Ave	1.210	1.235	0.0100	10.2	10.0	2.1	20.0
4-Chlorophenyl phenyl ether	Ave	0.6348	0.6506	0.4000	10.2	10.0	2.5	20.0
4-Nitroaniline	Ave	0.3560	0.3916	0.0100	11.0	10.0	10.0	20.0
Fluorene	Ave	1.315	1.330	0.9000	10.1	10.0	1.2	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1570	0.1582	0.0100	10.1	10.0	0.7	20.0
N-Nitrosodiphenylamine	Ave	0.6270	0.6769	0.0100	10.8	10.0	8.0	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.7959	0.8719		11.0	10.0	9.5	20.0
Azobenzene	Ave	0.7959	0.8719		11.0	10.0	9.5	20.0
4-Bromophenyl phenyl ether	Ave	0.2088	0.2222	0.1000	10.6	10.0	6.4	20.0
Hexachlorobenzene	Ave	0.1831	0.1906	0.1000	10.4	10.0	4.1	20.0
Atrazine	Ave	0.1749	0.1952	0.0100	11.2	10.0	11.6	20.0
Pentachlorophenol	Ave	0.1251	0.1134	0.0500	18.1	20.0	-9.4	20.0
Phenanthrene	Ave	1.159	1.189	0.7000	10.3	10.0	2.6	20.0
Anthracene	Ave	1.205	1.240	0.7000	10.3	10.0	2.9	20.0
Carbazole	Ave	1.126	1.186	0.0100	10.5	10.0	5.3	20.0
Di-n-butyl phthalate	Ave	1.392	1.457	0.0100	10.5	10.0	4.7	20.0
Fluoranthene	Ave	1.189	1.211	0.6000	10.2	10.0	1.9	20.0
Benzidine	Ave	0.8265	0.9592		11.6	10.0	16.0	20.0
Pyrene	Ave	1.510	1.574	0.6000	10.4	10.0	4.3	20.0
Butyl benzyl phthalate	Ave	0.7248	0.7812	0.0100	10.8	10.0	7.8	20.0
3,3'-Dimethoxybenzidine	Ave	0.3436	0.3752		10.9	10.0	9.2	20.0
Bis(2-ethylhexyl) phthalate	Ave	1.026	1.086	0.0100	10.6	10.0	5.8	20.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2365	0.2463		10.4	10.0	4.2	20.0
3,3'-Dichlorobenzidine	Ave	0.4834	0.5218	0.0100	10.8	10.0	7.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51476/2 Calibration Date: 07/20/2012 09:45

Instrument ID: A4HP7 Calib Start Date: 07/11/2012 11:20

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/11/2012 13:51

Lab File ID: 20720002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[a]anthracene	Ave	1.320	1.341	0.8000	10.2	10.0	1.6	20.0
Chrysene	Ave	1.206	1.238	0.7000	10.3	10.0	2.7	20.0
Di-n-octyl phthalate	Ave	2.282	2.483	0.0100	10.9	10.0	8.8	20.0
Benzo[b]fluoranthene	Ave	1.652	1.841	0.7000	11.1	10.0	11.4	20.0
Benzo[k]fluoranthene	Ave	1.670	1.693	0.7000	10.1	10.0	1.4	20.0
Benzo[a]pyrene	Ave	1.518	1.600	0.7000	10.5	10.0	5.4	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.591	1.731	0.5000	10.9	10.0	8.8	20.0
Dibenzo(a,h)anthracene	Ave	1.346	1.439	0.4000	10.7	10.0	6.9	20.0
Benzo[g,h,i]perylene	Ave	1.311	1.419	0.5000	10.8	10.0	8.2	20.0
2,4-Toluene diamine	Ave	0.2018			0.0200	10.0		20.0
2-Fluorophenol (Surr)	Ave	1.310	1.381		10.5	10.0	5.5	20.0
Phenol-d5 (Surr)	Ave	1.632	1.736		10.6	10.0	6.4	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4011	0.4099		10.2	10.0	2.2	20.0
2-Fluorobiphenyl (Surr)	Ave	1.485	1.528		10.3	10.0	3.0	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1179	0.1147		9.73	10.0	-2.7	20.0
Terphenyl-d14 (Surr)	Ave	0.8821	0.9196		10.4	10.0	4.3	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: 20720004.D Lab Sample ID: MB 240-51193/23-A

Matrix: Solid Date Extracted: 07/18/2012 11:30

Instrument ID: A4HP7 Date Analyzed: 07/20/2012 10:27

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-51193/24-A	20720005.D	07/20/2012 10:46
MT-SS19-8-10	240-13043-3	20720015.D	07/20/2012 13:56
MT-SS20-0-2	240-13043-4	20720016.D	07/20/2012 14:15
MT-SS21-0-2	240-13043-6	20720017.D	07/20/2012 14:34
MT-SS21-8-10	240-13043-7	20720018.D	07/20/2012 14:53
MT-SS20-8-10	240-13043-5	20720019.D	07/20/2012 15:12

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51193/23-A

Matrix: Solid | Lab File ID: 20720004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.00(g) | Date Analyzed: 07/20/2012 10:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	50	U	50	27
123-91-1	1,4-Dioxane	100	U	100	22
88-06-2	2,4,6-Trichlorophenol	150	U	150	80
95-95-4	2,4,5-Trichlorophenol	150	U	150	25
120-83-2	2,4-Dichlorophenol	150	U	150	20
105-67-9	2,4-Dimethylphenol	150	U	150	20
51-28-5	2,4-Dinitrophenol	330	U	330	80
121-14-2	2,4-Dinitrotoluene	200	U	200	27
91-58-7	2-Chloronaphthalene	50	U	50	3.3
95-57-8	2-Chlorophenol	50	U	50	27
91-57-6	2-Methylnaphthalene	6.7	U	6.7	3.3
95-48-7	2-Methylphenol	200	U	200	80
88-74-4	2-Nitroaniline	200	U	200	9.1
88-75-5	2-Nitrophenol	50	U	50	27
15831-10-4	3 & 4 Methylphenol	400	U	400	20
91-94-1	3,3'-Dichlorobenzidine	100	U	100	18
99-09-2	3-Nitroaniline	200	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	150	U	150	80
101-55-3	4-Bromophenyl phenyl ether	50	U	50	13
59-50-7	4-Chloro-3-methylphenol	150	U	150	21
106-47-8	4-Chloroaniline	150	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	50	U	50	13
100-01-6	4-Nitroaniline	200	U	200	26
83-32-9	Acenaphthene	6.7	U	6.7	3.3
208-96-8	Acenaphthylene	6.7	U	6.7	3.3
98-86-2	Acetophenone	100	U	100	9.2
120-12-7	Anthracene	6.7	U	6.7	3.3
1912-24-9	Atrazine	200	U	200	9.1
100-52-7	Benzaldehyde	100	U	100	12
56-55-3	Benzo[a]anthracene	6.7	U	6.7	3.3
50-32-8	Benzo[a]pyrene	6.7	U	6.7	3.3
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	3.3
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	3.3
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	3.3

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51193/23-A

Matrix: Solid | Lab File ID: 20720004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.00(g) | Date Analyzed: 07/20/2012 10:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	100	U	100	22
111-44-4	Bis(2-chloroethyl)ether	100	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	30.3	J	50	19
85-68-7	Butyl benzyl phthalate	50	U	50	10
105-60-2	Caprolactam	330	U	330	37
86-74-8	Carbazole	50	U	50	27
218-01-9	Chrysene	6.7	U	6.7	1.1
84-74-2	Di-n-butyl phthalate	50	U	50	15
117-84-0	Di-n-octyl phthalate	50	U	50	27
53-70-3	Dibenzo(a,h)anthracene	6.7	U	6.7	3.3
132-64-9	Dibenzofuran	50	U	50	3.3
84-66-2	Diethyl phthalate	50	U	50	16
131-11-3	Dimethyl phthalate	50	U	50	17
206-44-0	Fluoranthene	6.7	U	6.7	3.3
86-73-7	Fluorene	6.7	U	6.7	3.3
118-74-1	Hexachlorobenzene	6.7	U	6.7	2.1
87-68-3	Hexachlorobutadiene	50	U	50	27
77-47-4	Hexachlorocyclopentadiene	330	U	330	27
67-72-1	Hexachloroethane	50	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	3.3
78-59-1	Isophorone	50	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	50	U	50	27
62-75-9	N-Nitrosodimethylamine	100	U	100	16
86-30-6	N-Nitrosodiphenylamine	50	U	50	21
91-20-3	Naphthalene	6.7	U	6.7	3.3
98-95-3	Nitrobenzene	100	U	100	2.2
87-86-5	Pentachlorophenol	150	U	150	80
85-01-8	Phenanthrene	6.7	U	6.7	3.3
108-95-2	Phenol	50	U	50	27
129-00-0	Pyrene	6.7	U	6.7	3.3
108-60-1	2,2'-oxybis[1-chloropropane]	100	U	100	9.5
606-20-2	2,6-Dinitrotoluene	200	U	200	21
100-02-7	4-Nitrophenol	330	U	330	80

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51193/23-A

Matrix: Solid | Lab File ID: 20720004.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.00(g) | Date Analyzed: 07/20/2012 10:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	85		41-119
4165-62-2	Phenol-d5 (Surr)	89		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	68		24-112
367-12-4	2-Fluorophenol (Surr)	90		26-110
321-60-8	2-Fluorobiphenyl (Surr)	66		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	74		10-118

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20720005.D

Lab ID: LCS 240-51193/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	511	77	50-130	
1,4-Dioxane	667	274	41	10-110	
2,4,6-Trichlorophenol	667	425	64	37-110	
2,4,5-Trichlorophenol	667	459	69	42-110	
2,4-Dichlorophenol	667	483	72	40-110	
2,4-Dimethylphenol	667	426	64	28-110	
2,4-Dinitrophenol	667	227 J	34	10-110	
2,4-Dinitrotoluene	667	506	76	55-116	
2-Chloronaphthalene	667	426	64	46-110	
2-Chlorophenol	667	491	74	39-110	
2-Methylnaphthalene	667	473	71	46-110	
2-Methylphenol	667	499	75	36-110	
2-Nitroaniline	667	530	79	47-124	
2-Nitrophenol	667	495	74	35-110	
3 & 4 Methylphenol	1330	993	75	40-110	
3,3'-Dichlorobenzidine	667	365	55	31-110	
3-Nitroaniline	667	464	70	44-110	
4,6-Dinitro-2-methylphenol	667	450	67	21-110	
4-Bromophenyl phenyl ether	667	450	67	53-112	
4-Chloro-3-methylphenol	667	527	79	42-110	
4-Chloroaniline	667	360	54	25-110	
4-Chlorophenyl phenyl ether	667	456	68	53-110	
4-Nitroaniline	667	503	75	50-110	
Acenaphthene	667	479	72	46-110	
Acenaphthylene	667	489	73	47-110	
Acetophenone	667	517	78	50-130	
Anthracene	667	523	78	56-111	
Atrazine	667	700	105	50-130	
Benzaldehyde	667	482	72	10-130	
Benzo[a]anthracene	667	504	76	58-111	
Benzo[a]pyrene	667	471	71	44-115	
Benzo[b]fluoranthene	667	509	76	43-124	
Benzo[g,h,i]perylene	667	546	82	44-120	
Benzo[k]fluoranthene	667	529	79	38-122	
Bis(2-chloroethoxy)methane	667	439	66	42-110	
Bis(2-chloroethyl)ether	667	457	68	41-110	
Bis(2-ethylhexyl) phthalate	667	554	83	56-123	
Butyl benzyl phthalate	667	539	81	57-121	
Caprolactam	667	622	93	50-130	
Carbazole	667	542	81	56-115	
Chrysene	667	543	81	56-111	
Di-n-butyl phthalate	667	571	86	57-119	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20720005.D

Lab ID: LCS 240-51193/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	667	542	81	45-123	
Dibenzo(a,h)anthracene	667	550	82	45-122	
Dibenzofuran	667	498	75	50-110	
Diethyl phthalate	667	545	82	55-114	
Dimethyl phthalate	667	529	79	54-112	
Fluoranthene	667	535	80	55-118	
Fluorene	667	504	76	51-110	
Hexachlorobenzene	667	497	75	51-110	
Hexachlorobutadiene	667	401	60	39-110	
Hexachlorocyclopentadiene	667	366	55	10-110	
Hexachloroethane	667	442	66	38-110	
Indeno[1,2,3-cd]pyrene	667	538	81	45-121	
Isophorone	667	497	74	46-117	
N-Nitrosodi-n-propylamine	667	489	73	40-114	
N-Nitrosodimethylamine	667	471	71	10-130	
N-Nitrosodiphenylamine	667	514	77	54-112	
Naphthalene	667	485	73	42-110	
Nitrobenzene	667	453	68	40-110	
Pentachlorophenol	667	377	56	10-110	
Phenanthrene	667	527	79	54-110	
Phenol	667	527	79	39-110	
Pyrene	667	512	77	58-113	
2,2'-oxybis[1-chloropropane]	667	440	66	36-116	
2,6-Dinitrotoluene	667	499	75	54-115	
4-Nitrophenol	667	505	76	24-117	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: 20718001.D DFTPP Injection Date: 07/18/2012

Instrument ID: A4HP9 DFTPP Injection Time: 09:37

Analysis Batch No.: 51126

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	44.7	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	71.0	
70	Less than 2.0% of mass 69	0.3	(0.4)1
127	25.0 - 75.0% of mass 198	52.9	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.3	
275	10.0- 30.0% of mass 198	21.4	
365	Greater than 0.75% of mass 198	2.4	
441	Present, but less than mass 443	5.3	
442	40.0 - 110.0% of mass 198	46.2	
443	15.0 - 24.0% of mass 442	8.5	(18.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-51126/2	20718002.D	07/18/2012	09:54
	STD4 240-51126/3	20718003.D	07/18/2012	10:13
	STD3 240-51126/4	20718004.D	07/18/2012	10:33
	STD2 240-51126/5	20718005.D	07/18/2012	10:52
	STD1 240-51126/6	20718006.D	07/18/2012	11:11
	STD9 240-51126/7	20718007.D	07/18/2012	11:31
	STD8 240-51126/8	20718008.D	07/18/2012	11:50
	STD7 240-51126/9	20718009.D	07/18/2012	12:10
	STD6 240-51126/10	20718010.D	07/18/2012	12:29
	ICV 240-51126/11	20718011.D	07/18/2012	12:49

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-51126/6	20718006.D
Level 2	STD2 240-51126/5	20718005.D
Level 3	STD3 240-51126/4	20718004.D
Level 4	STD4 240-51126/3	20718003.D
Level 5	STD5 240-51126/2	20718002.D
Level 6	STD6 240-51126/10	20718010.D
Level 7	STD7 240-51126/9	20718009.D
Level 8	STD8 240-51126/8	20718008.D
Level 9	STD9 240-51126/7	20718007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.9578	1.0417 1.0077	0.9425 0.9511	0.9989 1.0726	0.9229	Ave		0.9869				5.3		20.0			
N-Nitrosodimethylamine	1.8506	1.8208 1.8573	1.7127 1.7135	1.6390 1.8577	1.6153	Ave		1.7584				5.7		20.0			
Pyridine	3.0052	2.9714 3.1111	2.7928 3.0630	2.6160 3.1378	2.6796	Ave		2.9221				6.9		20.0			
Ethyl methacrylate	2.4517	2.5971 2.5109	2.3602 2.3402	2.2925 2.6128	2.2933	Ave		2.4323				5.4		20.0			
Benzaldehyde	2.8218 2.2828	2.7601 +++++	2.7056 +++++	2.5546 +++++	2.4377	Ave		2.5938			0.0100	8.0		20.0			
3-Chloropropionitrile	1.2451	1.2031 1.2416	1.1629 1.1414	1.1674 1.2458	1.1316	Ave		1.1924				4.0		20.0			
Malononitrile	3.3344	3.0865 2.9911	3.1239 2.4553	3.1153 2.1764	3.1227	Ave		2.9257				14.0		20.0			
~~2,4-Toluene diamine~~	0.1520	0.3130 +++++	0.3197 +++++	0.2088 +++++	0.2283	Ave		0.2444				~~29.0~~	*	20.0			
Phenol	3.1350	2.7112 3.1422	2.8001 3.1323	2.7494 3.1820	2.7934	Ave		2.9557			0.8000	7.0		20.0			
Aniline	3.9529	3.6736 4.0746	3.6802 3.9465	3.6627 3.9369	3.5973	Ave		3.8156				4.7		20.0			
Bis(2-chloroethyl)ether	2.9125	2.8922 2.9061	2.6571 2.9529	2.5283 2.9413	2.6269	Ave		2.8022			0.7000	6.0		20.0			
2-Chlorophenol	1.5174	1.4858 1.5629	1.4855 1.5310	1.4797 1.5821	1.4406	Ave		1.5106			0.8000	3.1		20.0			
1,3-Dichlorobenzene	1.8151	1.8783 1.8375	1.6727 1.7425	1.6868 1.8282	1.7308	Ave		1.7740				4.3		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	1.6669	1.5982 1.6435	1.6209 1.5629	1.5961 1.6999	1.5868	Ave		1.6219				2.8		20.0			
Benzyl alcohol	1.3667	1.2855 1.4163	1.2368 1.4428	1.2335 1.3956	1.2776	Ave		1.3318				6.3		20.0			
1,2-Dichlorobenzene	1.7448	1.6837 1.7305	1.5869 1.6726	1.6090 1.7471	1.6042	Ave		1.6724				3.9		20.0			
2-Methylphenol	1.9268	1.9556 1.9200	1.7495 1.9684	1.6914 1.9027	1.7883	Ave		1.8628			0.7000	5.6		20.0			
Benzoic acid	0.2374	+++++ 0.2744	0.1167 0.2920	0.1769 0.2937	0.2294	Qua	-0.330	0.2488	0.0011						0.9990		0.9900
2,2'-oxybis[1-chloropropane]	2.2472	2.0765 2.2447	2.1068 2.2578	1.9893 2.1769	2.0167	Ave		2.1395				5.0		20.0			
3 & 4 Methylphenol	2.0493	1.8481 2.0795	1.9415 2.1104	1.8560 2.0153	1.8916	Ave		1.9740				5.2		20.0			
N-Nitrosodi-n-propylamine	2.3335	2.3680 2.3677	2.1513 2.4005	2.1089 2.2280	2.0072	Ave		2.2456			0.5000	6.4		20.0			
Acetophenone	3.0573	2.8247 3.0974	2.8921 3.2216	2.7210 3.0560	2.7414	Ave		2.9514			0.0100	6.2		20.0			
Hexachloroethane	0.8627	0.8513 0.8346	0.7797 0.8067	0.7455 0.8198	0.7878	Ave		0.8110			0.3000	4.8		20.0			
Nitrobenzene	0.8607	0.8536 0.8780	0.8285 0.8844	0.7858 0.8947	0.8008	Ave		0.8483			0.2000	4.7		20.0			
Isophorone	1.3425	1.1740 1.3949	1.2437 1.4592	1.2081 1.3968	1.2241	Ave		1.3054			0.4000	8.1		20.0			
2-Nitrophenol	0.2192	0.1932 0.2334	0.1915 0.2380	0.1967 0.2460	0.2178	Ave		0.2170			0.1000	9.8		20.0			
2,4-Dimethylphenol	0.5919	0.5474 0.6139	0.5521 0.6261	0.5407 0.6431	0.5489	Ave		0.5830			0.2000	7.0		20.0			
1,3,5-Trichlorobenzene	0.3814	0.3535 0.3917	0.3583 0.3939	0.3565 0.4203	0.3585	Ave		0.3768				6.4		20.0			
Bis(2-chloroethoxy)methane	0.7860	0.7293 0.8109	0.7436 0.8474	0.7241 0.8343	0.7332	Ave		0.7761			0.3000	6.5		20.0			
2,4-Dichlorophenol	0.2980	0.2634 0.3067	0.2850 0.3139	0.2697 0.3217	0.2866	Ave		0.2931			0.2000	7.1		20.0			
1,2,4-Trichlorobenzene	0.3799	0.3391 0.3889	0.3506 0.3923	0.3522 0.4055	0.3563	Ave		0.3706				6.5		20.0			
Naphthalene	1.1528 1.0844	0.9813 1.1138	1.0140 1.1388	0.9848 1.1766	1.0005	Ave		1.0719			0.7000	7.2		20.0			
4-Chloroaniline	0.4929	0.4558 0.5012	0.4900 0.5294	0.4721 0.5281	0.4654	Ave		0.4919			0.0100	5.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.2111	0.2059 0.2158	0.1963 0.2123	0.1981 0.2227	0.2029	Ave		0.2081			0.0100	4.3		20.0			
1,2,3-Trichlorobenzene	0.3486	0.3246 0.3577	0.3370 0.3625	0.3234 0.3709	0.3343	Ave		0.3449				5.2		20.0			
Caprolactam	0.1634	0.1449 0.1660	0.1527 0.1763	0.1464 0.1684	0.1490	Ave		0.1584			0.0100	7.4		20.0			
4-Chloro-3-methylphenol	0.4996	0.4538 0.5179	0.4541 0.5535	0.4591 0.5363	0.4639	Ave		0.4923			0.2000	8.1		20.0			
2-Methylnaphthalene	0.7308 0.7339	0.6640 0.7703	0.6570 0.7954	0.6363 0.8117	0.6895	Ave		0.7210			0.4000	8.8		20.0			
2,4-Dinitrophenol	0.2286	+++++ 0.2419	0.1374 0.2606	0.1737 0.2787	0.2215	Qua	-0.077	0.1987	0.0016		0.0100				1.0000		0.9900
1-Methylnaphthalene	0.7516 0.7123	0.6456 0.7257	0.6356 0.7630	0.6108 0.7740	0.6537	Ave		0.6969				8.8		20.0			
1,2,3,5-Tetrachlorobenzene	0.6445	0.5436 0.6564	0.5983 0.6472	0.5591 0.7008	0.6054	Ave		0.6194				8.5		20.0			
Hexachlorocyclopentadiene	0.4353	0.3520 0.4402	0.3714 0.4375	0.3509 0.4663	0.4247	Ave		0.4098			0.0500	11.0		20.0			
2,4,6-Trichlorophenol	0.3820	0.3055 0.3894	0.3615 0.3938	0.3557 0.4027	0.3658	Ave		0.3696			0.2000	8.3		20.0			
2,4,5-Trichlorophenol	0.3995	0.3413 0.4088	0.3843 0.4194	0.3639 0.4281	0.3913	Ave		0.3921			0.2000	7.3		20.0			
1,1'-Biphenyl	1.6350 1.5747	1.3678 1.6468	1.4203 1.6420	1.3621 1.7608	1.4379	Ave		1.5386			0.0100	9.4		20.0			
1,2,3,4 -Tetrachlorobenzene	0.6134	0.5486 0.6363	0.5597 0.6365	0.5492 0.6746	0.5814	Ave		0.6000				7.9		20.0			
2-Chloronaphthalene	1.4704 1.3088	1.2261 1.3166	1.2212 1.3331	1.1487 1.4103	1.2537	Ave		1.2988			0.8000	7.7		20.0			
4,6-Dinitro-2-methylphenol	0.1573	+++++ 0.1616	0.1185 0.1653	0.1396 0.1720	0.1603	Ave		0.1535			0.0100	12.0		20.0			
2-Nitroaniline	0.7102	0.6307 0.7157	0.6594 0.7170	0.6235 0.7317	0.6590	Ave		0.6809			0.0100	6.3		20.0			
Dimethyl phthalate	1.3680	1.1815 1.3896	1.2333 1.4323	1.2393 1.4155	1.2789	Ave		1.3173			0.0100	7.2		20.0			
2,6-Dinitrotoluene	0.3678	0.2956 0.3750	0.3354 0.3781	0.3148 0.3812	0.3523	Ave		0.3500				9.1		20.0			
1,2-Dinitrobenzene	0.1776	0.1468 0.1801	0.1642 0.1824	0.1529 0.1827	0.1704	Ave		0.1696				8.2		20.0			
Acenaphthylene	2.0400 1.9412	1.6679 2.0173	1.7609 1.9891	1.7197 2.0922	1.8225	Ave		1.8945			0.9000	8.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
3-Nitroaniline	0.3580	0.3380 0.3632	0.3231 0.3627	0.3274 0.3692	0.3434	Ave		0.3481			0.0100	5.1		20.0			
Acenaphthene	1.3717 1.2703	1.1108 1.3010	1.1589 1.3466	1.0808 1.4114	1.1577	Ave		1.2455			0.9000	9.7		20.0			
4-Nitrophenol	0.3305	0.2480 0.3444	0.2708 0.3518	0.3175 0.3588	0.3050	Ave		0.3159				13.0		20.0			
2,4-Dinitrotoluene	0.5101	0.4106 0.5063	0.4340 0.5117	0.4551 0.5143	0.4715	Ave		0.4767			0.2000	8.4		20.0			
Dibenzofuran	1.6133 1.6627	1.4149 1.6813	1.5306 1.7309	1.4895 1.7971	1.5275	Ave		1.6053			0.8000	7.7		20.0			
2,3,5,6-Tetrachlorophenol	0.3318	0.2706 0.3423	0.3176 0.3422	0.2976 0.3538	0.3173	Ave		0.3217				8.5		20.0			
Diethyl phthalate	1.4230	1.3016 1.4671	1.3264 1.5019	1.3077 1.5150	1.3247	Ave		1.3959			0.0100	6.5		20.0			
4-Chlorophenyl phenyl ether	0.7634	0.6873 0.7798	0.7140 0.8090	0.6895 0.8352	0.7099	Ave		0.7485			0.4000	7.5		20.0			
4-Nitroaniline	0.3917	0.3377 0.4134	0.3313 0.4143	0.3404 0.4320	0.3721	Ave		0.3791			0.0100	10.0		20.0			
Fluorene	1.4529 1.4429	1.2748 1.4651	1.2557 1.5126	1.2591 1.5535	1.2956	Ave		1.3903			0.9000	8.5		20.0			
N-Nitrosodiphenylamine	0.6148	0.5705 0.6337	0.5904 0.6271	0.5590 0.6490	0.5858	Ave		0.6038			0.0100	5.3		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.5936	1.4783 1.5826	1.5053 1.6071	1.4489 1.6526	1.4422	Ave		1.5402				5.1		20.0			
Azobenzene	1.5946	1.4783 1.5831	1.5112 1.6071	1.4504 1.6526	1.4445	Ave		1.5402				5.1		20.0			
4-Bromophenyl phenyl ether	0.2292	0.2092 0.2290	0.2137 0.2357	0.2242 0.2439	0.2213	Ave		0.2258			0.1000	5.0		20.0			
Hexachlorobenzene	0.2044 0.1881	0.1781 0.1943	0.1983 0.1947	0.1723 0.2014	0.1809	Ave		0.1903			0.1000	5.8		20.0			
Atrazine	0.2023	0.1940 0.2022	0.2015 0.1984	0.2020 0.1822	0.1957	Ave		0.1973			0.0100	3.5		20.0			
Pentachlorophenol	0.1318	0.0818 0.1426	0.1047 0.1535	0.1208 0.1549	0.1369	Ave		0.1284			0.0500	20.0		20.0			
Phenanthrene	1.2633 1.1893	1.0616 1.2033	1.0896 1.2502	1.0787 1.2845	1.1072	Ave		1.1698			0.7000	7.4		20.0			
Anthracene	1.2644 1.2365	1.0849 1.2653	1.1102 1.2942	1.1293 1.3357	1.1661	Ave		1.2096			0.7000	7.4		20.0			
Carbazole	1.1321	1.0163 1.1698	1.0622 1.1854	1.0347 1.2202	1.0695	Ave		1.1113			0.0100	6.8		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Di-n-butyl phthalate	1.5042	1.3243 1.5493	1.3784 1.5776	1.3597 1.6372	1.3971	Ave		1.4660			0.0100	7.9		20.0			
Fluoranthene	1.2988 1.3616	1.1705 1.3873	1.2218 1.4265	1.1901 1.4618	1.2336	Ave		1.3058			0.6000	8.2		20.0			
Benzidine	0.8547	0.6766 0.8348	0.7293 0.8121	0.6994 0.7926	0.7834	Ave		0.7729				8.3		20.0			
Pyrene	1.5064 1.5142	1.3954 1.5594	1.4240 1.5521	1.3627 1.6063	1.4080	Ave		1.4809			0.6000	5.8		20.0			
Butyl benzyl phthalate	0.7678	0.7009 0.7755	0.6804 0.7672	0.6584 0.7929	0.7178	Ave		0.7326			0.0100	6.8		20.0			
3,3'-Dimethoxybenzidine	0.3840	0.2632 0.3903	0.3112 0.3851	0.3169 0.4047	0.3561	Ave		0.3514				14.0		20.0			
Bis(2-ethylhexyl) phthalate	1.1000	0.9763 1.1412	0.9914 1.1597	0.9615 1.1703	1.0027	Ave		1.0629			0.0100	8.3		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.2905	0.2158 0.3015	0.2494 0.2965	0.2578 0.3056	0.2704	Ave		0.2734				11.0		20.0			
3,3'-Dichlorobenzidine	0.5050	0.4299 0.5217	0.4451 0.5160	0.4581 0.5363	0.4782	Ave		0.4863			0.0100	8.1		20.0			
Benzo[a]anthracene	1.5473 1.3698	1.3099 1.3901	1.3096 1.3701	1.2620 1.4335	1.2984	Ave		1.3656			0.8000	6.3		20.0			
Chrysene	1.3272 1.2366	1.1577 1.2666	1.1743 1.2444	1.1348 1.2925	1.1569	Ave		1.2212			0.7000	5.6		20.0			
Di-n-octyl phthalate	2.6027	2.0943 2.6600	2.2085 2.7206	2.2950 2.7706	2.4178	Ave		2.4712			0.0100	10.0		20.0			
Benzo[b]fluoranthene	1.6393 1.7471	1.4488 1.8173	1.5975 1.9395	1.5883 2.0434	1.6086	Ave		1.7144			0.7000	11.0		20.0			
Benzo[k]fluoranthene	1.8351 1.8718	1.5771 1.8389	1.6406 1.7697	1.6927 1.7939	1.8214	Ave		1.7601			0.7000	5.7		20.0			
Benzo[a]pyrene	1.5703 1.6723	1.4324 1.6655	1.5187 1.6693	1.5179 1.7368	1.5461	Ave		1.5921			0.7000	6.2		20.0			
Indeno[1,2,3-cd]pyrene	1.6770 1.7904	1.4554 1.8060	1.5488 1.8222	1.6029 1.8804	1.6514	Ave		1.6927			0.5000	8.4		20.0			
Dibenzo(a,h)anthracene	1.2068 1.4718	1.1140 1.5009	1.2375 1.5309	1.2778 1.5863	1.3735	Ave		1.3666			0.4000	12.0		20.0			
Benzo[g,h,i]perylene	1.4397 1.4221	1.2402 1.4240	1.2673 1.4426	1.3168 1.5187	1.3402	Ave		1.3791			0.5000	6.7		20.0			
2-Fluorophenol (Surr)	1.8389	1.6394 1.9144	1.7092 1.8652	1.6253 1.8632	1.6640	Ave		1.7650				6.6		20.0			
Phenol-d5 (Surr)	2.9128	2.6680 2.9215	2.5819 2.9653	2.4865 2.9119	2.5611	Ave		2.7511				7.1		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Nitrobenzene-d5 (Surr)	0.9663 0.8568	0.7949 0.8511	0.8384 0.8653	0.7716 0.8750	0.7763	Ave		0.8440				7.1		20.0			
2-Fluorobiphenyl (Surr)	1.6271 1.5709	1.4225 1.5669	1.4736 1.6287	1.4458 1.6800	1.4717	Ave		1.5430				6.0		20.0			
2,4,6-Tribromophenol (Surr)	 0.1197	0.0951 0.1265	0.1262 0.1268	0.0998 0.1292	0.1153	Ave		0.1173				11.0		20.0			
Terphenyl-d14 (Surr)	0.9684 0.8977	0.8018 0.9168	0.8051 0.9252	0.7871 0.9448	0.8261	Ave		0.8748				8.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-51126/6	20718006.D
Level 2	STD2 240-51126/5	20718005.D
Level 3	STD3 240-51126/4	20718004.D
Level 4	STD4 240-51126/3	20718003.D
Level 5	STD5 240-51126/2	20718002.D
Level 6	STD6 240-51126/10	20718010.D
Level 7	STD7 240-51126/9	20718009.D
Level 8	STD8 240-51126/8	20718008.D
Level 9	STD9 240-51126/7	20718007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	301695	17049 442978	32168 484263	65361 743432	153804	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	582901	29801 816441	58458 872447	107239 1287564	269201	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	946611	48634 1367578	95325 1559536	171166 2174730	446571	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Ethyl methacrylate	DCB	Ave	772241	42507 1103751	80557 1191549	149996 1810889	382196	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Ave	8838 719060	45175 +++++	92346 +++++	167147 +++++	406267	0.100 10.0	0.500 +++++	1.00 +++++	2.00 +++++	5.00
3-Chloropropionitrile	DCB	Ave	392193	19692 545773	39692 581158	76385 863411	188587	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Malononitrile	DCB	Ave	1050297	50517 1314851	106626 1250124	203832 1508454	520427	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Toluene diamine	NPT	Ave	198457	21107 +++++	43978 +++++	55395 +++++	151071	10.0	0.500 +++++	1.00 +++++	2.00 +++++	5.00
Phenol	DCB	Ave	987474	44375 1381259	95573 1594840	179895 2205370	465534	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1245108	60127 1791129	125612 2009369	239651 2728607	599511	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	917407	47338 1277494	90691 1503509	165425 2038574	437796	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	477975	24319 687027	50703 779523	96818 1096495	240084	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	571725	30743 807751	57092 887219	110365 1267069	288447	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	525046	26158 722465	55325 795776	104433 1178202	264459	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzyl alcohol	DCB	Ave	430508	21040 622573	42213 734585	80705 967258	212916	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCB	Ave	549581	27557 760684	54165 851620	105280 1210883	267356	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCB	Ave	606914	32007 844013	59715 1002196	110671 1318716	298038	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzoic acid	NPT	Qua	619842	+++++ 988228	32104 1235449	93845 1570776	303621	20.0	+++++ 30.0	2.00 40.0	4.00 50.0	10.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	707847	33987 986752	71909 1149582	130157 1508765	336106	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3 & 4 Methylphenol	DCB	Ave	645509	30248 914105	66266 1074523	121438 1396761	315249	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodi-n-propylamine	DCB	Ave	735013	38758 1040799	73428 1222212	137987 1544189	334519	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCB	Ave	963004	46232 1361568	98713 1640279	178037 2118051	456872	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachloroethane	DCB	Ave	271729	13934 366900	26612 410720	48777 568206	131298	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	1123702	57563 1581057	113966 1870913	208445 2392203	529982	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	1752781	79165 2511823	171086 3086807	320475 3734659	810163	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	286195	13027 420296	26344 503406	52185 657677	144159	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	772732	36911 1105484	75943 1324519	143433 1719458	363295	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3,5-Trichlorobenzene	NPT	Ave	497964	23838 705317	49290 833251	94555 1123843	237277	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethoxy)methane	NPT	Ave	1026235	49183 1460264	102286 1792496	192073 2230754	485232	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	389005	17760 552337	39210 664100	71536 860186	189699	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	495938	22865 700254	48230 829941	93435 1084156	235777	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	14325 1415825	66175 2005583	139483 2409080	261243 3145929	662136	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	643476	30738 902590	67401 1119890	125229 1412028	308012	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	275602	13883 388589	26996 449132	52553 595520	134295	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,3-Trichlorobenzene	NPT	Ave	455194	21889 644116	46352 766746	85775 991704	221252	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Caprolactam	NPT	Ave		9769	21006	38838	98604		0.500	1.00	2.00	5.00
			213341	298848	372875	450162		10.0	15.0	20.0	25.0	
4-Chloro-3-methylphenol	NPT	Ave		30599	62468	121795	307028		0.500	1.00	2.00	5.00
			652333	932614	1170921	1433960		10.0	15.0	20.0	25.0	
2-Methylnaphthalene	NPT	Ave	9082	44773	90380	168787	456312	0.100	0.500	1.00	2.00	5.00
			958125	1387050	1682494	2170404		10.0	15.0	20.0	25.0	
2,4-Dinitrophenol	ANT	Qua		+++++	22239	54331	171035		+++++	2.00	4.00	10.0
			351602	522939	705135	893124		20.0	30.0	40.0	50.0	
1-Methylnaphthalene	NPT	Ave	9340	43534	87436	162014	432630	0.100	0.500	1.00	2.00	5.00
			929968	1306750	1613960	2069472		10.0	15.0	20.0	25.0	
1,2,3,5-Tetrachlorobenzene	ANT	Ave		22000	48412	87429	233699		0.500	1.00	2.00	5.00
			495583	709534	875500	1122799		10.0	15.0	20.0	25.0	
Hexachlorocyclopentadiene	ANT	Ave		14248	30053	54879	163951		0.500	1.00	2.00	5.00
			334724	475874	591853	747088		10.0	15.0	20.0	25.0	
2,4,6-Trichlorophenol	ANT	Ave		12365	29256	55620	141192		0.500	1.00	2.00	5.00
			293735	420963	532807	645145		10.0	15.0	20.0	25.0	
2,4,5-Trichlorophenol	ANT	Ave		13814	31095	56914	151033		0.500	1.00	2.00	5.00
			307199	441936	567334	685809		10.0	15.0	20.0	25.0	
1,1'-Biphenyl	ANT	Ave	11828	55358	114932	213002	555052	0.100	0.500	1.00	2.00	5.00
			1210849	1780197	2221369	2820967		10.0	15.0	20.0	25.0	
1,2,3,4 -Tetrachlorobenzene	ANT	Ave		22203	45287	85883	224435		0.500	1.00	2.00	5.00
			471630	687791	861130	1080791		10.0	15.0	20.0	25.0	
2-Chloronaphthalene	ANT	Ave	10637	49623	98819	179633	483946	0.100	0.500	1.00	2.00	5.00
			1006367	1423276	1803471	2259341		10.0	15.0	20.0	25.0	
4,6-Dinitro-2-methylphenol	PHN	Ave		+++++	15335	34941	101469		+++++	1.00	2.00	5.00
			202965	294742	384981	474286		10.0	15.0	20.0	25.0	
2-Nitroaniline	ANT	Ave		25528	53359	97510	254383		0.500	1.00	2.00	5.00
			546060	773722	970042	1172225		10.0	15.0	20.0	25.0	
Dimethyl phthalate	ANT	Ave		47820	99802	193800	493649		0.500	1.00	2.00	5.00
			1051854	1502123	1937603	2267652		10.0	15.0	20.0	25.0	
2,6-Dinitrotoluene	ANT	Ave		11965	27138	49221	135971		0.500	1.00	2.00	5.00
			282838	405384	511477	610742		10.0	15.0	20.0	25.0	
1,2-Dinitrobenzene	ANT	Ave		5941	13287	23910	65765		0.500	1.00	2.00	5.00
			136595	194716	246786	292703		10.0	15.0	20.0	25.0	
Acenaphthylene	ANT	Ave	14758	67505	142490	268922	703494	0.100	0.500	1.00	2.00	5.00
			1492657	2180729	2690871	3351907		10.0	15.0	20.0	25.0	
3-Nitroaniline	ANT	Ave		13678	26143	51200	132536		0.500	1.00	2.00	5.00
			275310	392623	490721	591509		10.0	15.0	20.0	25.0	
Acenaphthene	ANT	Ave	9923	44956	93781	169015	446894	0.100	0.500	1.00	2.00	5.00
			976775	1406421	1821705	2261231		10.0	15.0	20.0	25.0	
4-Nitrophenol	ANT	Ave		10039	21910	49651	117723		0.500	1.00	2.00	5.00
			254150	372343	475966	574831		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
2,4-Dinitrotoluene	ANT	Ave	392211	16618 547362	35120 692226	71163 823878	182001	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	11671 1278463	57265 1817428	123855 2341633	232927 2879139	589616	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,3,5,6-Tetrachlorophenol	ANT	Ave	255156	10951 370034	25704 462907	46541 566840	122470	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	1094186	52680 1585901	107334 2031889	204493 2427184	511351	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chlorophenyl phenyl ether	ANT	Ave	586997	27816 842977	57776 1094497	107825 1337996	274034	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	301207	13668 446851	26806 560532	53225 692149	143620	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluorene	ANT	Ave	10511 1109459	51596 1583746	101615 2046250	196904 2488820	500097	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodiphenylamine	PHN	Ave	793266	37327 1155629	76429 1460036	139858 1789762	370767	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	2056069	96723 2886170	194866 3741762	362545 4557477	912768	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	2057328	96723 2887015	195624 3741762	362912 4557477	914210	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	295683	13688 417648	27658 548806	56107 672628	140041	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Ave	2420 242683	11654 354406	25666 453288	43120 555436	114513	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	260985	12690 368690	26088 461959	50541 502511	123851	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pentachlorophenol	PHN	Ave	340136	10705 520044	27120 714720	60432 854215	173344	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	14959 1534501	69461 2194483	141052 2910887	269901 3542300	700752	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	14973 1595408	70982 2307444	143719 3013283	282565 3683461	738003	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	1460604	66493 2133331	137511 2760000	258907 3364963	676899	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	1940699	86647 2825366	178433 3673147	340224 4515087	884216	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	15380 1756694	76584 2530001	158160 3321472	297770 4031225	780765	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Ave	1005207	37861 1391486	83858 1774159	157660 2028270	451558	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyrene	CRY	Ave	15475 1780834	78087 2599306	163738 3390702	307182 4110657	811562	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Butyl benzyl phthalate	CRY	Ave	902976	39220 1292753	78236 1676007	148410 2029074	413708	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dimethoxybenzidine	CRY	Ave	451554	14731 650631	35787 841200	71440 1035799	205233	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-ethylhexyl) phthalate	CRY	Ave	1293683	54633 1902299	113996 2533465	216729 2995020	577959	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,4'-Methylene bis(2-chloroaniline)	CRY	Ave	341619	12077 502640	28672 647765	58105 781950	155869	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	593873	24057 869649	51178 1127201	103254 1372454	275600	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]anthracene	CRY	Ave	15896 1610998	73302 2317236	150585 2993054	284468 3668519	748393	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	13635 1454333	64783 2111231	135023 2718553	255795 3307783	666815	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-octyl phthalate	PRY	Ave	2137358	84638 3154652	177884 4154760	356185 4940547	972514	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	11607 1434756	58550 2155214	128668 2961877	246499 3643753	647019	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	12994 1537154	63737 2180810	132137 2702647	262712 3198979	732601	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	11119 1373355	57887 1975155	122325 2549325	235577 3096990	621870	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	11874 1470304	58817 2141861	124746 2782826	248772 3353224	664217	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzo(a,h)anthracene	PRY	Ave	8545 1208702	45022 1780024	99674 2337887	198313 2828627	552455	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	10194 1167846	50121 1688844	102072 2203148	204368 2708116	539081	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCB	Ave	579220	26833 841546	58340 949656	106342 1291383	277319	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCB	Ave	917484	43668 1284246	88125 1509784	162691 2018213	426825	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	12008 1118574	53602 1532549	115332 1830441	204684 2339450	513749	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	11771 1207870	57574 1693813	119241 2203297	226102 2691530	568077	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	92040	3847 136763	10212 171514	15610 207009	44507	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	9948 1055761	44868 1528282	92572 2021235	177416 2417738	476164	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-51126/11 Calibration Date: 07/18/2012 12:49

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20718011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9869	0.9789		9.92	10.0	-0.8	30.0
N-Nitrosodimethylamine	Ave	1.758	1.823		10.4	10.0	3.7	30.0
Pyridine	Ave	2.922	2.915		9.98	10.0	-0.2	30.0
Ethyl methacrylate	Ave	2.432	2.469		10.2	10.0	1.5	30.0
3-Chloropropionitrile	Ave	1.192	1.243		10.4	10.0	4.3	30.0
Malononitrile	Ave	2.926	3.287		11.2	10.0	12.4	30.0
Benzaldehyde	Ave	2.594	2.102	0.0100	8.10	10.0	-19.0	30.0
Phenol	Ave	2.956	2.986	0.8000	10.1	10.0	1.0	30.0
Aniline	Ave	3.816	3.742		9.81	10.0	-1.9	30.0
Bis(2-chloroethyl)ether	Ave	2.802	2.764	0.7000	9.86	10.0	-1.4	30.0
2-Chlorophenol	Ave	1.511	1.481	0.8000	9.80	10.0	-2.0	30.0
1,3-Dichlorobenzene	Ave	1.774	1.750		9.86	10.0	-1.4	30.0
1,4-Dichlorobenzene	Ave	1.622	1.631		10.1	10.0	0.5	30.0
Benzyl alcohol	Ave	1.332	1.322		9.93	10.0	-0.7	30.0
1,2-Dichlorobenzene	Ave	1.672	1.684		10.1	10.0	0.7	30.0
2-Methylphenol	Ave	1.863	1.797	0.7000	9.65	10.0	-3.5	30.0
2,2'-oxybis[1-chloropropane]	Ave	2.139	2.152		10.1	10.0	0.6	30.0
3 & 4 Methylphenol	Ave	1.974	1.908		9.66	10.0	-3.4	30.0
N-Nitrosodi-n-propylamine	Ave	2.246	2.199	0.5000	9.79	10.0	-2.1	30.0
Acetophenone	Ave	2.951	2.877	0.0100	9.75	10.0	-2.5	30.0
Hexachloroethane	Ave	0.8110	0.8215	0.3000	10.1	10.0	1.3	30.0
Nitrobenzene	Ave	0.8483	0.8647	0.2000	10.2	10.0	1.9	30.0
Isophorone	Ave	1.305	1.297	0.4000	9.93	10.0	-0.7	30.0
2,4-Dimethylphenol	Ave	0.5830	0.5735	0.2000	9.84	10.0	-1.6	30.0
2-Nitrophenol	Ave	0.2170	0.2090	0.1000	9.63	10.0	-3.7	30.0
1,3,5-Trichlorobenzene	Ave	0.3768	0.3676		9.76	10.0	-2.4	30.0
Bis(2-chloroethoxy)methane	Ave	0.7761	0.7731	0.3000	9.96	10.0	-0.4	30.0
Benzoic acid	Qua		0.2426		19.2	20.0	-4.0	30.0
2,4-Dichlorophenol	Ave	0.2931	0.2878	0.2000	9.82	10.0	-1.8	30.0
1,2,4-Trichlorobenzene	Ave	0.3706	0.3711		10.0	10.0	0.1	30.0
Naphthalene	Ave	1.072	1.043	0.7000	9.73	10.0	-2.7	30.0
4-Chloroaniline	Ave	0.4919	0.4785	0.0100	9.73	10.0	-2.7	30.0
Hexachlorobutadiene	Ave	0.2081	0.2062	0.0100	9.91	10.0	-0.9	30.0
1,2,3-Trichlorobenzene	Ave	0.3449	0.3369		9.77	10.0	-2.3	30.0
Caprolactam	Ave	0.1584	0.1522	0.0100	9.61	10.0	-3.9	30.0
4-Chloro-3-methylphenol	Ave	0.4923	0.4977	0.2000	10.1	10.0	1.1	30.0
2-Methylnaphthalene	Ave	0.7210	0.7088	0.4000	9.83	10.0	-1.7	30.0
1-Methylnaphthalene	Ave	0.6969	0.6868		9.85	10.0	-1.5	30.0
1,2,3,5-Tetrachlorobenzene	Ave	0.6194	0.6179		9.98	10.0	-0.2	30.0
Hexachlorocyclopentadiene	Ave	0.4098	0.4229	0.0500	10.3	10.0	3.2	30.0
2,4,6-Trichlorophenol	Ave	0.3696	0.3655	0.2000	9.89	10.0	-1.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-51126/11 Calibration Date: 07/18/2012 12:49

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20718011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3921	0.4027	0.2000	10.3	10.0	2.7	30.0
2,4-Toluene diamine	Ave	0.2444	0.1701		6.96	10.0	-30.4*	30.0
1,1'-Biphenyl	Ave	1.539	1.491	0.0100	9.69	10.0	-3.1	30.0
1,2,3,4 -Tetrachlorobenzene	Ave	0.6000	0.5984		9.97	10.0	-0.3	30.0
2-Chloronaphthalene	Ave	1.299	1.238	0.8000	9.53	10.0	-4.7	30.0
2-Nitroaniline	Ave	0.6809	0.6960	0.0100	10.2	10.0	2.2	30.0
Dimethyl phthalate	Ave	1.317	1.343	0.0100	10.2	10.0	1.9	30.0
2,6-Dinitrotoluene	Ave	0.3500	0.3591		10.3	10.0	2.6	30.0
1,2-Dinitrobenzene	Ave	0.1696	0.1692		9.97	10.0	-0.3	30.0
Acenaphthylene	Ave	1.895	1.877	0.9000	9.91	10.0	-0.9	30.0
3-Nitroaniline	Ave	0.3481	0.3458	0.0100	9.93	10.0	-0.7	30.0
2,4-Dinitrophenol	Qua		0.2131	0.0100	18.9	20.0	-5.5	30.0
Acenaphthene	Ave	1.245	1.220	0.9000	9.80	10.0	-2.0	30.0
4-Nitrophenol	Ave	0.3159	0.3261		10.3	10.0	3.3	30.0
2,4-Dinitrotoluene	Ave	0.4767	0.4757	0.2000	9.98	10.0	-0.2	30.0
Dibenzofuran	Ave	1.605	1.591	0.8000	9.91	10.0	-0.9	30.0
2,3,5,6-Tetrachlorophenol	Ave	0.3217	0.3115		9.68	10.0	-3.2	30.0
Diethyl phthalate	Ave	1.396	1.388	0.0100	9.94	10.0	-0.6	30.0
4-Chlorophenyl phenyl ether	Ave	0.7485	0.7297	0.4000	9.75	10.0	-2.5	30.0
4-Nitroaniline	Ave	0.3791	0.3846	0.0100	10.1	10.0	1.4	30.0
Fluorene	Ave	1.390	1.391	0.9000	10.0	10.0	0.0	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1535	0.1514	0.0100	9.86	10.0	-1.4	30.0
N-Nitrosodiphenylamine	Ave	0.6038	0.6028	0.0100	9.98	10.0	-0.2	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.540	1.593		10.3	10.0	3.4	30.0
Azobenzene	Ave	1.540	1.593		10.3	10.0	3.4	30.0
4-Bromophenyl phenyl ether	Ave	0.2258	0.2266	0.1000	10.0	10.0	0.4	30.0
Hexachlorobenzene	Ave	0.1903	0.1862	0.1000	9.79	10.0	-2.1	30.0
Atrazine	Ave	0.1973	0.2025	0.0100	10.3	10.0	2.7	30.0
Pentachlorophenol	Ave	0.1284	0.1355	0.0500	21.1	20.0	5.6	30.0
Phenanthrene	Ave	1.170	1.157	0.7000	9.89	10.0	-1.1	30.0
Anthracene	Ave	1.210	1.206	0.7000	9.97	10.0	-0.3	30.0
Carbazole	Ave	1.111	1.099	0.0100	9.89	10.0	-1.1	30.0
Di-n-butyl phthalate	Ave	1.466	1.475	0.0100	10.1	10.0	0.6	30.0
Fluoranthene	Ave	1.306	1.311	0.6000	10.0	10.0	0.4	30.0
Benzidine	Ave	0.7729	0.8265		10.7	10.0	6.9	30.0
Pyrene	Ave	1.481	1.524	0.6000	10.3	10.0	2.9	30.0
Butyl benzyl phthalate	Ave	0.7326	0.7565	0.0100	10.3	10.0	3.3	30.0
3,3'-Dimethoxybenzidine	Ave	0.3514	0.3850		11.0	10.0	9.5	30.0
Bis(2-ethylhexyl) phthalate	Ave	1.063	1.093	0.0100	10.3	10.0	2.9	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2734	0.2922		10.7	10.0	6.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-51126/11 Calibration Date: 07/18/2012 12:49

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20718011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3,3'-Dichlorobenzidine	Ave	0.4863	0.4993	0.0100	10.3	10.0	2.7	30.0
Benzo[a]anthracene	Ave	1.366	1.349	0.8000	9.88	10.0	-1.2	30.0
Chrysene	Ave	1.221	1.242	0.7000	10.2	10.0	1.7	30.0
Di-n-octyl phthalate	Ave	2.471	2.499	0.0100	10.1	10.0	1.1	30.0
Benzo[b]fluoranthene	Ave	1.714	1.704	0.7000	9.94	10.0	-0.6	30.0
Benzo[k]fluoranthene	Ave	1.760	1.776	0.7000	10.1	10.0	0.9	30.0
Benzo[a]pyrene	Ave	1.592	1.607	0.7000	10.1	10.0	0.9	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.693	1.696	0.5000	10.0	10.0	0.2	30.0
Dibenzo(a,h)anthracene	Ave	1.367	1.401	0.4000	10.3	10.0	2.5	30.0
Benzo[g,h,i]perylene	Ave	1.379	1.356	0.5000	9.84	10.0	-1.6	30.0
2-Fluorophenol (Surr)	Ave	1.765	1.783		10.1	10.0	1.0	30.0
Phenol-d5 (Surr)	Ave	2.751	2.750		10.0	10.0	-0.0	30.0
Nitrobenzene-d5 (Surr)	Ave	0.8440	0.8375		9.92	10.0	-0.8	30.0
2-Fluorobiphenyl (Surr)	Ave	1.543	1.513		9.81	10.0	-1.9	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1173	0.1192		10.2	10.0	1.6	30.0
Terphenyl-d14 (Surr)	Ave	0.8748	0.8816		10.1	10.0	0.8	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: 20719001.D DFTPP Injection Date: 07/19/2012

Instrument ID: A4HP9 DFTPP Injection Time: 07:31

Analysis Batch No.: 51296

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	54.9	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	88.8	
70	Less than 2.0% of mass 69	0.4	(0.5)1
127	25.0 - 75.0% of mass 198	57.1	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.1	
275	10.0- 30.0% of mass 198	20.7	
365	Greater than 0.75% of mass 198	1.9	
441	Present, but less than mass 443	1.2	
442	40.0 - 110.0% of mass 198	40.9	
443	15.0 - 24.0% of mass 442	7.8	(19.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-51296/2	20719002.D	07/19/2012	08:11
	MB 240-50985/23-A	20719009.D	07/19/2012	10:29
	LCS 240-50985/22-A	20719010.D	07/19/2012	10:48
MT-SS19-0-2	240-13043-2	20719026.D	07/19/2012	16:01

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51296/2 Calibration Date: 07/19/2012 08:11

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20719002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9869	1.204		12.2	10.0	22.0*	20.0
N-Nitrosodimethylamine	Ave	1.758	2.082		11.8	10.0	18.4	20.0
Pyridine	Ave	2.922	3.341		11.4	10.0	14.3	20.0
~~Ethyl methacrylate~~	Ave	2.432	2.939		12.1	10.0	~~20.8~~	20.0
3-Chloropropionitrile	Ave	1.192	1.360		11.4	10.0	14.1	20.0
~~Malononitrile~~	Ave	2.926	3.607		12.3	10.0	~~23.3~~*	20.0
Benzaldehyde	Ave	2.594	2.174	0.0100	8.38	10.0	-16.2	20.0
Phenol	Ave	2.956	3.129	0.8000	10.6	10.0	5.8	20.0
Aniline	Ave	3.816	3.987		10.4	10.0	4.5	20.0
Bis(2-chloroethyl)ether	Ave	2.802	2.978	0.7000	10.6	10.0	6.3	20.0
2-Chlorophenol	Ave	1.511	1.581	0.8000	10.5	10.0	4.7	20.0
1,3-Dichlorobenzene	Ave	1.774	1.842		10.4	10.0	3.9	20.0
1,4-Dichlorobenzene	Ave	1.622	1.686		10.4	10.0	4.0	20.0
Benzyl alcohol	Ave	1.332	1.288		9.67	10.0	-3.3	20.0
1,2-Dichlorobenzene	Ave	1.672	1.763		10.5	10.0	5.4	20.0
2-Methylphenol	Ave	1.863	1.882	0.7000	10.1	10.0	1.0	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.139	2.254		10.5	10.0	5.4	20.0
3 & 4 Methylphenol	Ave	1.974	1.977		10.0	10.0	0.1	20.0
N-Nitrosodi-n-propylamine	Ave	2.246	2.334	0.5000	10.4	10.0	3.9	20.0
Acetophenone	Ave	2.951	3.050	0.0100	10.3	10.0	3.3	20.0
Hexachloroethane	Ave	0.8110	0.8408	0.3000	10.4	10.0	3.7	20.0
Nitrobenzene	Ave	0.8483	0.9277	0.2000	10.9	10.0	9.4	20.0
Isophorone	Ave	1.305	1.391	0.4000	10.7	10.0	6.5	20.0
2-Nitrophenol	Ave	0.2170	0.2141	0.1000	9.87	10.0	-1.3	20.0
2,4-Dimethylphenol	Ave	0.5830	0.6023	0.2000	10.3	10.0	3.3	20.0
1,3,5-Trichlorobenzene	Ave	0.3768	0.3872		10.3	10.0	2.8	20.0
Bis(2-chloroethoxy)methane	Ave	0.7761	0.8165	0.3000	10.5	10.0	5.2	20.0
Benzoic acid	Qua		0.2286		18.2	20.0	-9.0	20.0
2,4-Dichlorophenol	Ave	0.2931	0.2879	0.2000	9.82	10.0	-1.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3706	0.3728		10.1	10.0	0.6	20.0
Naphthalene	Ave	1.072	1.084	0.7000	10.1	10.0	1.1	20.0
4-Chloroaniline	Ave	0.4919	0.4864	0.0100	9.89	10.0	-1.1	20.0
Hexachlorobutadiene	Ave	0.2081	0.2149	0.0100	10.3	10.0	3.2	20.0
1,2,3-Trichlorobenzene	Ave	0.3449	0.3487		10.1	10.0	1.1	20.0
Caprolactam	Ave	0.1584	0.1588	0.0100	10.0	10.0	0.3	20.0
4-Chloro-3-methylphenol	Ave	0.4923	0.4925	0.2000	10.0	10.0	0.0	20.0
2-Methylnaphthalene	Ave	0.7210	0.7116	0.4000	9.87	10.0	-1.3	20.0
1-Methylnaphthalene	Ave	0.6969	0.6907		9.91	10.0	-0.9	20.0
1,2,3,5-Tetrachlorobenzene	Ave	0.6194	0.6428		10.4	10.0	3.8	20.0
Hexachlorocyclopentadiene	Ave	0.4098	0.4491	0.0500	11.0	10.0	9.6	20.0
2,4,6-Trichlorophenol	Ave	0.3696	0.3683	0.2000	9.97	10.0	-0.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51296/2 Calibration Date: 07/19/2012 08:11

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20719002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3921	0.3841	0.2000	9.80	10.0	-2.0	20.0
2,4-Toluene diamine	Ave	0.2444	0.2009		8.22	10.0	-17.8	20.0
1,1'-Biphenyl	Ave	1.539	1.531	0.0100	9.95	10.0	-0.5	20.0
1,2,3,4 -Tetrachlorobenzene	Ave	0.6000	0.5986		9.98	10.0	-0.2	20.0
2-Chloronaphthalene	Ave	1.299	1.267	0.8000	9.76	10.0	-2.4	20.0
2-Nitroaniline	Ave	0.6809	0.7716	0.0100	11.3	10.0	13.3	20.0
Dimethyl phthalate	Ave	1.317	1.353	0.0100	10.3	10.0	2.7	20.0
2,6-Dinitrotoluene	Ave	0.3500	0.3642		10.4	10.0	4.0	20.0
1,2-Dinitrobenzene	Ave	0.1696	0.1706		10.1	10.0	0.6	20.0
Acenaphthylene	Ave	1.895	1.923	0.9000	10.1	10.0	1.5	20.0
3-Nitroaniline	Ave	0.3481	0.3446	0.0100	9.90	10.0	-1.0	20.0
2,4-Dinitrophenol	Qua		0.2157	0.0100	19.1	20.0	-4.5	20.0
Acenaphthene	Ave	1.245	1.231	0.9000	9.88	10.0	-1.2	20.0
4-Nitrophenol	Ave	0.3159	0.3355		10.6	10.0	6.2	20.0
2,4-Dinitrotoluene	Ave	0.4767	0.4994	0.2000	10.5	10.0	4.8	20.0
Dibenzofuran	Ave	1.605	1.612	0.8000	10.0	10.0	0.4	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3217	0.3100		9.64	10.0	-3.6	20.0
Diethyl phthalate	Ave	1.396	1.428	0.0100	10.2	10.0	2.3	20.0
4-Chlorophenyl phenyl ether	Ave	0.7485	0.7370	0.4000	9.85	10.0	-1.5	20.0
4-Nitroaniline	Ave	0.3791	0.3936	0.0100	10.4	10.0	3.8	20.0
Fluorene	Ave	1.390	1.396	0.9000	10.0	10.0	0.4	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1535	0.1589	0.0100	10.4	10.0	3.5	20.0
N-Nitrosodiphenylamine	Ave	0.6038	0.6137	0.0100	10.2	10.0	1.6	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.540	1.710		11.1	10.0	11.0	20.0
Azobenzene	Ave	1.540	1.711		11.1	10.0	11.1	20.0
4-Bromophenyl phenyl ether	Ave	0.2258	0.2252	0.1000	9.97	10.0	-0.3	20.0
Hexachlorobenzene	Ave	0.1903	0.1901	0.1000	10.0	10.0	-0.0	20.0
Atrazine	Ave	0.1973	0.2078	0.0100	10.5	10.0	5.4	20.0
Pentachlorophenol	Ave	0.1284	0.1196	0.0500	18.6	20.0	-6.9	20.0
Phenanthrene	Ave	1.170	1.171	0.7000	10.0	10.0	0.0	20.0
Anthracene	Ave	1.210	1.234	0.7000	10.2	10.0	2.0	20.0
Carbazole	Ave	1.111	1.122	0.0100	10.1	10.0	1.0	20.0
Di-n-butyl phthalate	Ave	1.466	1.496	0.0100	10.2	10.0	2.1	20.0
Fluoranthene	Ave	1.306	1.318	0.6000	10.1	10.0	0.9	20.0
Benzidine	Ave	0.7729	0.6893		8.92	10.0	-10.8	20.0
Pyrene	Ave	1.481	1.541	0.6000	10.4	10.0	4.1	20.0
Butyl benzyl phthalate	Ave	0.7326	0.7706	0.0100	10.5	10.0	5.2	20.0
3,3'-Dimethoxybenzidine	Ave	0.3514	0.3184		9.06	10.0	-9.4	20.0
Bis(2-ethylhexyl) phthalate	Ave	1.063	1.088	0.0100	10.2	10.0	2.4	20.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2734	0.2886		10.6	10.0	5.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51296/2 Calibration Date: 07/19/2012 08:11

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20719002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3,3'-Dichlorobenzidine	Ave	0.4863	0.4997	0.0100	10.3	10.0	2.8	20.0
Benzo[a]anthracene	Ave	1.366	1.347	0.8000	9.87	10.0	-1.3	20.0
Chrysene	Ave	1.221	1.280	0.7000	10.5	10.0	4.8	20.0
Di-n-octyl phthalate	Ave	2.471	2.594	0.0100	10.5	10.0	4.9	20.0
Benzo[b]fluoranthene	Ave	1.714	1.909	0.7000	11.1	10.0	11.4	20.0
Benzo[k]fluoranthene	Ave	1.760	1.719	0.7000	9.76	10.0	-2.4	20.0
Benzo[a]pyrene	Ave	1.592	1.651	0.7000	10.4	10.0	3.7	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.693	1.762	0.5000	10.4	10.0	4.1	20.0
Dibenzo(a,h)anthracene	Ave	1.367	1.434	0.4000	10.5	10.0	5.0	20.0
Benzo[g,h,i]perylene	Ave	1.379	1.418	0.5000	10.3	10.0	2.8	20.0
2-Fluorophenol (Surr)	Ave	1.765	1.917		10.9	10.0	8.6	20.0
Phenol-d5 (Surr)	Ave	2.751	2.886		10.5	10.0	4.9	20.0
Nitrobenzene-d5 (Surr)	Ave	0.8440	0.9263		11.0	10.0	9.8	20.0
2-Fluorobiphenyl (Surr)	Ave	1.543	1.526		9.89	10.0	-1.1	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1173	0.1207		10.3	10.0	2.9	20.0
Terphenyl-d14 (Surr)	Ave	0.8748	0.8709		9.96	10.0	-0.4	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab File ID: 20719009.D Lab Sample ID: MB 240-50985/23-A

Matrix: Solid Date Extracted: 07/17/2012 08:20

Instrument ID: A4HP9 Date Analyzed: 07/19/2012 10:29

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-50985/22-A	20719010.D	07/19/2012 10:48
MT-SS19-0-2	240-13043-2	20719026.D	07/19/2012 16:01

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50985/23-A

Matrix: Solid | Lab File ID: 20719009.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/17/2012 08:20

Sample wt/vol: 30(g) | Date Analyzed: 07/19/2012 10:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51296 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	50	U	50	27
123-91-1	1,4-Dioxane	100	U	100	22
88-06-2	2,4,6-Trichlorophenol	150	U	150	80
95-95-4	2,4,5-Trichlorophenol	150	U	150	25
120-83-2	2,4-Dichlorophenol	150	U	150	20
105-67-9	2,4-Dimethylphenol	150	U	150	20
51-28-5	2,4-Dinitrophenol	330	U	330	80
121-14-2	2,4-Dinitrotoluene	200	U	200	27
91-58-7	2-Chloronaphthalene	50	U	50	3.3
95-57-8	2-Chlorophenol	50	U	50	27
91-57-6	2-Methylnaphthalene	6.7	U	6.7	3.3
95-48-7	2-Methylphenol	200	U	200	80
88-74-4	2-Nitroaniline	200	U	200	9.1
88-75-5	2-Nitrophenol	50	U	50	27
15831-10-4	3 & 4 Methylphenol	400	U	400	20
91-94-1	3,3'-Dichlorobenzidine	100	U	100	18
99-09-2	3-Nitroaniline	200	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	150	U	150	80
101-55-3	4-Bromophenyl phenyl ether	50	U	50	13
59-50-7	4-Chloro-3-methylphenol	150	U	150	21
106-47-8	4-Chloroaniline	150	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	50	U	50	13
100-01-6	4-Nitroaniline	200	U	200	26
83-32-9	Acenaphthene	6.7	U	6.7	3.3
208-96-8	Acenaphthylene	6.7	U	6.7	3.3
98-86-2	Acetophenone	100	U	100	9.2
120-12-7	Anthracene	6.7	U	6.7	3.3
1912-24-9	Atrazine	200	U	200	9.1
100-52-7	Benzaldehyde	100	U	100	12
56-55-3	Benzo[a]anthracene	6.7	U	6.7	3.3
50-32-8	Benzo[a]pyrene	6.7	U	6.7	3.3
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	3.3
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	3.3
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	3.3

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50985/23-A

Matrix: Solid | Lab File ID: 20719009.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/17/2012 08:20

Sample wt/vol: 30(g) | Date Analyzed: 07/19/2012 10:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51296 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	100	U	100	22
111-44-4	Bis(2-chloroethyl)ether	100	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	50	U	50	19
85-68-7	Butyl benzyl phthalate	50	U	50	10
105-60-2	Caprolactam	330	U	330	37
86-74-8	Carbazole	50	U	50	27
218-01-9	Chrysene	6.7	U	6.7	1.1
84-74-2	Di-n-butyl phthalate	50	U	50	15
117-84-0	Di-n-octyl phthalate	50	U	50	27
53-70-3	Dibenzo(a,h)anthracene	6.7	U	6.7	3.3
132-64-9	Dibenzofuran	50	U	50	3.3
84-66-2	Diethyl phthalate	50	U	50	16
131-11-3	Dimethyl phthalate	50	U	50	17
206-44-0	Fluoranthene	6.7	U	6.7	3.3
86-73-7	Fluorene	6.7	U	6.7	3.3
118-74-1	Hexachlorobenzene	6.7	U	6.7	2.1
87-68-3	Hexachlorobutadiene	50	U	50	27
77-47-4	Hexachlorocyclopentadiene	330	U	330	27
67-72-1	Hexachloroethane	50	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	3.3
78-59-1	Isophorone	50	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	50	U	50	27
62-75-9	N-Nitrosodimethylamine	100	U	100	16
86-30-6	N-Nitrosodiphenylamine	50	U	50	21
91-20-3	Naphthalene	6.7	U	6.7	3.3
98-95-3	Nitrobenzene	100	U	100	2.2
87-86-5	Pentachlorophenol	150	U	150	80
85-01-8	Phenanthrene	6.7	U	6.7	3.3
108-95-2	Phenol	50	U	50	27
129-00-0	Pyrene	6.7	U	6.7	3.3
108-60-1	2,2'-oxybis[1-chloropropane]	100	U	100	9.5
606-20-2	2,6-Dinitrotoluene	200	U	200	21
100-02-7	4-Nitrophenol	330	U	330	80

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50985/23-A

Matrix: Solid | Lab File ID: 20719009.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/17/2012 08:20

Sample wt/vol: 30(g) | Date Analyzed: 07/19/2012 10:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51296 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	67		41-119
4165-62-2	Phenol-d5 (Surr)	61		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	54		24-112
367-12-4	2-Fluorophenol (Surr)	61		26-110
321-60-8	2-Fluorobiphenyl (Surr)	46		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	42		10-118

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20719010.D

Lab ID: LCS 240-50985/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	402	60	50-130	
1,4-Dioxane	667	233	35	10-110	
2,4,6-Trichlorophenol	667	395	59	37-110	
2,4,5-Trichlorophenol	667	420	63	42-110	
2,4-Dichlorophenol	667	404	61	40-110	
2,4-Dimethylphenol	667	326	49	28-110	
2,4-Dinitrophenol	667	107 J	16	10-110	
2,4-Dinitrotoluene	667	419	63	55-116	
2-Chloronaphthalene	667	349	52	46-110	
2-Chlorophenol	667	404	61	39-110	
2-Methylnaphthalene	667	412	62	46-110	
2-Methylphenol	667	399	60	36-110	
2-Nitroaniline	667	499	75	47-124	
2-Nitrophenol	667	375	56	35-110	
3 & 4 Methylphenol	1330	807	61	40-110	
3,3'-Dichlorobenzidine	667	265	40	31-110	
3-Nitroaniline	667	385	58	44-110	
4,6-Dinitro-2-methylphenol	667	163	24	21-110	
4-Bromophenyl phenyl ether	667	363	54	53-112	
4-Chloro-3-methylphenol	667	455	68	42-110	
4-Chloroaniline	667	328	49	25-110	
4-Chlorophenyl phenyl ether	667	369	55	53-110	
4-Nitroaniline	667	433	65	50-110	
Acenaphthene	667	400	60	46-110	
Acenaphthylene	667	411	62	47-110	
Acetophenone	667	429	64	50-130	
Anthracene	667	433	65	56-111	
Atrazine	667	567	85	50-130	
Benzaldehyde	667	386	58	10-130	
Benzo[a]anthracene	667	429	64	58-111	
Benzo[a]pyrene	667	405	61	44-115	
Benzo[b]fluoranthene	667	463	69	43-124	
Benzo[g,h,i]perylene	667	439	66	44-120	
Benzo[k]fluoranthene	667	424	64	38-122	
Bis(2-chloroethoxy)methane	667	382	57	42-110	
Bis(2-chloroethyl)ether	667	371	56	41-110	
Bis(2-ethylhexyl) phthalate	667	458	69	56-123	
Butyl benzyl phthalate	667	455	68	57-121	
Caprolactam	667	426	64	50-130	
Carbazole	667	441	66	56-115	
Chrysene	667	455	68	56-111	
Di-n-butyl phthalate	667	463	69	57-119	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20719010.D

Lab ID: LCS 240-50985/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	667	453	68	45-123	
Dibenzo(a,h)anthracene	667	449	67	45-122	
Dibenzofuran	667	429	64	50-110	
Diethyl phthalate	667	463	69	55-114	
Dimethyl phthalate	667	463	69	54-112	
Fluoranthene	667	448	67	55-118	
Fluorene	667	419	63	51-110	
Hexachlorobenzene	667	407	61	51-110	
Hexachlorobutadiene	667	374	56	39-110	
Hexachlorocyclopentadiene	667	335	50	10-110	
Hexachloroethane	667	393	59	38-110	
Indeno[1,2,3-cd]pyrene	667	435	65	45-121	
Isophorone	667	441	66	46-117	
N-Nitrosodi-n-propylamine	667	435	65	40-114	
N-Nitrosodimethylamine	667	426	64	10-130	
N-Nitrosodiphenylamine	667	415	62	54-112	
Naphthalene	667	421	63	42-110	
Nitrobenzene	667	407	61	40-110	
Pentachlorophenol	667	153	23	10-110	
Phenanthrene	667	434	65	54-110	
Phenol	667	425	64	39-110	
Pyrene	667	434	65	58-113	
2,2'-oxybis[1-chloropropane]	667	394	59	36-116	
2,6-Dinitrotoluene	667	409	61	54-115	
4-Nitrophenol	667	372	56	24-117	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MT-SS19-0-2	240-13043-2	58	54	47	41	29	64
MT-SS19-8-10	240-13043-3	91	95	70	64	63	90
MT-SS20-0-2	240-13043-4	79	84	63	60	67	88
MT-SS20-8-10	240-13043-5	83	89	65	61	69	86
MT-SS21-0-2	240-13043-6	89	90	64	61	81	85
MT-SS21-8-10	240-13043-7	85	89	59	55	66	93
	MB 240-50985/23-A	61	61	54	46	42	67
	MB 240-51193/23-A	90	89	68	66	74	85
	LCS 240-50985/22-A	62	63	59	50	59	67
	LCS 240-51193/24-A	77	80	65	62	62	84

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	26-110
PHL = Phenol-d5 (Surr)	28-110
NBZ = Nitrobenzene-d5 (Surr)	24-112
FBP = 2-Fluorobiphenyl (Surr)	34-110
TBP = 2,4,6-Tribromophenol (Surr)	10-118
TPH = Terphenyl-d14 (Surr)	41-119

Column to be used to flag recovery values

FORM II 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: STD6 240-50462/10 Date Analyzed: 07/11/2012 13:51

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20711010.D Heated Purge: (Y/N) N

Calibration ID: 10087

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		241827	3.53	1009315	4.42	537073	5.69
UPPER LIMIT		483654	4.03	2018630	4.92	1074146	6.19
LOWER LIMIT		120914	3.03	504658	3.92	268537	5.19
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-50462/11		251581	3.53	1014354	4.42	563284	5.69
CCV 240-51476/2 CCVIS		147541	3.41	588850	4.30	316710	5.55

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: STD6 240-50462/10 Date Analyzed: 07/11/2012 13:51

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20711010.D Heated Purge: (Y/N) N

Calibration ID: 10087

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		802137	6.77	657426	8.74	478527	10.16
UPPER LIMIT		1604274	7.27	1314852	9.24	957054	10.66
LOWER LIMIT		401069	6.27	328713	8.24	239264	9.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-50462/11		896619	6.77	749467	8.76	572131	10.17
CCV 240-51476/2 CCVIS		464062	6.63	370141	8.59	273986	9.91

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCV 240-51476/2 Date Analyzed: 07/20/2012 09:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20720002.D Heated Purge: (Y/N) N

Calibration ID: 10099

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		147541	3.41	588850	4.30	316710	5.55
UPPER LIMIT		295082	3.91	1177700	4.80	633420	6.05
LOWER LIMIT		73771	2.91	294425	3.80	158355	5.05
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-51193/23-A		175670	3.40	741114	4.29	402126	5.55
LCS 240-51193/24-A		182779	3.40	749730	4.29	406472	5.55
240-13043-3	MT-SS19-8-10	206615	3.40	880840	4.30	516271	5.55
240-13043-4	MT-SS20-0-2	169610	3.40	724463	4.30	424365	5.55
240-13043-6	MT-SS21-0-2	165655	3.40	738559	4.30	423656	5.55
240-13043-7	MT-SS21-8-10	132688	3.40	633843	4.29	372419	5.55
240-13043-5	MT-SS20-8-10	187913	3.40	814788	4.29	488660	5.56

DCB = 1,4-Dichlorobenzene-d4

DCB = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

NPT = Naphthalene-d8

Area Limit = 50%-200% of internal standard area

ANT = Acenaphthene-d10

RT Limit = ± 0.5 minutes of internal standard RT

ANT = Acenaphthene-d10

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCV 240-51476/2 Date Analyzed: 07/20/2012 09:45

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20720002.D Heated Purge: (Y/N) N

Calibration ID: 10099

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		464062	6.63	370141	8.59	273986	9.91
UPPER LIMIT		928124	7.13	740282	9.09	547972	10.41
LOWER LIMIT		232031	6.13	185071	8.09	136993	9.41
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-51193/23-A		604384	6.63	488598	8.60	373832	9.92
LCS 240-51193/24-A		616725	6.63	511618	8.60	382252	9.91
240-13043-3	MT-SS19-8-10	810812	6.63	681129	8.60	513813	9.92
240-13043-4	MT-SS20-0-2	664055	6.63	585756	8.60	431405	9.92
240-13043-6	MT-SS21-0-2	694005	6.63	599000	8.60	468852	9.91
240-13043-7	MT-SS21-8-10	594238	6.63	498520	8.59	389175	9.91
240-13043-5	MT-SS20-8-10	747202	6.63	645765	8.61	485483	9.94

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
PRY = Perylene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: STD6 240-51126/10 Date Analyzed: 07/18/2012 12:29

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20718010.D Heated Purge: (Y/N) N

Calibration ID: 10168

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		125995	3.89	522239	4.85	307568	6.15
UPPER LIMIT		251990	4.39	1044478	5.35	615136	6.65
LOWER LIMIT		62998	3.39	261120	4.35	153784	5.65
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-51126/11		121149	3.90	485431	4.85	288798	6.15
CCV 240-51296/2 CCVIS		114867	3.78	452983	4.74	266400	6.04

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: STD6 240-51126/10 Date Analyzed: 07/18/2012 12:29

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20718010.D Heated Purge: (Y/N) N

Calibration ID: 10168

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		516084	7.24	470428	9.21	328489	10.62
UPPER LIMIT		1032168	7.74	940856	9.71	656978	11.12
LOWER LIMIT		258042	6.74	235214	8.71	164245	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-51126/11		477640	7.24	428408	9.20	309480	10.62
CCV 240-51296/2 CCVIS		436328	7.12	393318	9.09	277198	10.43

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCV 240-51296/2 Date Analyzed: 07/19/2012 08:11

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20719002.D Heated Purge: (Y/N) N

Calibration ID: 10172

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		114867	3.78	452983	4.74	266400	6.04
UPPER LIMIT		229734	4.28	905966	5.24	532800	6.54
LOWER LIMIT		57434	3.28	226492	4.24	133200	5.54
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-50985/23-A		114812	3.78	473432	4.74	288378	6.03
LCS 240-50985/22-A		111526	3.78	440744	4.74	271466	6.04
240-13043-2	MT-SS19-0-2	119913	3.78	491140	4.75	313564	6.04

DCB = 1,4-Dichlorobenzene-d4

DCB = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

NPT = Naphthalene-d8

Area Limit = 50%-200% of internal standard area

ANT = Acenaphthene-d10

RT Limit = ± 0.5 minutes of internal standard RT

ANT = Acenaphthene-d10

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCV 240-51296/2 Date Analyzed: 07/19/2012 08:11

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20719002.D Heated Purge: (Y/N) N

Calibration ID: 10172

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		436328	7.12	393318	9.09	277198	10.43
UPPER LIMIT		872656	7.62	786636	9.59	554396	10.93
LOWER LIMIT		218164	6.62	196659	8.59	138599	9.93
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-50985/23-A		503826	7.12	436728	9.07	300929	10.41
LCS 240-50985/22-A		467322	7.12	432210	9.08	298388	10.42
240-13043-2	MT-SS19-0-2	521084	7.12	452969	9.08	336689	10.42

PHN = Phenanthrene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12
CRY = Chrysene-d12
Area Limit = 50%-200% of internal standard area
PRY = Perylene-d12
RT Limit = ± 0.5 minutes of internal standard RT
PRY = Perylene-d12

Column used to flag values outside QC limits

FORM VIII 8270D

Method 8015C - GRO

Nonhalogenated Organics using GC/FID - Modified (Gasoline Range Organics) by Method 8015C

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: YPID Start Date: 06/29/2012 12:53

Analysis Batch Number: 49409 End Date: 06/29/2012 18:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/29/2012 12:53	1		RTX-VRX 0.45(mm)
STD1 240-49409/4 IC		06/29/2012 13:39	1	YF062904.D	RTX-VRX 0.45(mm)
STD2 240-49409/5 IC		06/29/2012 14:26	1	YF062905.D	RTX-VRX 0.45(mm)
STD3 240-49409/6 ICRT		06/29/2012 15:12	1	YF062906.D	RTX-VRX 0.45(mm)
STD4 240-49409/7 IC		06/29/2012 15:59	1	YF062907.D	RTX-VRX 0.45(mm)
STD5 240-49409/8 IC		06/29/2012 16:45	1	YF062908.D	RTX-VRX 0.45(mm)
STD6 240-49409/9 IC		06/29/2012 17:30	1	YF062909.D	RTX-VRX 0.45(mm)
ICV 240-49409/10		06/29/2012 18:14	1	YF062910.D	RTX-VRX 0.45(mm)

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49409

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 13:39 Calibration End Date: 06/29/2012 17:30 Calibration ID: 9879

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-49409/4	YF062904.D
Level 2	STD2 240-49409/5	YF062905.D
Level 3	STD3 240-49409/6	YF062906.D
Level 4	STD4 240-49409/7	YF062907.D
Level 5	STD5 240-49409/8	YF062908.D
Level 6	STD6 240-49409/9	YF062909.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	396398 309079	363256 311555	337661	315467	Ave		338902.687				10.0		20.0			
C6-C12	482905 340285	415902 342255	378953	348850	Ave		384858.436				15.0		20.0			
Trifluorotoluene (Surr)	284961 354937	292193 411371	314695	335646	Ave		332300.483				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49409

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 13:39 Calibration End Date: 06/29/2012 17:30 Calibration ID: 9879

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-49409/4	YF062904.D
Level 2	STD2 240-49409/5	YF062905.D
Level 3	STD3 240-49409/6	YF062906.D
Level 4	STD4 240-49409/7	YF062907.D
Level 5	STD5 240-49409/8	YF062908.D
Level 6	STD6 240-49409/9	YF062909.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Total Petroleum Hydrocarbons (C6-C10)	Ave	39639848 498488116	72651167	135064343	252373251	370895176	100 1600	200	400	800	1200
C6-C12	Ave	48290496 547607937	83180479	151581393	279079607	408342372	100 1600	200	400	800	1200
Trifluorotoluene (Surr)	Ave	2849611 4113708	2921931	3146947	3356464	3549368	10.0 10.0	10.0	10.0	10.0	10.0

Curve Type Legend:
Ave = Average

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 49409

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 13:39 Calibration End Date: 06/29/2012 17:30 Calibration ID: 9879

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-49409/4	YF062904.D
Level 2	STD2 240-49409/5	YF062905.D
Level 3	STD3 240-49409/6	YF062906.D
Level 4	STD4 240-49409/7	YF062907.D
Level 5	STD5 240-49409/8	YF062908.D
Level 6	STD6 240-49409/9	YF062909.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.788	11.788	11.788	11.788	11.788	11.788					4.772 - 18.803	11.788
C6-C12	13.379	13.379	13.379	13.379	13.379	13.379					4.872 - 21.887	13.379
Trifluorotoluene (Surr)	9.737	9.739	9.733	9.735	9.744	9.745					9.485 - 9.985	9.739

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-49409/10 Calibration Date: 06/29/2012 18:14

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF062910.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	338903	340389		804	800	0.4	20.0
C6-C12	Ave	384858	387501		806	800	0.7	20.0
Trifluorotoluene (Surr)	Ave	332300	330492		9.95	10.0	-0.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-49409/10 Calibration Date: 06/29/2012 18:14

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF062910.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.79	4.77	18.80
C6-C12	13.38	4.87	21.89
Trifluorotoluene (Surr)	9.75	9.49	9.99

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCV 240-51212/5 Date Analyzed: 07/18/2012 15:29

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF071805.D Heated Purge: (Y/N) N

Calibration ID: 9879

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.75		
UPPER LIMIT				9.85		
LOWER LIMIT				9.65		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-51212/5 CCVRT		07/18/2012 15:29	YF071805.D	9.75		
MB 240-51212/6		07/18/2012 16:09	YF071806.D	9.75		
LCS 240-51212/7		07/18/2012 16:49	YF071807.D	9.76		
CCV 240-51212/16		07/18/2012 22:42	YF071816.D	9.75		
240-13043-2	MT-SS19-0-2	07/19/2012 02:02	YF071821.D	9.75		
240-13043-3	MT-SS19-8-10	07/19/2012 02:41	YF071822.D	9.75		
240-13043-4	MT-SS20-0-2	07/19/2012 03:20	YF071823.D	9.75		
240-13043-5	MT-SS20-8-10	07/19/2012 04:00	YF071824.D	9.75		
240-13043-6	MT-SS21-0-2	07/19/2012 04:39	YF071825.D	9.75		
240-13043-7	MT-SS21-8-10	07/19/2012 05:18	YF071826.D	9.75		
CCV 240-51212/27		07/19/2012 05:57	YF071827.D	9.76		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: YPID Start Date: 07/18/2012 15:29

Analysis Batch Number: 51212 End Date: 07/19/2012 05:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-51212/5 CCVRT		07/18/2012 15:29	1	YF071805.D	RTX-VRX 0.45(mm)
MB 240-51212/6		07/18/2012 16:09	1	YF071806.D	RTX-VRX 0.45(mm)
LCS 240-51212/7		07/18/2012 16:49	1	YF071807.D	RTX-VRX 0.45(mm)
ZZZZZ		07/18/2012 20:06	2		RTX-VRX 0.45(mm)
ZZZZZ		07/18/2012 20:45	1		RTX-VRX 0.45(mm)
ZZZZZ		07/18/2012 21:23	1		RTX-VRX 0.45(mm)
ZZZZZ		07/18/2012 22:01	1		RTX-VRX 0.45(mm)
CCV 240-51212/16		07/18/2012 22:42	1	YF071816.D	RTX-VRX 0.45(mm)
240-13043-2	MT-SS19-0-2	07/19/2012 02:02	1	YF071821.D	RTX-VRX 0.45(mm)
240-13043-3	MT-SS19-8-10	07/19/2012 02:41	1	YF071822.D	RTX-VRX 0.45(mm)
240-13043-4	MT-SS20-0-2	07/19/2012 03:20	1	YF071823.D	RTX-VRX 0.45(mm)
240-13043-5	MT-SS20-8-10	07/19/2012 04:00	1	YF071824.D	RTX-VRX 0.45(mm)
240-13043-6	MT-SS21-0-2	07/19/2012 04:39	1	YF071825.D	RTX-VRX 0.45(mm)
240-13043-7	MT-SS21-8-10	07/19/2012 05:18	1	YF071826.D	RTX-VRX 0.45(mm)
CCV 240-51212/27		07/19/2012 05:57	1	YF071827.D	RTX-VRX 0.45(mm)

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51212/5 Calibration Date: 07/18/2012 15:29

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071805.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	338903	308811		729	800	-8.9	20.0
C6-C12	Ave	384858	343108		713	800	-10.8	20.0
Trifluorotoluene (Surr)	Ave	332300	353218		10.6	10.0	6.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51212/5 Calibration Date: 07/18/2012 15:29

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071805.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.79	4.79	18.79
C6-C12	13.46	4.89	22.02
Trifluorotoluene (Surr)	9.75	9.50	10.00

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51212/16 Calibration Date: 07/18/2012 22:42

Instrument ID: YPID Calib Start Date: ~~06/29/2012~~ 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071816.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	338903	277442		655	800	-18.1	20.0
C6-C12	Ave	384858	308426		641	800	-19.9	20.0
Trifluorotoluene (Surr)	Ave	332300	315730		9.50	10.0	-5.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51212/16 Calibration Date: 07/18/2012 22:42

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071816.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.79	4.79	18.79
C6-C12	13.46	4.89	22.02
Trifluorotoluene (Surr)	9.75	9.50	10.00

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51212/27 Calibration Date: 07/19/2012 05:57

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071827.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	338903	303506		716	800	-10.4	20.0
C6-C12	Ave	384858	336809		700	800	-12.5	20.0
Trifluorotoluene (Surr)	Ave	332300	330497		9.95	10.0	-0.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51212/27 Calibration Date: 07/19/2012 05:57

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071827.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.79	4.79	18.79
C6-C12	13.46	4.89	22.02
Trifluorotoluene (Surr)	9.76	9.51	10.01

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: MB 240-51212/6

Matrix: Solid Date Extracted: 07/18/2012 16:09

Lab File ID:(1) YF071806.D Lab File ID:(2)

Date Analyzed:(1) 07/18/2012 16:09 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-51212/7	07/18/2012 16:49	
MT-SS19-0-2	240-13043-2	07/19/2012 02:02	
MT-SS19-8-10	240-13043-3	07/19/2012 02:41	
MT-SS20-0-2	240-13043-4	07/19/2012 03:20	
MT-SS20-8-10	240-13043-5	07/19/2012 04:00	
MT-SS21-0-2	240-13043-6	07/19/2012 04:39	
MT-SS21-8-10	240-13043-7	07/19/2012 05:18	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51212/6

Matrix: Solid | Lab File ID: YF071806.D

Analysis Method: 8015C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 07/18/2012 16:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 51212 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	46

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	88		10-150

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF071807.D

Lab ID: LCS 240-51212/7 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	799	100	60-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
MT-SS19-0-2	240-13043-2	82
MT-SS19-8-10	240-13043-3	83
MT-SS20-0-2	240-13043-4	85
MT-SS20-8-10	240-13043-5	79
MT-SS21-0-2	240-13043-6	83
MT-SS21-8-10	240-13043-7	77
	MB 240-51212/6	88
	LCS 240-51212/7	99

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015C

Method 8015C - DRO

Nonhalogenated Organics using GC/FID - Modified (Diesel Range Organics) by Method 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP6R Start Date: 05/17/2012 11:52

Analysis Batch Number: 44412 End Date: 05/17/2012 17:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-44412/4 IC		05/17/2012 11:52	1	P6B51704.D	RTX-5 0.53(mm)
STD2 240-44412/5 IC		05/17/2012 12:23	1	P6B51705.D	RTX-5 0.53(mm)
STD3 240-44412/6 IC		05/17/2012 12:54	1	P6B51706.D	RTX-5 0.53(mm)
STD4 240-44412/7 IC		05/17/2012 13:25	1	P6B51707.D	RTX-5 0.53(mm)
STD5 240-44412/8 IC		05/17/2012 13:56	1	P6B51708.D	RTX-5 0.53(mm)
ICV 240-44412/9		05/17/2012 14:27	1	P6B51709.D	RTX-5 0.53(mm)
STD1 240-44412/10 IC		05/17/2012 14:58	1		RTX-5 0.53(mm)
STD2 240-44412/11 IC		05/17/2012 15:29	1		RTX-5 0.53(mm)
STD3 240-44412/12 IC		05/17/2012 16:00	1		RTX-5 0.53(mm)
STD4 240-44412/13 IC		05/17/2012 16:31	1		RTX-5 0.53(mm)
STD5 240-44412/14 IC		05/17/2012 17:03	1		RTX-5 0.53(mm)
ICV 240-44412/15		05/17/2012 17:34	1		RTX-5 0.53(mm)

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 44412

SDG No.:

Instrument ID: A2HP6R GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/17/2012 11:52 Calibration End Date: 05/17/2012 13:56 Calibration ID: 8872

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-44412/4	P6B51704.D
Level 2	STD2 240-44412/5	P6B51705.D
Level 3	STD3 240-44412/6	P6B51706.D
Level 4	STD4 240-44412/7	P6B51707.D
Level 5	STD5 240-44412/8	P6B51708.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	167629 137649	145347	173940	166611	Ave		158235.281				10.0		20.0			
n-Nonane	206003 165423	175155	206041	200981	Ave		190720.706				10.0		20.0			

Note: The ml coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 44412

SDG No.:

Instrument ID: A2HP6R GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/17/2012 11:52 Calibration End Date: 05/17/2012 13:56 Calibration ID: 8872

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-44412/4	P6B51704.D
Level 2	STD2 240-44412/5	P6B51705.D
Level 3	STD3 240-44412/6	P6B51706.D
Level 4	STD4 240-44412/7	P6B51707.D
Level 5	STD5 240-44412/8	P6B51708.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel	Ave	16762944	29069429	86969998	166610906	275297836	100	200	500	1000	2000
n-Nonane	Ave	2060033	3503095	10302053	20098113	33084658	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 44412

SDG No.:

Instrument ID: A2HP6R GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/17/2012 11:52 Calibration End Date: 05/17/2012 13:56 Calibration ID: 8872

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-44412/4	P6B51704.D
Level 2	STD2 240-44412/5	P6B51705.D
Level 3	STD3 240-44412/6	P6B51706.D
Level 4	STD4 240-44412/7	P6B51707.D
Level 5	STD5 240-44412/8	P6B51708.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	9.356	9.356	9.356	9.356	9.356						5.171 - 13.529	9.356
n-Nonane	4.175	4.173	4.176	4.179	4.177						4.125 - 4.225	4.176

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-44412/9 Calibration Date: 05/17/2012 14:27

Instrument ID: A2HP6R Calib Start Date: 05/17/2012 11:52

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 05/17/2012 13:56

Lab File ID: P6B51709.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	158235	171334		541	500	8.3	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-44412/9 Calibration Date: 05/17/2012 14:27

Instrument ID: A2HP6R Calib Start Date: 05/17/2012 11:52

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 05/17/2012 13:56

Lab File ID: P6B51709.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.36	5.17	13.53

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP6R Start Date: 07/20/2012 11:59

Analysis Batch Number: 51479 End Date: 07/20/2012 15:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-51479/4 CCVRT		07/20/2012 11:59	1	P6B72004.D	RTX-5 0.53(mm)
240-13043-2	MT-SS19-0-2	07/20/2012 12:31	1	P6B72005.D	RTX-5 0.53(mm)
240-13043-3	MT-SS19-8-10	07/20/2012 13:02	1	P6B72006.D	RTX-5 0.53(mm)
240-13043-4	MT-SS20-0-2	07/20/2012 13:34	1	P6B72007.D	RTX-5 0.53(mm)
240-13043-5	MT-SS20-8-10	07/20/2012 14:05	1	P6B72008.D	RTX-5 0.53(mm)
240-13043-6	MT-SS21-0-2	07/20/2012 14:36	1	P6B72009.D	RTX-5 0.53(mm)
240-13043-7	MT-SS21-8-10	07/20/2012 15:08	1	P6B72010.D	RTX-5 0.53(mm)
CCV 240-51479/11		07/20/2012 15:39	1	P6B72011.D	RTX-5 0.53(mm)

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCV 240-51479/4 Date Analyzed: 07/20/2012 11:59

Instrument ID: A2HP6R GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6B72004.D Heated Purge: (Y/N) N

Calibration ID: 8872

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.16		
UPPER LIMIT				4.26		
LOWER LIMIT				4.06		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-51479/4 CCVRT		07/20/2012 11:59	P6B72004.D	4.16		
240-13043-2	MT-SS19-0-2	07/20/2012 12:31	P6B72005.D	4.15		
240-13043-3	MT-SS19-8-10	07/20/2012 13:02	P6B72006.D	4.15		
240-13043-4	MT-SS20-0-2	07/20/2012 13:34	P6B72007.D	4.15		
240-13043-5	MT-SS20-8-10	07/20/2012 14:05	P6B72008.D	4.15		
240-13043-6	MT-SS21-0-2	07/20/2012 14:36	P6B72009.D	4.15		
240-13043-7	MT-SS21-8-10	07/20/2012 15:08	P6B72010.D	4.15		
CCV 240-51479/11		07/20/2012 15:39	P6B72011.D	4.15		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51479/4 Calibration Date: 07/20/2012 11:59

Instrument ID: A2HP6R Calib Start Date: 05/17/2012 11:52

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 05/17/2012 13:56

Lab File ID: P6B72004.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	158235	140870		445	500	-11.0	20.0
n-Nonane	Ave	190721	163365		42.8	50.0	-14.3	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51479/4 Calibration Date: 07/20/2012 11:59

Instrument ID: A2HP6R Calib Start Date: 05/17/2012 11:52

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 05/17/2012 13:56

Lab File ID: P6B72004.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.35	5.16	13.53
n-Nonane	4.16	4.11	4.21

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51479/11 Calibration Date: 07/20/2012 15:39

Instrument ID: A2HP6R Calib Start Date: 05/17/2012 11:52

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 05/17/2012 13:56

Lab File ID: P6B72011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	158235	147585		466	500	-6.7	20.0
n-Nonane	Ave	190721	177344		46.5	50.0	-7.0	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51479/11 Calibration Date: 07/20/2012 15:39

Instrument ID: A2HP6R Calib Start Date: 05/17/2012 11:52

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 05/17/2012 13:56

Lab File ID: P6B72011.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.35	5.16	13.53
n-Nonane	4.15	4.11	4.21

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP6F Start Date: 06/25/2012 14:51

Analysis Batch Number: 48689 End Date: 06/25/2012 21:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-48689/5 IC		06/25/2012 14:51	1	P6F62505.D	RTX-5 0.53(mm)
STD2 240-48689/6 IC		06/25/2012 15:31	1	P6F62506.D	RTX-5 0.53(mm)
STD3 240-48689/7 ICRT		06/25/2012 16:11	1	P6F62507.D	RTX-5 0.53(mm)
STD4 240-48689/8 IC		06/25/2012 16:51	1	P6F62508.D	RTX-5 0.53(mm)
STD5 240-48689/9 IC		06/25/2012 17:31	1	P6F62509.D	RTX-5 0.53(mm)
ICV 240-48689/10		06/25/2012 18:10	1	P6F62510.D	RTX-5 0.53(mm)
STD1 240-48689/11 IC		06/25/2012 18:50	1		RTX-5 0.53(mm)
STD2 240-48689/12 IC		06/25/2012 19:30	1		RTX-5 0.53(mm)
STD3 240-48689/13 IC		06/25/2012 20:10	1		RTX-5 0.53(mm)
STD4 240-48689/14 IC		06/25/2012 20:50	1		RTX-5 0.53(mm)
STD5 240-48689/15 IC		06/25/2012 21:30	1		RTX-5 0.53(mm)

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 48689

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53 ~~(mm)~~ Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2012 14:51 Calibration End Date: 06/25/2012 17:31 Calibration ID: 9538

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-48689/5	P6F62505.D
Level 2	STD2 240-48689/6	P6F62506.D
Level 3	STD3 240-48689/7	P6F62507.D
Level 4	STD4 240-48689/8	P6F62508.D
Level 5	STD5 240-48689/9	P6F62509.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	196456 165927	185262	185306	173096	Ave		181209.356				6.6		20.0			
n-Nonane	210482 188182	207607	220438	205830	Ave		206507.780				5.7		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 48689

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start ~~Date~~: 06/25/2012 14:51 Calibration End Date: 06/25/2012 17:31 Calibration ID: 9538

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-48689/5	P6F62505.D
Level 2	STD2 240-48689/6	P6F62506.D
Level 3	STD3 240-48689/7	P6F62507.D
Level 4	STD4 240-48689/8	P6F62508.D
Level 5	STD5 240-48689/9	P6F62509.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel	Ave	19645571	37052412	92652936	173095961	331854356	100	200	500	1000	2000
n-Nonane	Ave	2104818	4152135	11021904	20583000	37636454	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 48689

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/25/2012 14:51 Calibration End Date: 06/25/2012 17:31 Calibration ID: 9538

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-48689/5	P6F62505.D
Level 2	STD2 240-48689/6	P6F62506.D
Level 3	STD3 240-48689/7	P6F62507.D
Level 4	STD4 240-48689/8	P6F62508.D
Level 5	STD5 240-48689/9	P6F62509.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	9.649	9.649	9.649	9.649	9.649						5.497 - 13.807	9.649
n-Nonane	4.568	4.570	4.570	4.573	4.575						4.520 - 4.620	4.571

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-48689/10 Calibration Date: 06/25/2012 18:10

Instrument ID: A2HP6F Calib Start Date: 06/25/2012 14:51

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/25/2012 17:31

Lab File ID: P6F62510.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181209	174412		481	500	-3.8	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-48689/10 Calibration Date: 06/25/2012 18:10

Instrument ID: A2HP6F Calib Start Date: 06/25/2012 14:51

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/25/2012 17:31

Lab File ID: P6F62510.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.65	5.50	13.81

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP6F Start Date: 07/19/2012 14:55

Analysis Batch Number: 51314 End Date: 07/19/2012 20:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 240-51314/9		07/19/2012 14:55	1	P6F71909.D	RTX-5 0.53(mm)
MB 240-51014/22-A		07/19/2012 15:26	1	P6F71910.D	RTX-5 0.53(mm)
LCS 240-51014/23-A		07/19/2012 15:58	1	P6F71911.D	RTX-5 0.53(mm)
ZZZZZ		07/19/2012 17:00	1		RTX-5 0.53(mm)
ZZZZZ		07/19/2012 17:32	1		RTX-5 0.53(mm)
ZZZZZ		07/19/2012 18:03	1		RTX-5 0.53(mm)
ZZZZZ		07/19/2012 18:34	1		RTX-5 0.53(mm)
ZZZZZ		07/19/2012 19:05	1		RTX-5 0.53(mm)
ZZZZZ		07/19/2012 19:36	1		RTX-5 0.53(mm)
CCV 240-51314/19		07/19/2012 20:07	1	P6F71919.D	RTX-5 0.53(mm)

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCVRT 240-51314/9 Date Analyzed: 07/19/2012 14:55

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F71909.D Heated Purge: (Y/N) N

Calibration ID: 9538

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.18		
UPPER LIMIT				4.28		
LOWER LIMIT				4.08		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-51314/9		07/19/2012 14:55	P6F71909.D	4.18		
MB 240-51014/22-A		07/19/2012 15:26	P6F71910.D	4.17		
LCS 240-51014/23-A		07/19/2012 15:58	P6F71911.D	4.17		
CCV 240-51314/19		07/19/2012 20:07	P6F71919.D	4.18		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCVRT 240-51314/9 Calibration Date: 07/19/2012 14:55

Instrument ID: A2HP6F Calib Start Date: 06/25/2012 14:51

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/25/2012 17:31

Lab File ID: P6F71909.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181209	171672		474	500	-5.3	20.0
n-Nonane	Ave	206508	184294		44.6	50.0	-10.8	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCVRT 240-51314/9 Calibration Date: 07/19/2012 14:55

Instrument ID: A2HP6F Calib Start Date: 06/25/2012 14:51

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/25/2012 17:31

Lab File ID: P6F71909.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.40	5.18	13.62
n-Nonane	4.18	4.13	4.23

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51314/19 | Calibration Date: 07/19/2012 20:07

Instrument ID: A2HP6F | Calib Start Date: 06/25/2012 14:51

GC Column: RTX-5 ID: 0.53(mm) | Calib End Date: 06/25/2012 17:31

Lab File ID: P6F71919.D | Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181209	176784		488	500	-2.4	20.0
n-Nonane	Ave	206508	190870		46.2	50.0	-7.6	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51314/19 Calibration Date: 07/19/2012 20:07

Instrument ID: A2HP6F Calib Start Date: 06/25/2012 14:51

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 06/25/2012 17:31

Lab File ID: P6F71919.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.40	5.18	13.62
n-Nonane	4.18	4.13	4.23

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: MB 240-51014/22-A

Matrix: Solid Date Extracted: 07/17/2012 09:14

Lab File ID:(1) P6F71910.D Lab File ID:(2)

Date Analyzed:(1) 07/19/2012 15:26 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-51014/23-A	07/19/2012 15:58	
MT-SS19-0-2	240-13043-2	07/20/2012 12:31	
MT-SS19-8-10	240-13043-3	07/20/2012 13:02	
MT-SS20-0-2	240-13043-4	07/20/2012 13:34	
MT-SS20-8-10	240-13043-5	07/20/2012 14:05	
MT-SS21-0-2	240-13043-6	07/20/2012 14:36	
MT-SS21-8-10	240-13043-7	07/20/2012 15:08	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51014/22-A

Matrix: Solid | Lab File ID: P6F71910.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3540C | Date Extracted: 07/17/2012 09:14

Sample wt/vol: 30(g) | Date Analyzed: 07/19/2012 15:26

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51314 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	16.5	J	17	9.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	36		10-110

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P6F71911.D

Lab ID: LCS 240-51014/23-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel	83.3	74.2	89	47-138	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-5 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	C91 #
MT-SS19-0-2	240-13043-2	34
MT-SS19-8-10	240-13043-3	39
MT-SS20-0-2	240-13043-4	38
MT-SS20-8-10	240-13043-5	40
MT-SS21-0-2	240-13043-6	36
MT-SS21-8-10	240-13043-7	37
	MB 240-51014/22-A	36
	LCS 240-51014/23-A	40

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015C

Method 8082A

Polychlorinated Biphenyls (PCBs) (GC) by Method 8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP13 Start Date: 03/23/2012 13:23

Analysis Batch Number: 37817 End Date: 03/24/2012 01:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-37817/3 IC		03/23/2012 13:23	1		CLP-1 0.53(mm)
STD005 240-37817/3 IC		03/23/2012 13:23	1	P1300003.D	CLP-2 0.53(mm)
STD01 240-37817/4 IC	1232	03/23/2012 13:38	1		CLP-1 0.53(mm)
STD01 240-37817/4 IC		03/23/2012 13:38	1	P1300004.D	CLP-2 0.53(mm)
STD02 240-37817/5 IC		03/23/2012 13:53	1		CLP-1 0.53(mm)
STD02 240-37817/5 IC		03/23/2012 13:53	1	P1300005.D	CLP-2 0.53(mm)
STD05 240-37817/6 IC		03/23/2012 14:08	1		CLP-1 0.53(mm)
STD05 240-37817/6 IC		03/23/2012 14:08	1	P1300006.D	CLP-2 0.53(mm)
STD1 240-37817/7 IC		03/23/2012 14:23	1		CLP-1 0.53(mm)
STD1 240-37817/7 IC		03/23/2012 14:23	1	P1300007.D	CLP-2 0.53(mm)
STD2 240-37817/8 IC		03/23/2012 14:38	1		CLP-1 0.53(mm)
STD2 240-37817/8 IC		03/23/2012 14:38	1	P1300008.D	CLP-2 0.53(mm)
STD005 240-37817/9 IC		03/23/2012 14:53	1		CLP-1 0.53(mm)
STD005 240-37817/9 IC		03/23/2012 14:53	1	P1300009.D	CLP-2 0.53(mm)
STD01 240-37817/10 IC		03/23/2012 15:08	1		CLP-1 0.53(mm)
STD01 240-37817/10 IC		03/23/2012 15:08	1	P1300010.D	CLP-2 0.53(mm)
STD02 240-37817/11 IC	1242	03/23/2012 15:23	1		CLP-1 0.53(mm)
STD02 240-37817/11 IC		03/23/2012 15:23	1	P1300011.D	CLP-2 0.53(mm)
STD05 240-37817/12 IC		03/23/2012 15:37	1		CLP-1 0.53(mm)
STD05 240-37817/12 IC		03/23/2012 15:37	1	P1300012.D	CLP-2 0.53(mm)
STD1 240-37817/13 IC		03/23/2012 15:52	1		CLP-1 0.53(mm)
STD1 240-37817/13 IC		03/23/2012 15:52	1	P1300013.D	CLP-2 0.53(mm)
STD2 240-37817/14 IC		03/23/2012 16:07	1		CLP-1 0.53(mm)
STD2 240-37817/14 IC		03/23/2012 16:07	1	P1300014.D	CLP-2 0.53(mm)
STD005 240-37817/15 IC		03/23/2012 16:22	1		CLP-1 0.53(mm)
STD005 240-37817/15 IC		03/23/2012 16:22	1	P1300015.D	CLP-2 0.53(mm)
STD01 240-37817/16 IC	1248	03/23/2012 16:37	1		CLP-1 0.53(mm)
STD01 240-37817/16 IC		03/23/2012 16:37	1	P1300016.D	CLP-2 0.53(mm)
STD02 240-37817/17 IC		03/23/2012 16:52	1		CLP-1 0.53(mm)
STD02 240-37817/17 IC		03/23/2012 16:52	1	P1300017.D	CLP-2 0.53(mm)
STD05 240-37817/18 IC		03/23/2012 17:07	1		CLP-1 0.53(mm)
STD05 240-37817/18 IC		03/23/2012 17:07	1	P1300018.D	CLP-2 0.53(mm)
STD1 240-37817/19 IC		03/23/2012 17:22	1		CLP-1 0.53(mm)
STD1 240-37817/19 IC		03/23/2012 17:22	1	P1300019.D	CLP-2 0.53(mm)
STD2 240-37817/20 IC		03/23/2012 17:37	1		CLP-1 0.53(mm)
STD2 240-37817/20 IC		03/23/2012 17:37	1	P1300020.D	CLP-2 0.53(mm)
STD005 240-37817/21 IC	1221 /1254	03/23/2012 17:52	1		CLP-1 0.53(mm)

8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP13 Start Date: 03/23/2012 13:23

Analysis Batch Number: 37817 End Date: 03/24/2012 01:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-37817/21 IC		03/23/2012 17:52	1	P1300021.D	CLP-2 0.53(mm)
STD01 240-37817/22 IC		03/23/2012 18:06	1		CLP-1 0.53(mm)
STD01 240-37817/22 IC	1221/1254	03/23/2012 18:06	1	P1300022.D	CLP-2 0.53(mm)
STD02 240-37817/23 IC		03/23/2012 18:21	1		CLP-1 0.53(mm)
STD02 240-37817/23 IC		03/23/2012 18:21	1	P1300023.D	CLP-2 0.53(mm)
STD05 240-37817/24 IC		03/23/2012 18:36	1		CLP-1 0.53(mm)
STD05 240-37817/24 IC		03/23/2012 18:36	1	P1300024.D	CLP-2 0.53(mm)
STD1 240-37817/25 IC		03/23/2012 18:51	1		CLP-1 0.53(mm)
STD1 240-37817/25 IC		03/23/2012 18:51	1	P1300025.D	CLP-2 0.53(mm)
STD2 240-37817/26 IC		03/23/2012 19:06	1		CLP-1 0.53(mm)
STD2 240-37817/26 IC		03/23/2012 19:06	1	P1300026.D	CLP-2 0.53(mm)
STD005 240-37817/27 IC		03/23/2012 19:21	1		CLP-1 0.53(mm)
STD005 240-37817/27 IC		03/23/2012 19:21	1	P1300027.D	CLP-2 0.53(mm)
STD01 240-37817/28 IC		03/23/2012 19:36	1		CLP-1 0.53(mm)
STD01 240-37817/28 IC	1016/1260	03/23/2012 19:36	1	P1300028.D	CLP-2 0.53(mm)
STD02 240-37817/29 IC		03/23/2012 19:51	1		CLP-1 0.53(mm)
STD02 240-37817/29 IC		03/23/2012 19:51	1	P1300029.D	CLP-2 0.53(mm)
STD05 240-37817/30 ICRT		03/23/2012 20:06	1		CLP-1 0.53(mm)
STD05 240-37817/30 ICRT		03/23/2012 20:06	1	P1300030.D	CLP-2 0.53(mm)
STD1 240-37817/31 IC		03/23/2012 20:21	1		CLP-1 0.53(mm)
STD1 240-37817/31 IC		03/23/2012 20:21	1	P1300031.D	CLP-2 0.53(mm)
STD2 240-37817/32 IC		03/23/2012 20:36	1		CLP-1 0.53(mm)
STD2 240-37817/32 IC		03/23/2012 20:36	1	P1300032.D	CLP-2 0.53(mm)
STD005 240-37817/33 IC		03/23/2012 20:51	1		CLP-1 0.53(mm)
STD005 240-37817/33 IC		03/23/2012 20:51	1		CLP-2 0.53(mm)
STD01 240-37817/34 IC		03/23/2012 21:06	1		CLP-1 0.53(mm)
STD01 240-37817/34 IC		03/23/2012 21:06	1		CLP-2 0.53(mm)
STD02 240-37817/35 IC		03/23/2012 21:20	1		CLP-1 0.53(mm)
STD02 240-37817/35 IC		03/23/2012 21:20	1		CLP-2 0.53(mm)
STD05 240-37817/36 IC		03/23/2012 21:35	1		CLP-1 0.53(mm)
STD05 240-37817/36 IC		03/23/2012 21:35	1		CLP-2 0.53(mm)
STD1 240-37817/37 IC		03/23/2012 21:50	1		CLP-1 0.53(mm)
STD1 240-37817/37 IC		03/23/2012 21:50	1		CLP-2 0.53(mm)
STD2 240-37817/38 IC		03/23/2012 22:05	1		CLP-1 0.53(mm)
STD2 240-37817/38 IC		03/23/2012 22:05	1		CLP-2 0.53(mm)

8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP13 Start Date: 03/23/2012 13:23

Analysis Batch Number: 37817 End Date: 03/24/2012 01:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD005 240-37817/39 IC		03/23/2012 22:20	1		CLP-1 0.53(mm)
STD005 240-37817/39 IC		03/23/2012 22:20	1		CLP-2 0.53(mm)
STD01 240-37817/40 IC		03/23/2012 22:35	1		CLP-1 0.53(mm)
STD01 240-37817/40 IC		03/23/2012 22:35	1		CLP-2 0.53(mm)
STD02 240-37817/41 IC		03/23/2012 22:50	1		CLP-1 0.53(mm)
STD02 240-37817/41 IC		03/23/2012 22:50	1		CLP-2 0.53(mm)
STD05 240-37817/42 IC		03/23/2012 23:05	1		CLP-1 0.53(mm)
STD05 240-37817/42 IC		03/23/2012 23:05	1		CLP-2 0.53(mm)
STD1 240-37817/43 IC		03/23/2012 23:20	1		CLP-1 0.53(mm)
STD1 240-37817/43 IC		03/23/2012 23:20	1		CLP-2 0.53(mm)
STD2 240-37817/44 IC		03/23/2012 23:35	1		CLP-1 0.53(mm)
STD2 240-37817/44 IC		03/23/2012 23:35	1		CLP-2 0.53(mm)
ICV 240-37817/45		03/23/2012 23:50	1		CLP-1 0.53(mm)
ICV 240-37817/45		03/23/2012 23:50	1		CLP-2 0.53(mm)
ICV 240-37817/46		03/24/2012 00:05	1		CLP-1 0.53(mm)
ICV 240-37817/46		03/24/2012 00:05	1		CLP-2 0.53(mm)
ICV 240-37817/47		03/24/2012 00:20	1		CLP-1 0.53(mm)
ICV 240-37817/47		03/24/2012 00:20	1		CLP-2 0.53(mm)
ICV 240-37817/48		03/24/2012 00:34	1		CLP-1 0.53(mm)
ICV 240-37817/48		03/24/2012 00:34	1		CLP-2 0.53(mm)
ICV 240-37817/49		03/24/2012 00:49	1		CLP-1 0.53(mm)
ICV 240-37817/49		03/24/2012 00:49	1		CLP-2 0.53(mm)
ICV 240-37817/50		03/24/2012 01:04	1		CLP-1 0.53(mm)
ICV 240-37817/50		03/24/2012 01:04	1	P1300050.D	CLP-2 0.53(mm)
ICV 240-37817/51		03/24/2012 01:19	1		CLP-1 0.53(mm)
ICV 240-37817/51		03/24/2012 01:19	1		CLP-2 0.53(mm)
ICV 240-37817/52		03/24/2012 01:34	1		CLP-1 0.53(mm)
ICV 240-37817/52		03/24/2012 01:34	1		CLP-2 0.53(mm)

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 13:23 Calibration End Date: 03/23/2012 14:38 Calibration ID: 7685

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/3	P1300003.D
Level 2	STD01 240-37817/4	P1300004.D
Level 3	STD02 240-37817/5	P1300005.D
Level 4	STD05 240-37817/6	P1300006.D
Level 5	STD1 240-37817/7	P1300007.D
Level 6	STD2 240-37817/8	P1300008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1232 Peak 1	41987960 31169802	37741340 29105190	37187540	34069908	Ave		35210289.9				13.0		20.0			
PCB-1232 Peak 2	38666420 26658227	31086080 24889159	30530060	29199204	Ave		30171525.0				16.0		20.0			
PCB-1232 Peak 3	68715440 56388963	62720570 53650739	62424620	60793170	Ave		60782250.3				8.7		20.0			
PCB-1232 Peak 4	28370660 23996866	26547950 22729105	26389530	26121834	Ave		25692657.4				7.8		20.0			
PCB-1232 Peak 5	22019100 20276411	20890500 19283202	23576795	21936048	Ave		21330342.6				7.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 13:23 Calibration End Date: 03/23/2012 14:38 Calibration ID: 7685

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/3	P1300003.D
Level 2	STD01 240-37817/4	P1300004.D
Level 3	STD02 240-37817/5	P1300005.D
Level 4	STD05 240-37817/6	P1300006.D
Level 5	STD1 240-37817/7	P1300007.D
Level 6	STD2 240-37817/8	P1300008.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	Ave	2099398 58210379	3774134	7437508	17034954	31169802	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 2	Ave	1933321 49778318	3108608	6106012	14599602	26658227	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 3	Ave	3435772 107301477	6272057	12484924	30396585	56388963	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 4	Ave	1418533 45458209	2654795	5277906	13060917	23996866	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1232 Peak 5	Ave	1100955 38566403	2089050	4715359	10968024	20276411	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 13:23 Calibration End Date: 03/23/2012 14:38 Calibration ID: 7685

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/3	P1300003.D
Level 2	STD01 240-37817/4	P1300004.D
Level 3	STD02 240-37817/5	P1300005.D
Level 4	STD05 240-37817/6	P1300006.D
Level 5	STD1 240-37817/7	P1300007.D
Level 6	STD2 240-37817/8	P1300008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1232 Peak 1	2.155	2.158	2.158	2.155	2.159	2.158					2.105 - 2.205	2.157
PCB-1232 Peak 2	2.581	2.582	2.580	2.580	2.583	2.582					2.531 - 2.631	2.581
PCB-1232 Peak 3	3.065	3.067	3.067	3.065	3.067	3.068					3.015 - 3.115	3.067
PCB-1232 Peak 4	3.212	3.212	3.212	3.212	3.213	3.213					3.162 - 3.262	3.212
PCB-1232 Peak 5	3.863	3.865	3.864	3.864	3.864	3.865					3.813 - 3.913	3.864

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 14:53 Calibration End Date: 03/23/2012 16:07 Calibration ID: 7691

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/9	P1300009.D
Level 2	STD01 240-37817/10	P1300010.D
Level 3	STD02 240-37817/11	P1300011.D
Level 4	STD05 240-37817/12	P1300012.D
Level 5	STD1 240-37817/13	P1300013.D
Level 6	STD2 240-37817/14	P1300014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1242 Peak 1	35484600 24071800	30309600 22193411	27339380	24345746	Ave		27290756.2				18.0		20.0			
PCB-1242 Peak 2	67251520 47648713	58853540 43631407	54528860	47713854	Ave		53271315.6				16.0		20.0			
PCB-1242 Peak 3	139141180 101811520	118476030 94762760	110911880	99381970	Ave		110747557				15.0		20.0			
PCB-1242 Peak 4	59399760 43685003	51211920 40831635	47573380	42399874	Ave		47516928.7				15.0		20.0			
PCB-1242 Peak 5	43827680 35578681	45006160 33257074	39954045	35334634	Ave		38826379.0				13.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 14:53 Calibration End Date: 03/23/2012 16:07 Calibration ID: 7691

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/9	P1300009.D
Level 2	STD01 240-37817/10	P1300010.D
Level 3	STD02 240-37817/11	P1300011.D
Level 4	STD05 240-37817/12	P1300012.D
Level 5	STD1 240-37817/13	P1300013.D
Level 6	STD2 240-37817/14	P1300014.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	Ave	1774230 44386822	3030960	5467876	12172873	24071800	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 2	Ave	3362576 87262813	5885354	10905772	23856927	47648713	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 3	Ave	6957059 189525520	11847603	22182376	49690985	101811520	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 4	Ave	2969988 81663270	5121192	9514676	21199937	43685003	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1242 Peak 5	Ave	2191384 66514148	4500616	7990809	17667317	35578681	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 14:53 Calibration End Date: 03/23/2012 16:07 Calibration ID: 7691

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/9	P1300009.D
Level 2	STD01 240-37817/10	P1300010.D
Level 3	STD02 240-37817/11	P1300011.D
Level 4	STD05 240-37817/12	P1300012.D
Level 5	STD1 240-37817/13	P1300013.D
Level 6	STD2 240-37817/14	P1300014.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1242 Peak 1	2.156	2.157	2.158	2.158	2.155	2.155					2.106 - 2.206	2.157
PCB-1242 Peak 2	2.581	2.582	2.582	2.583	2.580	2.581					2.531 - 2.631	2.582
PCB-1242 Peak 3	3.067	3.067	3.068	3.068	3.066	3.066					3.017 - 3.117	3.067
PCB-1242 Peak 4	3.212	3.212	3.213	3.214	3.211	3.212					3.162 - 3.262	3.212
PCB-1242 Peak 5	3.728	3.731	3.731	3.731	3.730	3.730					3.678 - 3.778	3.730

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 16:22 Calibration End Date: 03/23/2012 17:37 Calibration ID: 7655

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/15	P1300015.D
Level 2	STD01 240-37817/16	P1300016.D
Level 3	STD02 240-37817/17	P1300017.D
Level 4	STD05 240-37817/18	P1300018.D
Level 5	STD1 240-37817/19	P1300019.D
Level 6	STD2 240-37817/20	P1300020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1248 Peak 1	29280440 22294514	27796270 20437200	24757860	24082470	Ave		24774792.3				13.0		20.0			
PCB-1248 Peak 2	82159040 63906732	76209520 59559157	68282510	67656316	Ave		69628879.2				12.0		20.0			
PCB-1248 Peak 3	80423740 64106051	74243240 59858766	66936285	67780514	Ave		68891432.6				11.0		20.0			
PCB-1248 Peak 4	129310140 109534046	121314600 102697666	109662245	114484552	Ave		114500541				8.3		20.0			
PCB-1248 Peak 5	48049920 41600318	46294540 39252141	43403565	43337598	Ave		43656346.9				7.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 16:22 Calibration End Date: 03/23/2012 17:37 Calibration ID: 7655

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/15	P1300015.D
Level 2	STD01 240-37817/16	P1300016.D
Level 3	STD02 240-37817/17	P1300017.D
Level 4	STD05 240-37817/18	P1300018.D
Level 5	STD1 240-37817/19	P1300019.D
Level 6	STD2 240-37817/20	P1300020.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	Ave	1464022 40874399	2779627	4951572	12041235	22294514	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 2	Ave	4107952 119118314	7620952	13656502	33828158	63906732	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 3	Ave	4021187 119717531	7424324	13387257	33890257	64106051	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 4	Ave	6465507 205395331	12131460	21932449	57242276	109534046	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1248 Peak 5	Ave	2402496 78504281	4629454	8680713	21668799	41600318	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 16:22 Calibration End Date: 03/23/2012 17:37 Calibration ID: 7655

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/15	P1300015.D
Level 2	STD01 240-37817/16	P1300016.D
Level 3	STD02 240-37817/17	P1300017.D
Level 4	STD05 240-37817/18	P1300018.D
Level 5	STD1 240-37817/19	P1300019.D
Level 6	STD2 240-37817/20	P1300020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1248 Peak 1	2.580	2.580	2.582	2.579	2.581	2.582					2.530 - 2.630	2.581
PCB-1248 Peak 2	3.065	3.064	3.067	3.064	3.066	3.066					3.015 - 3.115	3.065
PCB-1248 Peak 3	3.864	3.864	3.864	3.864	3.864	3.865					3.814 - 3.914	3.864
PCB-1248 Peak 4	4.446	4.446	4.448	4.448	4.447	4.447					4.396 - 4.496	4.447
PCB-1248 Peak 5	4.926	4.928	4.928	4.927	4.927	4.927					4.876 - 4.976	4.927

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 17:52 Calibration End Date: 03/23/2012 19:06 Calibration ID: 7661

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/21	P1300021.D
Level 2	STD01 240-37817/22	P1300022.D
Level 3	STD02 240-37817/23	P1300023.D
Level 4	STD05 240-37817/24	P1300024.D
Level 5	STD1 240-37817/25	P1300025.D
Level 6	STD2 240-37817/26	P1300026.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1221 Peak 1	21686520 16466693	20560760 15902212	19528910	18009094	Ave		18692364.8				12.0		20.0			
PCB-1221 Peak 2	14907480 10582874	13563710 10207501	12774545	11811556	Ave		12307944.3				15.0		20.0			
PCB-1221 Peak 3	53486060 38682853	49344170 37261305	46393045	42605862	Ave		44628882.4				14.0		20.0			
PCB-1254 Peak 1	95729720 75576208	89891720 74153904	85535675	80866904	Ave		83625688.4				10.0		20.0			
PCB-1254 Peak 2	146703300 119395634	138745420 116766817	133231015	126673620	Ave		130252634				8.8		20.0			
PCB-1254 Peak 3	118531840 98194120	111255030 94743843	106610220	102440248	Ave		105295884				8.3		20.0			
PCB-1254 Peak 4	116453920 98132555	110929430 97114766	106489665	102729590	Ave		105308321				7.1		20.0			
PCB-1254 Peak 5	147404140 128459760	146751360 126524307	141166225	135522868	Ave		137638110				6.5		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 17:52 Calibration End Date: 03/23/2012 19:06 Calibration ID: 7661

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/21	P1300021.D
Level 2	STD01 240-37817/22	P1300022.D
Level 3	STD02 240-37817/23	P1300023.D
Level 4	STD05 240-37817/24	P1300024.D
Level 5	STD1 240-37817/25	P1300025.D
Level 6	STD2 240-37817/26	P1300026.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	Ave	1084326 31804423	2056076	3905782	9004547	16466693	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1221 Peak 2	Ave	745374 20415001	1356371	2554909	5905778	10582874	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1221 Peak 3	Ave	2674303 74522609	4934417	9278609	21302931	38682853	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 1	Ave	4786486 148307807	8989172	17107135	40433452	75576208	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 2	Ave	7335165 233533635	13874542	26646203	63336810	119395634	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 3	Ave	5926592 189487686	11125503	21322044	51220124	98194120	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 4	Ave	5822696 194229533	11092943	21297933	51364795	98132555	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1254 Peak 5	Ave	7370207 253048615	14675136	28233245	67761434	128459760	0.0500 2.00	0.100	0.200	0.500	1.00

Curve Type Legend:
Ave = Average

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 17:52 Calibration End Date: 03/23/2012 19:06 Calibration ID: 7661

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/21	P1300021.D
Level 2	STD01 240-37817/22	P1300022.D
Level 3	STD02 240-37817/23	P1300023.D
Level 4	STD05 240-37817/24	P1300024.D
Level 5	STD1 240-37817/25	P1300025.D
Level 6	STD2 240-37817/26	P1300026.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1221 Peak 1	1.960	1.961	1.956	1.957	1.956	1.957					1.910 - 2.010	1.958
PCB-1221 Peak 2	2.098	2.099	2.096	2.096	2.096	2.097					2.048 - 2.148	2.097
PCB-1221 Peak 3	2.159	2.159	2.156	2.156	2.156	2.157					2.109 - 2.209	2.157
PCB-1254 Peak 1	4.428	4.428	4.428	4.427	4.426	4.427					4.378 - 4.478	4.427
PCB-1254 Peak 2	4.927	4.927	4.927	4.927	4.926	4.927					4.877 - 4.977	4.927
PCB-1254 Peak 3	5.192	5.193	5.191	5.192	5.191	5.192					5.142 - 5.242	5.192
PCB-1254 Peak 4	5.570	5.571	5.572	5.571	5.571	5.572					5.520 - 5.620	5.571
PCB-1254 Peak 5	5.787	5.787	5.787	5.786	5.786	5.787					5.737 - 5.837	5.787

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-13043-1 | Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 | GC Column: CLP-2 | ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 19:21 | Calibration End Date: 03/23/2012 20:36 | Calibration ID: 7667

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/27	P1300027.D
Level 2	STD01 240-37817/28	P1300028.D
Level 3	STD02 240-37817/29	P1300029.D
Level 4	STD05 240-37817/30	P1300030.D
Level 5	STD1 240-37817/31	P1300031.D
Level 6	STD2 240-37817/32	P1300032.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
PCB-1016 Peak 1	37994640 28099950	35692400 26388065	34072010	31588362	Ave		32305904.4				14.0		20.0			
PCB-1016 Peak 2	71449540 55602353	70326420 52271968	63453700	63139138	Ave		62707186.5				12.0		20.0			
PCB-1016 Peak 3	149235440 120784004	142683790 115657775	135707065	134954890	Ave		133170494				9.6		20.0			
PCB-1016 Peak 4	62877180 51948453	60255550 49578786	56837740	57973442	Ave		56578525.1				8.9		20.0			
PCB-1016 Peak 5	49206740 42418047	48728610 40854182	45494340	47081670	Ave		45630598.1				7.4		20.0			
PCB-1260 Peak 1	230337560 123430183	143038530 118987789	141153700	135972042	Lin1	4785758.32	118111351							0.9970		0.9900
PCB-1260 Peak 2	188809940 158805139	181162020 153614567	180374715	174212854	Ave		172829873				8.0		20.0			
PCB-1260 Peak 3	118252040 100014033	113390370 96651813	112186660	108629926	Ave		108187474				7.7		20.0			
PCB-1260 Peak 4	288832440 249708961	279958080 242625275	279856720	272761020	Ave		268957083				6.9		20.0			
PCB-1260 Peak 5	196249340 167274623	188128980 162638446	188874980	182229620	Ave		180899331				7.3		20.0			
Tetrachloro-m-xylene	2212700800 1919551660	2208839800 1694536400	2191510200	1924520680	Ave		2025276590				11.0		20.0			
Decachlorobiphenyl	2182601200 1966081980	2203494600 1736350370	2179767100	1925836080	Ave		2032355222				9.3		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 19:21 Calibration End Date: 03/23/2012 20:36 Calibration ID: 7667

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/27	P1300027.D
Level 2	STD01 240-37817/28	P1300028.D
Level 3	STD02 240-37817/29	P1300029.D
Level 4	STD05 240-37817/30	P1300030.D
Level 5	STD1 240-37817/31	P1300031.D
Level 6	STD2 240-37817/32	P1300032.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	Ave	1899732 52776129	3569240	6814402	15794181	28099950	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 2	Ave	3572477 104543936	7032642	12690740	31569569	55602353	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 3	Ave	7461772 231315551	14268379	27141413	67477445	120784004	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 4	Ave	3143859 99157571	6025555	11367548	28986721	51948453	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1016 Peak 5	Ave	2460337 81708363	4872861	9098868	23540835	42418047	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 1	Lin1	11516878 237975578	14303853	28230740	67986021	123430183	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 2	Ave	9440497 307229134	18116202	36074943	87106427	158805139	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 3	Ave	5912602 193303626	11339037	22437332	54314963	100014033	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 4	Ave	14441622 485250550	27995808	55971344	136380510	249708961	0.0500 2.00	0.100	0.200	0.500	1.00
PCB-1260 Peak 5	Ave	9812467 325276891	18812898	37774996	91114810	167274623	0.0500 2.00	0.100	0.200	0.500	1.00
Tetrachloro-m-xylene	Ave	5531752 169453640	11044199	21915102	48113017	95977583	0.00250 0.100	0.00500	0.0100	0.0250	0.0500
Decachlorobiphenyl	Ave	5456503 173635037	11017473	21797671	48145902	98304099	0.00250 0.100	0.00500	0.0100	0.0250	0.0500

Curve Type Legend:

Ave = Average
Lin1 = Linear 1/conc

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 37817

SDG No.:

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2012 19:21 Calibration End Date: 03/23/2012 20:36 Calibration ID: 7667

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 240-37817/27	P1300027.D
Level 2	STD01 240-37817/28	P1300028.D
Level 3	STD02 240-37817/29	P1300029.D
Level 4	STD05 240-37817/30	P1300030.D
Level 5	STD1 240-37817/31	P1300031.D
Level 6	STD2 240-37817/32	P1300032.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
PCB-1016 Peak 1	2.157	2.158	2.159	2.156	2.159	2.157					2.106 - 2.206	2.158
PCB-1016 Peak 2	2.581	2.583	2.584	2.582	2.583	2.582					2.532 - 2.632	2.583
PCB-1016 Peak 3	3.067	3.067	3.068	3.067	3.068	3.067					3.017 - 3.117	3.067
PCB-1016 Peak 4	3.212	3.214	3.214	3.212	3.214	3.212					3.162 - 3.262	3.213
PCB-1016 Peak 5	3.321	3.323	3.323	3.322	3.323	3.321					3.272 - 3.372	3.322
PCB-1260 Peak 1	5.398	5.401	5.400	5.400	5.400	5.400					5.350 - 5.450	5.400
PCB-1260 Peak 2	5.783	5.784	5.784	5.784	5.783	5.782					5.734 - 5.834	5.783
PCB-1260 Peak 3	6.216	6.217	6.217	6.217	6.216	6.216					6.167 - 6.267	6.217
PCB-1260 Peak 4	6.514	6.515	6.514	6.515	6.514	6.515					6.465 - 6.565	6.515
PCB-1260 Peak 5	6.912	6.913	6.913	6.912	6.911	6.912					6.862 - 6.962	6.912
Tetrachloro-m-xylene	1.665	1.667	1.667	1.664	1.669	1.666					1.614 - 1.714	1.666
Decachlorobiphenyl	8.216	8.216	8.216	8.215	8.215	8.215					8.165 - 8.265	8.216

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-37817/50 Calibration Date: 03/24/2012 01:04

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300050.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	32305904	30725238		0.951	1.00	-4.9	20.0
PCB-1016 Peak 2	Ave	62707187	57685989		0.920	1.00	-8.0	20.0
PCB-1016 Peak 3	Ave	133170494	124134424		0.932	1.00	-6.8	20.0
PCB-1016 Peak 4	Ave	56578525	51499126		0.910	1.00	-9.0	20.0
PCB-1016 Peak 5	Ave	45630598	41911213		0.919	1.00	-8.2	20.0
PCB-1260 Peak 1	Linl		133989345		1.09	1.00	9.0	20.0
PCB-1260 Peak 2	Ave	172829873	168198763		0.973	1.00	-2.7	20.0
PCB-1260 Peak 3	Ave	108187474	109070298		1.01	1.00	0.8	20.0
PCB-1260 Peak 4	Ave	268957083	278179444		1.03	1.00	3.4	20.0
PCB-1260 Peak 5	Ave	180899331	183658696		1.02	1.00	1.5	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICV 240-37817/50 Calibration Date: 03/24/2012 01:04

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300050.D

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	2.16	2.11	2.21
PCB-1016 Peak 2	2.58	2.53	2.63
PCB-1016 Peak 3	3.07	3.02	3.12
PCB-1016 Peak 4	3.21	3.16	3.26
PCB-1016 Peak 5	3.32	3.27	3.37
PCB-1260 Peak 1	5.40	5.35	5.45
PCB-1260 Peak 2	5.78	5.73	5.83
PCB-1260 Peak 3	6.22	6.17	6.27
PCB-1260 Peak 4	6.51	6.47	6.57
PCB-1260 Peak 5	6.91	6.86	6.96

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP13 Start Date: 07/19/2012 01:32

Analysis Batch Number: 51268 End Date: 07/19/2012 11:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-51268/3 CCVRT	10/6/12	07/19/2012 01:32	1		CLP-1 0.53(mm)
CCV 240-51268/3 CCVRT		07/19/2012 01:32	1	P1300003.D	CLP-2 0.53(mm)
ZZZZZ		07/19/2012 02:46	1		CLP-1 0.53(mm)
240-13043-2	MT-SS19-0-2	07/19/2012 02:46	1	P1300008.D	CLP-2 0.53(mm)
ZZZZZ		07/19/2012 03:01	1		CLP-1 0.53(mm)
240-13043-3	MT-SS19-8-10	07/19/2012 03:01	1	P1300009.D	CLP-2 0.53(mm)
ZZZZZ		07/19/2012 03:49	1		CLP-1 0.53(mm)
ZZZZZ		07/19/2012 03:49	1		CLP-2 0.53(mm)
ZZZZZ		07/19/2012 04:04	1		CLP-1 0.53(mm)
ZZZZZ		07/19/2012 04:04	1		CLP-2 0.53(mm)
ZZZZZ		07/19/2012 04:19	1		CLP-1 0.53(mm)
ZZZZZ		07/19/2012 04:19	1		CLP-2 0.53(mm)
ZZZZZ		07/19/2012 06:17	1		CLP-1 0.53(mm)
240-13043-7	MT-SS21-8-10	07/19/2012 06:17	1	P1300013.D	CLP-2 0.53(mm)
ZZZZZ		07/19/2012 09:01	1		CLP-1 0.53(mm)
MB 240-51000/21-A		07/19/2012 09:01	1	P1300024.D	CLP-2 0.53(mm)
CCV 240-51268/25		07/19/2012 09:15	1		CLP-1 0.53(mm)
CCV 240-51268/25	10/6/12	07/19/2012 09:15	1	P1300025.D	CLP-2 0.53(mm)
ZZZZZ		07/19/2012 11:15	1		CLP-1 0.53(mm)
LCS 240-51000/20-A		07/19/2012 11:15	1	P1300033.D	CLP-2 0.53(mm)
CCV 240-51268/34		07/19/2012 11:29	1		CLP-1 0.53(mm)
CCV 240-51268/34	10/6/12	07/19/2012 11:29	1	P1300034.D	CLP-2 0.53(mm)

8082A

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51268/34 Calibration Date: 07/19/2012 11:29

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300034.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	32305904	33247214		0.515	0.500	2.9	20.0
PCB-1016 Peak 2	Ave	62707187	70102786		0.559	0.500	11.8	20.0
PCB-1016 Peak 3	Ave	133170494	140663244		0.528	0.500	5.6	20.0
PCB-1016 Peak 4	Ave	56578525	60851174		0.538	0.500	7.6	20.0
PCB-1016 Peak 5	Ave	45630598	48677192		0.533	0.500	6.7	20.0
PCB-1260 Peak 1	Lin1		138437778		0.546	0.500	9.1	20.0
PCB-1260 Peak 2	Ave	172829873	178618912		0.517	0.500	3.3	20.0
PCB-1260 Peak 3	Ave	108187474	93603804		0.433	0.500	-13.5	20.0
PCB-1260 Peak 4	Ave	268957083	213486854		0.397	0.500	-20.6*	20.0
PCB-1260 Peak 5	Ave	180899331	145397280		0.402	0.500	-19.6	20.0
Tetrachloro-m-xylene	Ave	2025276590	2242122800		0.0277	0.0250	10.7	20.0
Decachlorobiphenyl	Ave	2032355222	1570790480		0.0193	0.0250	-22.7*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51268/34 Calibration Date: 07/19/2012 11:29

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300034.D

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	2.12	2.07	2.17
PCB-1016 Peak 2	2.55	2.50	2.60
PCB-1016 Peak 3	3.03	2.98	3.08
PCB-1016 Peak 4	3.17	3.12	3.22
PCB-1016 Peak 5	3.28	3.23	3.33
PCB-1260 Peak 1	5.35	5.30	5.40
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.17	6.12	6.22
PCB-1260 Peak 4	6.47	6.42	6.52
PCB-1260 Peak 5	6.86	6.81	6.91
Tetrachloro-m-xylene	1.64	1.59	1.69
Decachlorobiphenyl	8.16	8.11	8.21

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: A2HP13 Start Date: 07/19/2012 13:40

Analysis Batch Number: 51369 End Date: 07/19/2012 15:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-51369/3 CCVRT	1016/1260	07/19/2012 13:40	1		CLP-1 0.53(mm)
CCV 240-51369/3 CCVRT		07/19/2012 13:40	1	P1300003.D	CLP-2 0.53(mm)
ZZZZZ		07/19/2012 14:54	1		CLP-1 0.53(mm)
240-13043-4	MT-SS20-0-2	07/19/2012 14:54	1	P1300008.D	CLP-2 0.53(mm)
ZZZZZ		07/19/2012 15:09	1		CLP-1 0.53(mm)
240-13043-5	MT-SS20-8-10	07/19/2012 15:09	1	P1300009.D	CLP-2 0.53(mm)
ZZZZZ		07/19/2012 15:24	1		CLP-1 0.53(mm)
240-13043-6	MT-SS21-0-2	07/19/2012 15:24	1	P1300010.D	CLP-2 0.53(mm)
CCV 240-51369/12		07/19/2012 15:54	1		CLP-1 0.53(mm)
CCV 240-51369/12	1016/1260	07/19/2012 15:54	1	P1300012.D	CLP-2 0.53(mm)

8082A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCV 240-51268/3 Date Analyzed: 07/19/2012 01:32

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1300003.D Heated Purge: (Y/N) N

Calibration ID: 7667

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.64	8.16	
UPPER LIMIT				1.74	8.26	
LOWER LIMIT				1.54	8.06	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-51268/3 CCVRT		07/19/2012 01:32	P1300003.D	1.64	8.16	
240-13043-2	MT-SS19-0-2	07/19/2012 02:46	P1300008.D	1.64	8.16	
240-13043-3	MT-SS19-8-10	07/19/2012 03:01	P1300009.D	1.64	8.16	
240-13043-7	MT-SS21-8-10	07/19/2012 06:17	P1300013.D	1.64	8.16	
MB 240-51000/21-A		07/19/2012 09:01	P1300024.D	1.64	8.16	
CCV 240-51268/25		07/19/2012 09:15	P1300025.D	1.64	8.16	
LCS 240-51000/20-A		07/19/2012 11:15	P1300033.D	1.63	8.16	
CCV 240-51268/34		07/19/2012 11:29	P1300034.D	1.64	8.16	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Sample No.: CCV 240-51369/3 Date Analyzed: 07/19/2012 13:40

Instrument ID: A2HP13 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1300003.D Heated Purge: (Y/N) N

Calibration ID: 7667

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				1.62	8.14	
UPPER LIMIT				1.72	8.24	
LOWER LIMIT				1.52	8.04	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-51369/3 CCVRT		07/19/2012 13:40	P1300003.D	1.62	8.14	
240-13043-4	MT-SS20-0-2	07/19/2012 14:54	P1300008.D	1.62	8.14	
240-13043-5	MT-SS20-8-10	07/19/2012 15:09	P1300009.D	1.63	8.14	
240-13043-6	MT-SS21-0-2	07/19/2012 15:24	P1300010.D	1.63	8.14	
CCV 240-51369/12		07/19/2012 15:54	P1300012.D	1.62	8.14	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51268/3 Calibration Date: 07/19/2012 01:32

Instrument ID: A2HPI3 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	32305904	34132006		0.528	0.500	5.7	20.0
PCB-1016 Peak 2	Ave	62707187	62685180		0.500	0.500	-0.0	20.0
PCB-1016 Peak 3	Ave	133170494	120692704		0.453	0.500	-9.4	20.0
PCB-1016 Peak 4	Ave	56578525	48519302		0.429	0.500	-14.2	20.0
PCB-1016 Peak 5	Ave	45630598	38952304		0.427	0.500	-14.6	20.0
PCB-1260 Peak 1	Lin1		136948032		0.539	0.500	7.8	20.0
PCB-1260 Peak 2	Ave	172829873	179448308		0.519	0.500	3.8	20.0
PCB-1260 Peak 3	Ave	108187474	99261832		0.459	0.500	-8.3	20.0
PCB-1260 Peak 4	Ave	268957083	232434226		0.432	0.500	-13.6	20.0
PCB-1260 Peak 5	Ave	180899331	155383400		0.430	0.500	-14.1	20.0
Tetrachloro-m-xylene	Ave	2025276590	2194365960		0.0271	0.0250	8.3	20.0
Decachlorobiphenyl	Ave	2032355222	1868783160		0.0230	0.0250	-8.0	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51268/3 Calibration Date: 07/19/2012 01:32

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300003.D

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	2.12	2.07	2.17
PCB-1016 Peak 2	2.55	2.50	2.60
PCB-1016 Peak 3	3.03	2.98	3.08
PCB-1016 Peak 4	3.17	3.12	3.22
PCB-1016 Peak 5	3.28	3.23	3.33
PCB-1260 Peak 1	5.35	5.30	5.40
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.17	6.12	6.22
PCB-1260 Peak 4	6.47	6.42	6.52
PCB-1260 Peak 5	6.86	6.81	6.91
Tetrachloro-m-xylene	1.64	1.59	1.69
Decachlorobiphenyl	8.16	8.11	8.21

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51268/25 Calibration Date: 07/19/2012 09:15

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300025.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	32305904	33665656		0.521	0.500	4.2	20.0
PCB-1016 Peak 2	Ave	62707187	66684316		0.532	0.500	6.3	20.0
PCB-1016 Peak 3	Ave	133170494	134128584		0.504	0.500	0.7	20.0
PCB-1016 Peak 4	Ave	56578525	56655654		0.501	0.500	0.1	20.0
PCB-1016 Peak 5	Ave	45630598	44504536		0.488	0.500	-2.5	20.0
PCB-1260 Peak 1	Lin1		130034420		0.510	0.500	2.0	20.0
PCB-1260 Peak 2	Ave	172829873	166547496		0.482	0.500	-3.6	20.0
PCB-1260 Peak 3	Ave	108187474	88579840		0.409	0.500	-18.1	20.0
PCB-1260 Peak 4	Ave	268957083	211468150		0.393	0.500	-21.4*	20.0
PCB-1260 Peak 5	Ave	180899331	137052738		0.379	0.500	-24.2*	20.0
Tetrachloro-m-xylene	Ave	2025276590	2195207040		0.0271	0.0250	8.4	20.0
Decachlorobiphenyl	Ave	2032355222	1470676560		0.0181	0.0250	-27.6*	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51268/25 Calibration Date: 07/19/2012 09:15

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300025.D

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	2.12	2.07	2.17
PCB-1016 Peak 2	2.55	2.50	2.60
PCB-1016 Peak 3	3.03	2.98	3.08
PCB-1016 Peak 4	3.17	3.12	3.22
PCB-1016 Peak 5	3.28	3.23	3.33
PCB-1260 Peak 1	5.35	5.30	5.40
PCB-1260 Peak 2	5.74	5.69	5.79
PCB-1260 Peak 3	6.17	6.12	6.22
PCB-1260 Peak 4	6.46	6.41	6.51
PCB-1260 Peak 5	6.86	6.81	6.91
Tetrachloro-m-xylene	1.64	1.59	1.69
Decachlorobiphenyl	8.16	8.11	8.21

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51369/3 Calibration Date: 07/19/2012 13:40

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	32305904	35455232		0.549	0.500	9.7	20.0
PCB-1016 Peak 2	Ave	62707187	70811760		0.565	0.500	12.9	20.0
PCB-1016 Peak 3	Ave	133170494	151993184		0.571	0.500	14.1	20.0
PCB-1016 Peak 4	Ave	56578525	64465796		0.570	0.500	13.9	20.0
PCB-1016 Peak 5	Ave	45630598	51699766		0.567	0.500	13.3	20.0
PCB-1260 Peak 1	Lin1		155901466		0.620	0.500	23.9*	20.0
PCB-1260 Peak 2	Ave	172829873	210632384		0.609	0.500	21.9*	20.0
PCB-1260 Peak 3	Ave	108187474	112541170		0.520	0.500	4.0	20.0
PCB-1260 Peak 4	Ave	268957083	273375302		0.508	0.500	1.6	20.0
PCB-1260 Peak 5	Ave	180899331	185051188		0.512	0.500	2.3	20.0
Tetrachloro-m-xylene	Ave	2025276590	2259582560		0.0279	0.0250	11.6	20.0
Decachlorobiphenyl	Ave	2032355222	1948649120		0.0240	0.0250	-4.1	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51369/3 Calibration Date: 07/19/2012 13:40

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300003.D

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	2.11	2.06	2.16
PCB-1016 Peak 2	2.53	2.48	2.58
PCB-1016 Peak 3	3.01	2.96	3.06
PCB-1016 Peak 4	3.16	3.11	3.21
PCB-1016 Peak 5	3.27	3.22	3.32
PCB-1260 Peak 1	5.33	5.28	5.38
PCB-1260 Peak 2	5.72	5.67	5.77
PCB-1260 Peak 3	6.15	6.10	6.20
PCB-1260 Peak 4	6.45	6.40	6.50
PCB-1260 Peak 5	6.84	6.79	6.89
Tetrachloro-m-xylene	1.62	1.57	1.67
Decachlorobiphenyl	8.14	8.09	8.19

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51369/12 Calibration Date: 07/19/2012 15:54

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300012.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	32305904	33646960		0.521	0.500	4.2	20.0
PCB-1016 Peak 2	Ave	62707187	67393932		0.537	0.500	7.5	20.0
PCB-1016 Peak 3	Ave	133170494	148348680		0.557	0.500	11.4	20.0
PCB-1016 Peak 4	Ave	56578525	59899132		0.529	0.500	5.9	20.0
PCB-1016 Peak 5	Ave	45630598	48058280		0.527	0.500	5.3	20.0
PCB-1260 Peak 1	Lin1		154842652		0.615	0.500	23.0*	20.0
PCB-1260 Peak 2	Ave	172829873	202194812		0.585	0.500	17.0	20.0
PCB-1260 Peak 3	Ave	108187474	109872680		0.508	0.500	1.6	20.0
PCB-1260 Peak 4	Ave	268957083	270741838		0.503	0.500	0.7	20.0
PCB-1260 Peak 5	Ave	180899331	188147990		0.520	0.500	4.0	20.0
Tetrachloro-m-xylene	Ave	2025276590	2246686800		0.0277	0.0250	10.9	20.0
Decachlorobiphenyl	Ave	2032355222	2059080560		0.0253	0.0250	1.3	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: CCV 240-51369/12 Calibration Date: 07/19/2012 15:54

Instrument ID: A2HP13 Calib Start Date: 03/23/2012 19:21

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 03/23/2012 20:36

Lab File ID: P1300012.D

Analyte	RT	RT WINDOW	
		TO	FROM
PCB-1016 Peak 1	2.11	2.06	2.16
PCB-1016 Peak 2	2.53	2.48	2.58
PCB-1016 Peak 3	3.01	2.96	3.06
PCB-1016 Peak 4	3.16	3.11	3.21
PCB-1016 Peak 5	3.27	3.22	3.32
PCB-1260 Peak 1	5.34	5.29	5.39
PCB-1260 Peak 2	5.72	5.67	5.77
PCB-1260 Peak 3	6.15	6.10	6.20
PCB-1260 Peak 4	6.45	6.40	6.50
PCB-1260 Peak 5	6.84	6.79	6.89
Tetrachloro-m-xylene	1.62	1.57	1.67
Decachlorobiphenyl	8.14	8.09	8.19

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: MB 240-51000/21-A

Matrix: Solid Date Extracted: 07/17/2012 08:46

Lab File ID:(1) P1300024.D Lab File ID:(2)

Date Analyzed:(1) 07/19/2012 09:01 Date Analyzed:(2)

Instrument ID:(1) A2HP13 Instrument ID:(2)

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MT-SS19-0-2	240-13043-2	07/19/2012 02:46	
MT-SS19-8-10	240-13043-3	07/19/2012 03:01	
MT-SS21-8-10	240-13043-7	07/19/2012 06:17	
	LCS 240-51000/20-A	07/19/2012 11:15	
MT-SS20-0-2	240-13043-4	07/19/2012 14:54	
MT-SS20-8-10	240-13043-5	07/19/2012 15:09	
MT-SS21-0-2	240-13043-6	07/19/2012 15:24	

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51000/21-A

Matrix: Solid | Lab File ID: P1300024.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3540C | Date Extracted: 07/17/2012 08:46

Sample wt/vol: 30(g) | Date Analyzed: 07/19/2012 09:01

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51268 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	33	U	33	21
11104-28-2	Aroclor-1221	33	U	33	16
11141-16-5	Aroclor-1232	33	U	33	14
53469-21-9	Aroclor-1242	33	U	33	13
12672-29-6	Aroclor-1248	33	U	33	17
11097-69-1	Aroclor-1254	33	U	33	17
11096-82-5	Aroclor-1260	33	U	33	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	66		29-151
2051-24-3	Decachlorobiphenyl	61		14-163

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1300033.D

Lab ID: LCS 240-51000/20-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	333	313	94	62-120	
Aroclor-1260	333	278	83	56-122	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	DCB1 #
MT-SS19-0-2	240-13043-2	70	100
MT-SS19-8-10	240-13043-3	81	102
MT-SS20-0-2	240-13043-4	90	83
MT-SS20-8-10	240-13043-5	95	117
MT-SS21-0-2	240-13043-6	76	116
MT-SS21-8-10	240-13043-7	55	74
	MB 240-51000/21-A	66	61
	LCS 240-51000/20-A	102	76

	QC LIMITS
TCX = Tetrachloro-m-xylene	29-151
DCB = Decachlorobiphenyl	14-163

Column to be used to flag recovery values

FORM II 8082A

VOC CALCULATION	SAMPLE		
	MT-SS20-8-10		
TARGET ANALYTE	trichloroethene		
ANALYTE RESPONSE	747600		
INTERNAL STANDARD	fluorobenzene		
I.S. RESPONSE	1307494		
I.S. CONCENTRATION	50	ug/kg	
ANALYTE CAL. RF	0.2487		
DILUTION FACTOR (DF)	1		
WEIGHT SAMPLE	5.952	grams	
SOLIDS (percent /100)	0.85		
FINAL VOLUME	5	ml	

$$\frac{\text{(ANALYTE RESPONSE) X (I.S. CONCENTRATION) X DF X FINAL VOL.}}{\text{(I.S. RESPONSE) X (CAL. R.F.) X WEIGHT (gms) X SOLIDS}} = \begin{array}{ll} 113.60880 & \text{ug/kg} \\ 0.113608798 & \text{mg/kg} \end{array}$$

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS21-8-10 Lab Sample ID: 240-13043-7

Matrix: Solid Lab File ID: UX89762.D

Analysis Method: 8260B Date Collected: 07/09/2012 14:35

Sample wt/vol: 5.952(g) Date Analyzed: 07/12/2012 03:18

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 15.0 Level: (low/med) Low

Analysis Batch No.: 50546 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.4	J	4.9	0.37
108-90-7	Chlorobenzene	4.9	U	4.9	0.33
75-00-3	Chloroethane	4.9	U	4.9	0.85
67-66-3	Chloroform	4.9	U	4.9	0.29
74-87-3	Chloromethane	4.9	U	4.9	0.41
156-59-2	cis-1,2-Dichloroethene	4.9	U	4.9	0.36
10061-01-5	cis-1,3-Dichloropropene	4.9	U	4.9	0.34
124-48-1	Dibromochloromethane	4.9	U	4.9	0.54
74-95-3	Dibromomethane	4.9	U	4.9	0.62
75-71-8	Dichlorodifluoromethane	4.9	U	4.9	0.49
108-20-3	Diisopropyl ether	9.9	U	9.9	1.5
100-41-4	Ethylbenzene	4.9	U	4.9	0.26
637-92-3	Ethyl-t-butyl ether (ETBE)	4.9	U	4.9	0.22
87-68-3	Hexachlorobutadiene	4.9	U	4.9	1.2
98-82-8	Isopropylbenzene	4.9	U	4.9	0.16
1634-04-4	Methyl tert-butyl ether	20	U	20	0.42
75-09-2	Methylene Chloride	0.66	J B	4.9	0.66
179601-23-1	m-Xylene & p-Xylene	9.9	U	9.9	1.2
91-20-3	Naphthalene	4.9	U	4.9	0.19
104-51-8	n-Butylbenzene	4.9	U	4.9	0.23
103-65-1	n-Propylbenzene	4.9	U	4.9	0.40
95-47-6	o-Xylene	4.9	U	4.9	0.35
99-87-6	p-Isopropyltoluene	4.9	U	4.9	0.21
135-98-8	sec-Butylbenzene	4.9	U	4.9	0.18
100-42-5	Styrene	4.9	U	4.9	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	4.9	U	4.9	0.37
75-65-0	tert-Butyl alcohol	200	U	200	7.5
98-06-6	tert-Butylbenzene	4.9	U	4.9	0.29
127-18-4	Tetrachloroethene	4.9	U	4.9	0.51
108-88-3	Toluene	4.9	U	4.9	0.27
156-60-5	trans-1,2-Dichloroethene	4.9	U	4.9	0.41
10061-02-6	trans-1,3-Dichloropropene	4.9	U	4.9	0.53
79-01-6	Trichloroethene	110		4.9	0.42
75-69-4	Trichlorofluoromethane	4.9	U	4.9	0.34
108-05-4	Vinyl acetate	9.9	U	9.9	0.25
75-01-4	Vinyl chloride	4.9	U	4.9	0.39

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A3UX8\20120711-11491.b\UX89762.D
Lims ID: 240-13043-B-7-A Client ID: MT-SS21-8-10
Inject. Date: 12-Jul-2012 03:18:30 Dil. Factor: 1.0000
Sample Type: Client
Sample ID: 240-0011491-012
Misc. Info.: M20711A,8260SUX8,,402279 =M20711A,8260SUX8,,402279
Operator: 402279 Instrument ID: A3UX8
Vol. Injected: 1.0000 ALS Bottle#: 11
Lims Batch ID: 50546 Lims Sample ID: 12
Detector: MS SCAN

Method: \\Ncchrom\ChromData\A3UX8\20120711-11491.b\8260_8.m
Last Update: 12-Jul-2012 20:13:38 Calib Date: 01-Jun-2012 06:44:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A3UX8\20120601-10421.b\UX88970.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Process Host: CORP-CTX-15

First Level Reviewer: latat Date: 12-Jul-2012 03:46:23

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.156	5.159	-0.003	99	1307494	50.0	
* 2 Chlorobenzene-d5	117	7.687	7.678	0.009	86	1050784	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.875	9.878	-0.003	98	577934	50.0	
$ 5 Dibromofluoromethane (Surr)	113	4.623	4.627	-0.004	60	267107	44.5	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.895	4.887	0.008	89	248901	45.5	
$ 7 Toluene-d8 (Surr)	98	6.421	6.424	-0.003	92	1028861	44.7	
$ 131 4-Bromofluorobenzene (Surr)	95	8.763	8.755	0.008	97	347738	46.0	
12 Dichlorodifluoromethane	85		1.587					
13 Chloromethane	50		1.752					
14 Vinyl chloride	62		1.870					
15 Bromomethane	94		2.178					
16 Chloroethane	64		2.273					
18 Trichlorofluoromethane	101		2.497					
21 1,1-Dichloroethene	96		2.923					
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.947					
22 Acetone	43		2.959					
26 Carbon disulfide	76		3.112					
30 Methylene Chloride	84	3.298	3.302	-0.004	93	24276	0.6640	
31 2-Methyl-2-propanol	59		3.385					
33 trans-1,2-Dichloroethene	96		3.515					
34 Methyl tert-butyl ether	73		3.526					
36 1,1-Dichloroethane	63		3.834					
37 Vinyl acetate	86		3.858					
38 Isopropyl ether	87		3.880					
40 Tert-butyl ethyl ether	59		4.152					
41 2-Butanone (MEK)	43		4.272					
42 cis-1,2-Dichloroethene	96		4.272					
43 2,2-Dichloropropane	77		4.283					
47 Chlorobromomethane	128		4.461					
49 Chloroform	83		4.508					
50 1,1,1-Trichloroethane	97		4.662					

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
52 1,1-Dichloropropene	75		4.792					
53 Carbon tetrachloride	117	4.801	4.804	-0.003	71	24368	4.45	
55 Benzene	78		4.946					
56 1,2-Dichloroethane	62		4.946					
57 Tert-amyl methyl ether	73		5.016					
60 Trichloroethene	130	5.439	5.443	-0.004	89	747600	114.9	
62 1,2-Dichloropropane	63		5.620					
65 Dibromomethane	93		5.715					
67 Dichlorobromomethane	83		5.821					
69 2-Chloroethyl vinyl ether	63		6.046					
70 cis-1,3-Dichloropropene	75		6.188					
71 4-Methyl-2-pentanone (MIBK)	43		6.306					
72 Toluene	91		6.484					
73 trans-1,3-Dichloropropene	75		6.637					
77 Tetrachloroethene	164		6.957					
76 1,3-Dichloropropane	76		6.957					
78 2-Hexanone	43		7.004					
79 Chlorodibromomethane	129		7.158					
123 Ethylene Dibromide	107		7.276					
82 Chlorobenzene	112		7.714					
83 1,1,1,2-Tetrachloroethane	131		7.773					
84 Ethylbenzene	106		7.797					
10 m-Xylene & p-Xylene	106		7.903					
85 o-Xylene	106		8.270					
86 Styrene	104		8.282					
87 Bromoform	173		8.459					
88 Isopropylbenzene	105		8.613					
90 1,1,2,2-Tetrachloroethane	83		8.873					
91 Bromobenzene	156		8.908					
92 1,2,3-Trichloropropane	110		8.920					
94 N-Propylbenzene	120		9.003					
95 2-Chlorotoluene	126		9.098					
104 4-Chlorotoluene	126		9.192					
97 tert-Butylbenzene	119		9.488					
98 1,2,4-Trimethylbenzene	105		9.535					
99 sec-Butylbenzene	105		9.701					
100 1,3-Dichlorobenzene	146		9.819					
101 4-Isopropyltoluene	119		9.843					
102 1,4-Dichlorobenzene	146		9.902					
103 1,2,3-Trimethylbenzene	105		9.948					
105 n-Butylbenzene	91		10.233					
106 1,2-Dichlorobenzene	146		10.269					
107 1,2-Dibromo-3-Chloropropane	157		11.026					
109 1,2,4-Trichlorobenzene	180		11.854					
110 Hexachlorobutadiene	225		12.031					
111 Naphthalene	128		12.102					
112 1,2,3-Trichlorobenzene	180		12.362					
S 114 Xylenes, Total	106		16.530					

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 45924

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/01/2012 02:08 Calibration End Date: 06/01/2012 04:37 Calibration ID: 9093

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Chloroethyl vinyl ether	+++++ 0.0238	0.0169 0.0267	0.0204 0.0313	0.0219	0.0233	Qua	-0.015	0.0220	0						1.0000		0.9900
Trichloroethene	0.2243 0.2513	0.2509 0.2603	0.2313 0.2649	0.2539	0.2532	Ave		0.2487				5.6		15.0			
Methylcyclohexane	0.2118 0.4003	0.1912 0.4082	0.3418 0.3981	0.3665	0.3811	Lin1	-0.277	0.4027							0.9990		0.9900
1,2-Dichloropropane	0.1805 0.2033	0.1843 0.2080	0.1938 0.2127	0.2041	0.2031	Ave		0.1987				5.7		15.0			
Dibromomethane	0.0952 0.1194	0.1175 0.1219	0.1139 0.1271	0.1138	0.1216	Ave		0.1163				8.2		15.0			
1,4-Dioxane	0.0025 0.0020	0.0025 0.0020	0.0020 0.0019	0.0021	0.0024	Ave		0.0022				10.0		15.0			
Bromodichloromethane	0.2015 0.2316	0.1911 0.2459	0.2026 0.2570	0.2127	0.2244	Ave		0.2208				10.0		15.0			
cis-1,3-Dichloropropene	0.1591 0.2647	0.1991 0.2829	0.2037 0.2992	0.2262	0.2547	Lin1	-0.224	0.2889							0.9970		0.9900
4-Methyl-2-pentanone	0.2036 0.2427	0.2289 0.2447	0.2315 0.2610	0.2391	0.2431	Ave		0.2368				7.0		15.0			
Toluene	1.2618 1.1963	1.0799 1.1982	1.1210 1.2635	1.2019	1.1935	Ave		1.1895				5.3		15.0			
trans-1,3-Dichloropropene	0.2005 0.2816	0.1787 0.3038	0.2057 0.3318	0.2370	0.2604	Qua	-0.299	0.2765	0.0003						1.0000		0.9900
Ethyl methacrylate	0.1819 0.2949	0.2235 0.3018	0.2312 0.3253	0.2658	0.2936	Lin1	-0.211	0.3144							0.9980		0.9900
1,1,2-Trichloroethane	0.2105 0.2310	0.2365 0.2316	0.2154 0.2478	0.2322	0.2385	Ave		0.2304				5.3		15.0			
1,3-Dichloropropane	0.3751 0.3653	0.3792 0.3653	0.3575 0.3841	0.3601	0.3777	Ave		0.3705				2.6		15.0			
Tetrachloroethene	0.1897 0.2669	0.2069 0.2690	0.2355 0.2762	0.2606	0.2664	Ave		0.2464				13.0		15.0			
2-Hexanone	0.1516 0.1976	0.1995 0.1883	0.1988 0.2091	0.2053	0.2036	Ave		0.1942				9.4		15.0			
Dibromochloromethane	0.1902 0.2816	0.1961 0.2914	0.2080 0.3169	0.2388	0.2644	Lin1	-0.234	0.3036							0.9960		0.9900
1,2-Dibromoethane	0.2149 0.2489	0.2178 0.2450	0.2240 0.2636	0.2394	0.2552	Ave		0.2386				7.5		15.0			
Chlorobenzene	0.8847 0.8463	0.7973 0.8554	0.8028 0.8959	0.8434	0.8568	Ave		0.8478			0.3000	4.1		15.0			
1,1,1,2-Tetrachloroethane	0.2543 0.3065	0.2260 0.3130	0.2496 0.3239	0.2668	0.2844	Ave		0.2781				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

PAH CALCULATION

	SAMPLE		
	MT-SS20-8-10		
TARGET ANALYTE	benzo(a)anthracene		
ANALYTE RESPONSE	27851		
INTERNAL STANDARD	chrysene-d12		
I.S. RESPONSE	645765		
I.S. CONCENTRATION	4	ug/ml	
ANALYTE CAL. RF	1.32		
DILUTION FACTOR (DF)	1		
WEIGHT SAMPLE	30.1	grams	
SOLIDS (percent /100)	0.822		
FINAL VOLUME	2000	µL	
INJECTION VOLUME	1	µL	
CORRECTION FACTOR CF1	1000		
	0.227719495	on column	
(ANALYTE RESPONSE) X (I.S. CONCENTRATION) X DF X FINAL VOL.X CF1 / (I.S. RESPONSE) X (CAL. R.F.) X WEIGHT (gms) X SOLIDS x INJ. VOL.	=	10.5644	ug/kg

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Client Sample ID: MT-SS20-8-10 | Lab Sample ID: 240-13043-5

Matrix: Solid | Lab File ID: 20720019.D

Analysis Method: 8270D | Date Collected: 07/09/2012 13:45

Extract. Method: 3540C | Date Extracted: 07/18/2012 11:30

Sample wt/vol: 30.10(g) | Date Analyzed: 07/20/2012 15:12

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.8 82.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51476 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	61	U	61	33
123-91-1	1,4-Dioxane	120	U	120	27
88-06-2	2,4,6-Trichlorophenol	180	U	180	97
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	400	U	400	97
121-14-2	2,4-Dinitrotoluene	240	U	240	33
91-58-7	2-Chloronaphthalene	61	U	61	4.0
95-57-8	2-Chlorophenol	61	U	61	33
91-57-6	2-Methylnaphthalene	8.1	U	8.1	4.0
95-48-7	2-Methylphenol	240	U	240	97
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	61	U	61	33
15831-10-4	3 & 4 Methylphenol	490	U	490	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	22
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	97
101-55-3	4-Bromophenyl phenyl ether	61	U	61	16
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	21
7005-72-3	4-Chlorophenyl phenyl ether	61	U	61	16
100-01-6	4-Nitroaniline	240	U	240	32
83-32-9	Acenaphthene	8.1	U	8.1	4.0
208-96-8	Acenaphthylene	8.1	U	8.1	4.0
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	8.1	U	8.1	4.0
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U	120	15
56-55-3	Benzo[a]anthracene	11		8.1	4.0
50-32-8	Benzo[a]pyrene	16		8.1	4.0
205-99-2	Benzo[b]fluoranthene	15		8.1	4.0
191-24-2	Benzo[g,h,i]perylene	15		8.1	4.0
207-08-9	Benzo[k]fluoranthene	7.2	J	8.1	4.0

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A4HP7\20120720-11697.b\20720019.D		
Lims ID:	240-13043-G-5-C	Client ID:	MT-SS20-8-10
Inject. Date:	20-Jul-2012 15:12:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0011697-019		
Misc. Info.:	240-13043-g-5-c		
Operator:	001710	Instrument ID:	A4HP7
Vol. Injected:	1.0000	ALS Bottle#:	19
Lims Batch ID:	51476	Lims Sample ID:	19
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A4HP7\20120720-11697.b\8270_hp7.m		
Last Update:	23-Jul-2012 15:10:16	Calib Date:	11-Jul-2012 19:23:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A4HP7\20120711-11474.b\20711028.D		
Limit Group:	MSS 8270D ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	XAWRK015		
First Level Reviewer: gruberj		Date:	23-Jul-2012 14:53:48

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	3.402	3.407	-0.005	94	187913	4.00	
* 2 Naphthalene-d8	136	4.290	4.295	-0.005	98	814788	4.00	
* 3 Acenaphthene-d10	164	5.557	5.552	0.005	87	488660	4.00	
* 4 Phenanthrene-d10	188	6.632	6.632	0.0	97	747202	4.00	
* 5 Chrysene-d12	240	8.611	8.579	0.032	93	645765	4.00	
* 6 Perylene-d12	264	9.938	9.890	0.048	89	485483	4.00	
$ 7 2-Fluorophenol	112	2.562	2.546	0.016	93	772046	12.5	
$ 8 Phenol-d5	99	3.129	3.118	0.011	92	1022597	13.3	
$ 9 Nitrobenzene-d5	82	3.776	3.781	-0.005	94	530667	6.49	
$ 10 2-Fluorobiphenyl (Surr)	172	5.049	5.049	0.0	100	1103168	6.08	
$ 11 2,4,6-Tribromophenol	330	6.124	6.124	0.0	85	149804	10.4	
$ 12 Terphenyl-d14	244	7.777	7.766	0.011	99	1218789	8.56	
24 1,4-Dioxane	88		1.621					
25 N-Nitrosodimethylamine	74		1.781					
40 Benzaldehyde	77		3.118					
41 Phenol	94		3.129					
44 Bis(2-chloroethyl)ether	93		3.204					
46 2-Chlorophenol	128		3.263					
51 2-Methylphenol	108		3.541					
52 2,2'-oxybis[1-chloropropane]	45		3.562					
191 3 & 4 Methylphenol	108		3.642					
56 N-Nitrosodi-n-propylamine	70		3.658					
57 Acetophenone	105		3.669					
60 Hexachloroethane	117		3.760					
61 Nitrobenzene	77		3.792					
63 Isophorone	82		3.953					
64 2,4-Dimethylphenol	107		4.017					
65 2-Nitrophenol	139		4.017					
68 Bis(2-chloroethoxy)methane	93		4.081					
71 2,4-Dichlorophenol	162		4.183					
73 Naphthalene	128		4.311					

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
74 4-Chloroaniline	127		4.327					
77 Hexachlorobutadiene	225		4.386					
83 Caprolactam	113		4.573					
84 4-Chloro-3-methylphenol	107		4.659					
85 2-Methylnaphthalene	142		4.798					
88 Hexachlorocyclopentadiene	237		4.910					
90 2,4,6-Trichlorophenol	196		4.990					
91 2,4,5-Trichlorophenol	196		5.022					
95 1,1'-Biphenyl	154		5.124					
98 2-Chloronaphthalene	162		5.151					
100 2-Nitroaniline	65		5.210					
103 Dimethyl phthalate	163		5.322					
105 2,6-Dinitrotoluene	165		5.375					
107 Acenaphthylene	152		5.456					
108 3-Nitroaniline	138		5.504					
109 2,4-Dinitrophenol	184		5.573					
110 Acenaphthene	153		5.579					
111 4-Nitrophenol	109		5.605					
112 2,4-Dinitrotoluene	165		5.669					
114 Dibenzofuran	168		5.702					
119 Diethyl phthalate	149		5.825					
121 4-Chlorophenyl phenyl ether	204		5.932					
123 4-Nitroaniline	138		5.948					
124 Fluorene	166		5.948					
126 4,6-Dinitro-2-methylphenol	198		5.964					
130 N-Nitrosodiphenylamine	169		6.012					
137 4-Bromophenyl phenyl ether	248		6.290					
139 Hexachlorobenzene	284		6.354					
140 Atrazine	200		6.376					
141 Pentachlorophenol	266		6.488					
146 Phenanthrene	178	6.648	6.648	0.0	91	25096	0.1159	
147 Anthracene	178		6.686					
149 Carbazole	167		6.787					
151 Di-n-butyl phthalate	149	6.996	7.001	-0.005	95	30216	0.1162	
157 Fluoranthene	202	7.520	7.515	0.005	92	36215	0.1631	
160 Pyrene	202	7.691	7.686	0.005	95	58524	0.2401	
166 Butyl benzyl phthalate	149		8.103					
171 Bis(2-ethylhexyl) phthalate	149	8.536	8.515	0.021	93	56999	0.3442	
173 3,3'-Dichlorobenzidine	252		8.536					
175 Benzo[a]anthracene	228	8.601	8.579	0.022	39	27851	0.1307	
176 Chrysene	228	8.633	8.611	0.022	66	26833	0.1378	
178 Di-n-octyl phthalate	149		9.018					
180 Benzo[b]fluoranthene	252	9.531	9.499	0.032	89	37469	0.1869	M
181 Benzo[k]fluoranthene	252	9.547	9.526	0.021	43	18047	0.0890	M
182 Benzo[a]pyrene	252	9.874	9.847	0.027	65	35414	0.1922	
186 Indeno[1,2,3-cd]pyrene	276	11.323	11.307	0.016	84	24625	0.1275	
187 Dibenz(a,h)anthracene	278		11.312					
188 Benzo[g,h,i]perylene	276	11.767	11.735	0.032	76	29136	0.1831	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13043-1 Analy Batch No.: 50462

SDG No.:

Instrument ID: A4HP7 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2012 11:20 Calibration End Date: 07/11/2012 13:51 Calibration ID: 10087

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Di-n-butyl phthalate	1.4260	1.2513 1.4546	1.2967 1.5232	1.3027 1.5561	1.3219	Ave		1.3916			0.0100	8.2		20.0			
Fluoranthene	1.2618 1.2036	1.0692 1.2519	1.0914 1.2835	1.0970 1.2990	1.1424	Ave		1.1889			0.6000	7.6		20.0			
Benzidine	0.8967	0.5991 0.9428	0.7101 0.9467	0.7877 0.8895	0.8398	Ave		0.8265				15.0		20.0			
Pyrene	1.6234 1.5151	1.3757 1.5985	1.4248 1.5824	1.4359 1.5893	1.4430	Ave		1.5098			0.6000	6.1		20.0			
Butyl benzyl phthalate	0.7372	0.6604 0.7629	0.6972 0.7800	0.6791 0.7929	0.6888	Ave		0.7248			0.0100	6.9		20.0			
3,3'-Dimethoxybenzidine	0.3657	0.2651 0.3719	0.3041 0.3966	0.3319 0.3815	0.3321	Ave		0.3436				13.0		20.0			
Bis(2-ethylhexyl) phthalate	1.0437	0.9151 1.0853	0.9744 1.1236	0.9521 1.1225	0.9886	Ave		1.0257			0.0100	7.8		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.2421	0.2136 0.2557	0.2141 0.2542	0.2276 0.2535	0.2309	Ave		0.2365				7.4		20.0			
3,3'-Dichlorobenzidine	0.4949	0.4212 0.5193	0.4528 0.5194	0.4761 0.5175	0.4662	Ave		0.4834			0.0100	7.4		20.0			
Benzo[a]anthracene	1.5240 1.3002	1.2124 1.3706	1.2613 1.3909	1.2513 1.3514	1.2177	Ave		1.3200			0.8000	7.6		20.0			
Chrysene	1.3481 1.1927	1.0893 1.2523	1.1720 1.2548	1.1316 1.2695	1.1429	Ave		1.2059			0.7000	6.8		20.0			
Di-n-octyl phthalate	2.4641	1.9599 2.4614	2.0026 2.5046	2.1302 2.5585	2.1712	Ave		2.2816			0.0100	11.0		20.0			
Benzo[b]fluoranthene	1.8902 1.7336	1.5916 1.8030	1.5360 1.6714	1.4475 1.7032	1.4914	Ave		1.6520			0.7000	8.9		20.0			
Benzo[k]fluoranthene	1.9194 1.6731	1.5271 1.6156	1.5589 1.7461	1.6421 1.7582	1.5905	Ave		1.6701			0.7000	7.3		20.0			
Benzo[a]pyrene	1.7881 1.5540	1.3265 1.5863	1.3993 1.5679	1.4289 1.5916	1.4233	Ave		1.5184			0.7000	9.1		20.0			
Indeno[1,2,3-cd]pyrene	1.7216 1.6482	1.4481 1.6636	1.4774 1.6591	1.5081 1.6792	1.5123	Ave		1.5909			0.5000	6.5		20.0			
Dibenzo(a,h)anthracene	1.4163 1.3976	1.2084 1.4077	1.2692 1.4108	1.2797 1.4486	1.2776	Ave		1.3462			0.4000	6.4		20.0			
Benzo[g,h,i]perylene	1.3167 1.3610	1.1949 1.3838	1.2769 1.3688	1.2434 1.4020	1.2535	Ave		1.3112			0.5000	5.5		20.0			
2-Fluorophenol (Surr)	1.3276	1.2657 1.3381	1.2857 1.3421	1.2753 1.3766	1.2655	Ave		1.3096				3.2		20.0			
Phenol-d5 (Surr)	1.6639	1.5486 1.6909	1.5495 1.6865	1.5830 1.7453	1.5895	Ave		1.6322				4.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE: OCTOBER 1, 2012**

FROM: **TERRI L. SOLOMON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – SELECT METALS**
MARTIN STATE AIRPORT – MT SOIL BORING
SAMPLE DELIVERY GROUP (SDG) – 240-13043-1

SAMPLES: 6/Soil/

MT-SS19-0-2	MT-SS19-8-10	MT-SS20-0-2
MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10

Overview

The sample set for Martin State Airport – MT Soil Boring, SDG 240-13043-1, consists of six (6) soil environmental samples. No field duplicate pairs were included within this SDG.

All samples were analyzed for select metals including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium and zinc. The samples were collected by Tetra Tech on July 9, 2012 and analyzed by TestAmerica. Metals analyses were conducted using SW-846 method 6010C. Mercury analyses were conducted using SW-846 method 7471B.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, laboratory control sample recoveries, matrix spike/matrix spike duplicate recoveries, ICP serial dilution results, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems

None.

Minor Problems

- The contract required detection limit (CRDL) percent recoveries for silver and thallium were < 90% quality control limit affecting all samples. The nondetected results reported for silver and thallium were qualified as biased low, "UL".

- The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Beryllium	0.963 ug/L	0.482 mg/kg
Molybdenum	2.94 ug/L	1.47 mg/kg
Vanadium	1.48 ug/L	0.74 mg/kg
Zinc	6.29 ug/L	3.14 mg/kg
Antimony[(1)]	0.497 mg/kg	2.48 mg/kg
Barium[(1)]	0.315 mg/kg	1.58 mg/kg

[(1)] Maximum concentration present in a preparation blank.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level reported for antimony and molybdenum were qualified "B" as a result of laboratory blank contamination.

- The matrix spike and/or matrix spike duplicate percent recoveries for antimony, chromium, selenium, silver and vanadium were < 75% quality control limit. The positive and nondetected results reported for the aforementioned analytes were qualified as biased low, "L" and "UL", respectively.

- The ICP serial dilution percent difference (result > 50X MDL) for nickel was > 10% quality control limit. The positive results reported for nickel were qualified as estimated, "J".

- Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated, "J".

Notes

Nondetected results are reported to the method detection limits.

The CRDL percent recoveries for arsenic and cobalt were < 90% quality control limit. No validation actions were warranted as all sample results were > 2X CRDL.

The CRDL percent recovery for zinc was > 110% quality control limit. No validation actions were warranted as all sample results were > 2X CRDL.

Executive Summary

Laboratory Performance: The CRDL percent recoveries for silver and thallium were < 90% quality control limit. Several contaminants were present in the laboratory method / preparation blanks.

Other Factors Affecting Data Quality: Positive results reported below the RL but above the MDL were qualified as estimated. The matrix spike / matrix spike duplicate percent recoveries for several analytes were < 75% quality control limit. The ICP serial dilution percent difference for nickel was > 10% quality control limit.

The data for these analyses were reviewed with reference to Region III modifications to the "National Functional Guidelines for Inorganic Data Validation", April 1993.

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Terri L. Solomon
Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04054	NSAMPLE	MT-SS19-0-2			MT-SS19-8-10			MT-SS20-0-2			MT-SS20-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-2			240-13043-3			240-13043-4			240-13043-5		
FRACTION: M	SAMP_DATE	7/9/2012			7/9/2012			7/9/2012			7/9/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	83.8			85.8			85.3			82.2		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.43	UL	D	0.46	B	A	0.66	B	A	0.67	B	A
ARSENIC		6.2			6.4			3.9			5		
BARIUM		13	J	P	13	J	P	19	J	P	18	J	P
BERYLLIUM		1.6			2.7			2.9			4		
CADMIUM		0.04	U		0.036	U		0.035	U		0.037	U	
CHROMIUM		24	L	D	23	L	D	20	L	D	24	L	D
COBALT		7.5			14			14			13		
COPPER		33			25			24			38		
LEAD		6.7			3.8			4.4			6.3		
MERCURY		0.018	U		0.019	U		0.017	U		0.019	U	
MOLYBDENUM		0.77	B	A	0.41	B	A	0.38	B	A	0.58	B	A
NICKEL		30	J	I	52	J	I	45	J	I	44	J	I
SELENIUM		0.5	UL	D	0.46	UL	D	0.44	UL	D	0.47	UL	D
SILVER		0.11	UL	CD	0.1	UL	CD	0.098	UL	CD	0.1	UL	CD
THALLIUM		0.61	UL	C	0.56	UL	C	0.54	UL	C	0.57	UL	C
VANADIUM		43	L	D	29	L	D	31	L	D	38	L	D
ZINC		38			72			69			73		

PROJ_NO: 04054	NSAMPLE	MT-SS21-0-2			MT-SS21-8-10		
SDG: 240-13043-1	LAB_ID	240-13043-6			240-13043-7		
FRACTION: M	SAMP_DATE	7/9/2012			7/9/2012		
MEDIA: SOIL	QC_TYPE	NM			NM		
	UNITS	MG/KG			MG/KG		
	PCT_SOLIDS	84.8			85.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.36	UL	D	0.47	B	A
ARSENIC		4.4			4.7		
BARIUM		16	J	P	12	J	P
BERYLLIUM		3.8			5.8		
CADMIUM		0.033	U		0.038	U	
CHROMIUM		24	L	D	21	L	D
COBALT		10			14		
COPPER		15			19		
LEAD		4.1			5.1		
MERCURY		0.019	U		0.016	U	
MOLYBDENUM		0.31	B	A	0.34	B	A
NICKEL		34	J	I	49	J	I
SELENIUM		0.42	UL	D	0.48	UL	D
SILVER		0.093	UL	CD	0.11	UL	CD
THALLIUM		0.51	UL	C	0.58	UL	C
VANADIUM		36	L	D	36	L	D
ZINC		49			78		

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-SS19-0-2 Lab Sample ID: 240-13043-2

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG ID.:

Matrix: Solid Date Sampled: 07/09/2012 11:40

Reporting Basis: DRY Date Received: 07/10/2012 08:30

% Solids: 83.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.43	mg/Kg	U		1	6010C
7440-38-2	Arsenic	6.2	1.7	0.33	mg/Kg			1	6010C
7440-39-3	Barium	13	22	0.079	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	1.6	0.56	0.048	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.56	0.56	0.040	mg/Kg	U		1	6010C
7440-47-3	Chromium	24	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	7.5	1.1	0.18	mg/Kg			1	6010C
7440-50-8	Copper	33	2.8	0.83	mg/Kg			1	6010C
7439-92-1	Lead	6.7	1.1	0.21	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.77	4.5	0.30	mg/Kg	J		1	6010C
7440-02-0	Nickel	30	4.5	0.30	mg/Kg			1	6010C
7782-49-2	Selenium	2.2	2.2	0.50	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.61	mg/Kg	U		1	6010C
7440-62-2	Vanadium	43	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	38	5.6	1.1	mg/Kg			1	6010C
7439-97-6	Mercury	0.12	0.12	0.018	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-SS19-8-10 Lab Sample ID: 240-13043-3

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG ID.:

Matrix: Solid Date Sampled: 07/09/2012 11:45

Reporting Basis: DRY Date Received: 07/10/2012 08:30

% Solids: 85.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.46	2.0	0.40	mg/Kg	J	B	1	6010C
7440-38-2	Arsenic	6.4	1.5	0.30	mg/Kg			1	6010C
7440-39-3	Barium	13	20	0.072	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	2.7	0.51	0.044	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.51	0.51	0.036	mg/Kg	U		1	6010C
7440-47-3	Chromium	23	1.0	0.20	mg/Kg			1	6010C
7440-48-4	Cobalt	14	1.0	0.16	mg/Kg			1	6010C
7440-50-8	Copper	25	2.5	0.75	mg/Kg			1	6010C
7439-92-1	Lead	3.8	1.0	0.19	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.41	4.1	0.27	mg/Kg	J		1	6010C
7440-02-0	Nickel	52	4.1	0.27	mg/Kg			1	6010C
7782-49-2	Selenium	2.0	2.0	0.46	mg/Kg	U		1	6010C
7440-22-4	Silver	1.0	1.0	0.10	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.0	2.0	0.56	mg/Kg	U		1	6010C
7440-62-2	Vanadium	29	1.0	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	72	5.1	1.0	mg/Kg			1	6010C
7439-97-6	Mercury	0.12	0.12	0.019	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-SS20-0-2 Lab Sample ID: 240-13043-4

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG ID.:

Matrix: Solid Date Sampled: 07/09/2012 13:40

Reporting Basis: DRY Date Received: 07/10/2012 08:30

% Solids: 85.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.66	2.0	0.38	mg/Kg	J	B	1	6010C
7440-38-2	Arsenic	3.9	1.5	0.29	mg/Kg			1	6010C
7440-39-3	Barium	19	20	0.069	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	2.9	0.49	0.042	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.49	0.49	0.035	mg/Kg	U		1	6010C
7440-47-3	Chromium	20	0.98	0.20	mg/Kg			1	6010C
7440-48-4	Cobalt	14	0.98	0.16	mg/Kg			1	6010C
7440-50-8	Copper	24	2.4	0.72	mg/Kg			1	6010C
7439-92-1	Lead	4.4	0.98	0.19	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.38	3.9	0.26	mg/Kg	J		1	6010C
7440-02-0	Nickel	45	3.9	0.26	mg/Kg			1	6010C
7782-49-2	Selenium	2.0	2.0	0.44	mg/Kg	U		1	6010C
7440-22-4	Silver	0.98	0.98	0.098	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.0	2.0	0.54	mg/Kg	U		1	6010C
7440-62-2	Vanadium	31	0.98	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	69	4.9	0.98	mg/Kg			1	6010C
7439-97-6	Mercury	0.11	0.11	0.017	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-SS20-8-10 Lab Sample ID: 240-13043-5

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG ID.:

Matrix: Solid Date Sampled: 07/09/2012 13:45

Reporting Basis: DRY Date Received: 07/10/2012 08:30

% Solids: 82.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.67	2.1	0.41	mg/Kg	J	B	1	6010C
7440-38-2	Arsenic	5.0	1.6	0.31	mg/Kg			1	6010C
7440-39-3	Barium	18	21	0.074	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	4.0	0.52	0.045	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.52	0.52	0.037	mg/Kg	U		1	6010C
7440-47-3	Chromium	24	1.0	0.21	mg/Kg			1	6010C
7440-48-4	Cobalt	13	1.0	0.17	mg/Kg			1	6010C
7440-50-8	Copper	38	2.6	0.77	mg/Kg			1	6010C
7439-92-1	Lead	6.3	1.0	0.20	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.58	4.2	0.28	mg/Kg	J		1	6010C
7440-02-0	Nickel	44	4.2	0.28	mg/Kg			1	6010C
7782-49-2	Selenium	2.1	2.1	0.47	mg/Kg	U		1	6010C
7440-22-4	Silver	1.0	1.0	0.10	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.1	2.1	0.57	mg/Kg	U		1	6010C
7440-62-2	Vanadium	38	1.0	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	73	5.2	1.0	mg/Kg			1	6010C
7439-97-6	Mercury	0.13	0.13	0.019	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-SS21-0-2 Lab Sample ID: 240-13043-6

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG ID.:

Matrix: Solid Date Sampled: 07/09/2012 14:30

Reporting Basis: DRY Date Received: 07/10/2012 08:30

% Solids: 84.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	1.9	1.9	0.36	mg/Kg	U		1	6010C
7440-38-2	Arsenic	4.4	1.4	0.28	mg/Kg			1	6010C
7440-39-3	Barium	16	19	0.066	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	3.8	0.46	0.040	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.46	0.46	0.033	mg/Kg	U		1	6010C
7440-47-3	Chromium	24	0.93	0.19	mg/Kg			1	6010C
7440-48-4	Cobalt	10	0.93	0.15	mg/Kg			1	6010C
7440-50-8	Copper	15	2.3	0.69	mg/Kg			1	6010C
7439-92-1	Lead	4.1	0.93	0.18	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.31	3.7	0.25	mg/Kg	J		1	6010C
7440-02-0	Nickel	34	3.7	0.25	mg/Kg			1	6010C
7782-49-2	Selenium	1.9	1.9	0.42	mg/Kg	U		1	6010C
7440-22-4	Silver	0.93	0.93	0.093	mg/Kg	U		1	6010C
7440-28-0	Thallium	1.9	1.9	0.51	mg/Kg	U		1	6010C
7440-62-2	Vanadium	36	0.93	0.11	mg/Kg			1	6010C
7440-66-6	Zinc	49	4.6	0.93	mg/Kg			1	6010C
7439-97-6	Mercury	0.12	0.12	0.019	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-SS21-8-10 Lab Sample ID: 240-13043-7

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG ID.:

Matrix: Solid Date Sampled: 07/09/2012 14:35

Reporting Basis: DRY Date Received: 07/10/2012 08:30

% Solids: 85.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.47	2.1	0.41	mg/Kg	J	B	1	6010C
7440-38-2	Arsenic	4.7	1.6	0.32	mg/Kg			1	6010C
7440-39-3	Barium	12	21	0.075	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	5.8	0.53	0.046	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.53	0.53	0.038	mg/Kg	U		1	6010C
7440-47-3	Chromium	21	1.1	0.21	mg/Kg			1	6010C
7440-48-4	Cobalt	14	1.1	0.17	mg/Kg			1	6010C
7440-50-8	Copper	19	2.6	0.78	mg/Kg			1	6010C
7439-92-1	Lead	5.1	1.1	0.20	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.34	4.2	0.29	mg/Kg	J		1	6010C
7440-02-0	Nickel	49	4.2	0.29	mg/Kg			1	6010C
7782-49-2	Selenium	2.1	2.1	0.48	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.1	2.1	0.58	mg/Kg	U		1	6010C
7440-62-2	Vanadium	36	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	78	5.3	1.1	mg/Kg			1	6010C
7439-97-6	Mercury	0.10	0.10	0.016	mg/Kg	U		1	7471B

APPENDIX C
SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MSA-MT SOIL BORING

Report Number: 240-13043-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available Any exceptions to NELAP requirements are noted in this report Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 07/10/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 1.6 C.

The following samples were logged for TPH DRO analysis per client request: MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6), and MT-SS21-8-10 (240-13043-7). This analysis was not originally requested on the chain-of-custody (COC).

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 07/10/2012 and analyzed on 07/12/2012.

Acetone was detected in method blank MB 240-50546/7 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Methylene Chloride and Naphthalene were detected in method blank MB 240-50546/7 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

The laboratory control sample (LCS) for batch 50546 exceeded control limits for the following analyte: Acetone. This compound has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Insufficient sample volume was available to meet method-mandated requirements for matrix spike/matrix spike duplicate (MS/MSD) analyses for batch 50546.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample TB-070912 (240-13043-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/13/2012.

1,2,3-Trichlorobenzene, Naphthalene and tert-Butyl alcohol were detected in method blank MB 240-50786/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

2-Chloroethyl vinyl ether and tert-Butyl alcohol failed the recovery criteria low for the MS/MSD of sample 240-13086-8 in batch 240-50786.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/17/2012 and 07/18/2012 and analyzed on 07/19/2012 and 07/20/2012.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 240-51193/23-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

The continuing calibration verification (CCV) for 1,4-dioxane, associated with batch 51296 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 07/19/2012.

No difficulties were encountered during the GRO analyses. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for diesel range organics (DRO)in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 07/17/2012 and analyzed on 07/20/2012.

Total Petroleum Hydrocarbons (C10-C32) was detected in method blank MB 240-51014/22-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the DRO analyses. All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 07/17/2012 and analyzed on 07/19/2012.

The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: MT-SS19-0-2 (240-13043-2) and MT-SS21-8-10 (240-13043-7). Lot # S65830.

No other difficulties were encountered during the PCBs analyses. All quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for total metals (ICP)in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/12/2012 and analyzed on 07/16/2012.

Antimony, Barium and Beryllium were detected in method blank MB 240-50598/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes failed the recovery criteria low for the MS of sample MT-SS19-0-2 (240-13043-2) in batch 240-51051. Antimony, Chromium, Selenium and Vanadium failed the recovery criteria low for the MSD of sample MT-SS19-0-2 (240-13043-2) in batch 240-51051.

A matrix spike and matrix spike duplicate were performed on sample MT-SS19-0-2 (240-13043-2) instead of a matrix spike and laboratory duplicate.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

MERCURY

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 07/12/2012 and analyzed on 07/13/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples MT-SS19-0-2 (240-13043-2), MT-SS19-8-10 (240-13043-3), MT-SS20-0-2 (240-13043-4), MT-SS20-8-10 (240-13043-5), MT-SS21-0-2 (240-13043-6) and MT-SS21-8-10 (240-13043-7) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 07/11/2012.

No difficulties were encountered during the % solids analyses. All quality control parameters were within the acceptance limits.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech Inc.	Client Project Manager: Tony Apanavage	Site Contact: Stu Cameron	Lab Contact: Pat O'Meara	COC No:
Address: 20251 Century Blvd.	Telephone: 301 528-3021	Telephone: 703 342-8389	Telephone: 330 497-9396	1 of 1 COCs
City/State/Zip: Germantown, MD 20874	Email:			
Phone: 301 528-3021		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: MSA-MT Soil Boring Sampling	Method of Shipment/Carrier: Fed EX			
Project Number: 112IC04054-04	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	MeOH/Tbl		VOCs	SVOCs, PCBs	Metals	Gas	VOCs	Sample Specific Notes / Special Instructions:
TB-070912	7-9-12	—		X						2					N	G	X					
MT-SS19-0-2	↓	1140				X							4	3			X	X	X	X	X	
~~MT-SB19-8-10~~ MT-SS19-8-10		1145				X							4	3			X	X	X	X	X	
MT-SS20-0-2		1340				X							4	3			X	X	X	X	X	
~~MT-SB20-8-10~~ MT-SS20-8-10		1345				X							4	3			X	X	X	X	X	
~~MT-SB21-0-2~~ MT-SS21-0-2		1430				X							4	3			X	X	X	X	X	
~~MT-SB21-8-10~~ MT-SS21-8-10		1435				X							4	3			X	X	X	X	X	

AC 11/29/12

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tt mus	7-9-12 / 1515			
			Received in Laboratory by: [signature]	TAL	7/10/12 830

TAL-0016 (1008)

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07/26/2012

HOLDTIME

SDG 240-13043-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS19-8-10	240-13043-3	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS20-0-2	240-13043-4	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS20-8-10	240-13043-5	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
HG	MG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/12/2012	7/13/2012	3	1	4
M	MG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS19-8-10	240-13043-3	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS20-8-10	240-13043-5	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
M	MG/KG	MT-SS20-0-2	240-13043-4	NM	7/9/2012	7/12/2012	7/16/2012	3	4	7
OS	UG/KG	MT-SS19-0-2	240-13043-2	NM	7/9/2012	7/17/2012	7/19/2012	8	2	10
OS	UG/KG	MT-SS21-8-10	240-13043-7	NM	7/9/2012	7/18/2012	7/20/2012	9	2	11
OS	UG/KG	MT-SS21-0-2	240-13043-6	NM	7/9/2012	7/18/2012	7/20/2012	9	2	11

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-13043-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Closed System Purge and Trap	TAL NC		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270D	
Soxhlet Extraction	TAL NC		SW846 3540C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL NC	SW846 8015C	
Purge and Trap	TAL NC		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL NC	SW846 8015C	
Soxhlet Extraction	TAL NC		SW846 3540C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL NC	SW846 8082A	
Soxhlet Extraction	TAL NC		SW846 3540C
Metals (ICP)	TAL NC	SW846 6010C	
Preparation, Metals	TAL NC		SW846 3050B
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	TAL NC	SW846 7471B	
Preparation, Mercury	TAL NC		SW846 7471B
Percent Moisture	TAL NC	EPA Moisture	
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Purge and Trap	TAL NC		SW846 5030B

Lab References:

TAL NC = TestAmerica Canton

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-13043-1

SDG No.:

Project: MSA-MT SOIL BORING

Client Sample ID	Lab Sample ID
MT-SS19-0-2	240-13043-2
MT-SS19-8-10	240-13043-3
MT-SS20-0-2	240-13043-4
MT-SS20-8-10	240-13043-5
MT-SS21-0-2	240-13043-6
MT-SS21-8-10	240-13043-7

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

ICV Source: MTTRICV_00014 Concentration Units: ug/L

CCV Source: MTTRCCV_00028

Analyte	ICV 240-51051/4 07/16/2012 11:10				CCV 240-51051/50 07/16/2012 15:39				CCV 240-51051/62 07/16/2012 16:47			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	250		250	100	467		500	93	465		500	93
Arsenic	245		250	98	475		500	95	470		500	94
Barium	1020		1000	102	1870		2000	93	1860		2000	93
Beryllium	1040		1000	104	1990		2000	100	1980		2000	99
Cadmium	253		250	101	484		500	97	484		500	97
Chromium	1020		1000	102	1970		2000	98	1950		2000	98
Cobalt	1020		1000	102	1950		2000	98	1940		2000	97
Copper	1010		1000	101	1990		2000	99	1990		2000	100
Lead	247		250	99	477		500	95	472		500	94
Molybdenum	997		1000	100	2010		2000	100	2020		2000	101
Nickel	1020		1000	102	1960		2000	98	2040		2000	102
Selenium	247		250	99	477		500	95	472		500	94
Silver	494		500	99	1000		1000	100	1020		1000	102
Thallium	498		500	100	960		1000	96	954		1000	95
Vanadium	1000		1000	100	1890		2000	94	1830		2000	92
Zinc	1040		1000	104	1990		2000	100	2010		2000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

ICV Source: MTTRICV_00014 Concentration Units: ug/L

CCV Source: MTTRCCV_00028

Analyte	CCV 240-51051/74 07/16/2012 17:54											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	458		500	92								
Arsenic	470		500	94								
Barium	1820		2000	91								
Beryllium	1970		2000	99								
Cadmium	485		500	97								
Chromium	1940		2000	97								
Cobalt	1940		2000	97								
Copper	1970		2000	98								
Lead	471		500	94								
Molybdenum	2030		2000	101								
Nickel	2100		2000	105								
Selenium	472		500	94								
Silver	1020		1000	102								
Thallium	942		1000	94								
Vanadium	1790		2000	90								
Zinc	2010		2000	101								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

ICV Source: MTHGICVW_00340 Concentration Units: ug/L

CCV Source: MTHGCALW_00222

Analyte	ICV 240-50907/7-A 07/13/2012 12:08				CCV 240-50907/11-A 07/13/2012 13:12				CCV 240-50907/11-A 07/13/2012 13:36			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.41		2.50	97	5.22		5.00	104	5.36		5.00	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

ICV Source: MTHGICVW_00340 Concentration Units: ug/L

CCV Source: MTHGCALW_00222

Analyte	CCV 240-50907/11-A 07/13/2012 14:00											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.34		5.00	107								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Method: 6010C Instrument ID: I5

Lab Sample ID: CRI 240-51051/7 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00007

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	18.9	J	95	70-130
Arsenic	15.0	11.9	J	79	70-130
Barium	200	198	J	99	70-130
Beryllium	5.00	5.03		101	70-130
Cadmium	5.00	4.97	J	99	70-130
Chromium	10.0	9.02	J	90	70-130
Cobalt	10.0	8.83	J	88	70-130
Copper	20.0	19.2	J	96	70-130
Lead	10.0	8.97	J	90	70-130
Molybdenum	40.0	37.5	J	94	70-130
Nickel	40.0	39.3	J	98	70-130
Selenium	20.0	20.5		103	70-130
Silver	10.0	8.43	J	84	70-130
Thallium	20.0	14.5	J	72	70-130
Vanadium	10.0	10.4		104	70-130
Zinc	50.0	64.0		128	70-130

Lab Sample ID: CRI 240-51051/107 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00007

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	20.9		104	70-130
Arsenic	15.0	14.6	J	97	70-130
Barium	200	201		100	70-130
Beryllium	5.00	5.02		100	70-130
Cadmium	5.00	5.18		104	70-130
Chromium	10.0	9.70	J	97	70-130
Cobalt	10.0	8.98	J	90	70-130
Copper	20.0	21.0	J	105	70-130
Lead	10.0	9.12	J	91	70-130
Molybdenum	40.0	38.5	J	96	70-130
Nickel	40.0	39.1	J	98	70-130
Selenium	20.0	20.4		102	70-130
Silver	10.0	8.47	J	85	70-130
Thallium	20.0	17.0	J	85	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Method: 6010C Instrument ID: I5

Lab Sample ID: CRI 240-51051/107 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00007

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	11.1		111	70-130
Zinc	50.0	60.1		120	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Method: 7471B Instrument ID: H4

Lab Sample ID: CRA 240-50907/9-B Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00222

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.169	J	84	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICBIS 240-51051/5 07/16/2012 11:16		CCB 240-51051/51 07/16/2012 15:44		CCB 240-51051/63 07/16/2012 16:52		CCB 240-51051/75 07/16/2012 18:00	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	2.75	J	2.38	J	20	U
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	0.655	J	0.835	J	0.963	J
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	1.90	J	2.94	J	2.75	J	2.11	J
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	1.08	J	1.48	J	1.06	J	1.31	J
Zinc	50	50	U	50	U	5.90	J	6.29	J

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-50907/8-A 07/13/2012 12:10		CCB 240-50907/10-A 07/13/2012 13:14		CCB 240-50907/10-A 07/13/2012 13:39		CCB 240-50907/10-A 07/13/2012 14:02	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.60	U	0.60	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-50598/1-A

Instrument Code: I5 Batch No.: 51051

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	0.497	J		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	0.315	J		6010C
7440-41-7	Beryllium	0.0478	J		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	5.0	U		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-50601/1-A

Instrument Code: H4 Batch No.: 50942

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICSA 240-51051/10 Instrument ID: I5

Lab File ID: I50716B ICS Source: MTTRICSAW_00013

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**2.18**	
Arsenic		**1.34**	
Barium		**2.11**	
Beryllium		**0.113**	
Cadmium		**-1.13**	
Chromium		**3.03**	
Cobalt		**-0.270**	
Copper		**3.83**	
Lead		**-2.04**	
Molybdenum		**1.19**	
Nickel		**3.30**	
Selenium		**4.17**	
Silver		**-0.0197**	
Thallium		**5.20**	
Vanadium		**-0.0500**	
Zinc		**-0.157**	
Aluminum	*500000*	*490448*	*98*
Boron		*-5.05*	
Calcium	*500000*	*480367*	*96*
Iron	*200000*	*193609*	*97*
Magnesium	*500000*	*517394*	*103*
Manganese		*2.22*	
Potassium		*188*	
Sodium		*501*	
Tin		*1.96*	
Titanium		*-7.15*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Lab Sample ID: ICSAB 240-51051/11 Instrument ID: I5

Lab File ID: I50716B ICS Source: MTTRICSABW_00009

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**1000**	**1009**	**101**
Arsenic	**1000**	**978**	**98**
Barium	**500**	**513**	**103**
Beryllium	**500**	**508**	**102**
Cadmium	**1000**	**951**	**95**
Chromium	**500**	**489**	**98**
Cobalt	**500**	**476**	**95**
Copper	**500**	**516**	**103**
Lead	**1000**	**944**	**94**
Molybdenum	**1000**	**983**	**98**
Nickel	**1000**	**960**	**96**
Selenium	**1000**	**966**	**97**
Silver	**1000**	**1048**	**105**
Thallium	**1000**	**969**	**97**
Vanadium	**500**	**482**	**96**
Zinc	**1000**	**1021**	**102**
Aluminum	*500000*	*489942*	*98*
Boron	*1000*	*983*	*98*
Calcium	*500000*	*480092*	*96*
Iron	*200000*	*192991*	*96*
Magnesium	*500000*	*517715*	*104*
Manganese	*500*	*493*	*99*
Potassium	*10000*	*11444*	*114*
Sodium	*10000*	*10896*	*109*
Tin	*1000*	*980*	*98*
Titanium	*1000*	*974*	*97*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: MT-SS19-0-2 MS | Lab ID: 240-13043-2 MS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids: 83.8

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	24.5		2.2	U	56.3	44	75-125	F	6010C
Arsenic	177		6.2		225	76	75-125		6010C
Barium	204		13	J	225	85	75-125		6010C
Beryllium	6.18		1.6		5.63	81	75-125		6010C
Cadmium	4.44		0.56	U	5.63	79	75-125		6010C
Chromium	39.5		24		22.5	69	75-125	F	6010C
Cobalt	51.9		7.5		56.3	79	75-125		6010C
Copper	59.8		33		28.1	94	75-125		6010C
Lead	50.5		6.7		56.3	78	75-125		6010C
Molybdenum	91.4		0.77	J	113	80	75-125		6010C
Nickel	73.2		30		56.3	77	75-125		6010C
Selenium	164		2.2	U	225	73	75-125	F	6010C
Silver	4.00		1.1	U	5.63	71	75-125	F	6010C
Thallium	175		2.2	U	225	78	75-125		6010C
Vanadium	79.2		43		56.3	65	75-125	F	6010C
Zinc	82.0		38		56.3	77	75-125		6010C
Mercury	0.192		0.12	U	0.192	100	11-192		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: MT-SS19-0-2 MSD | Lab ID: 240-13043-2 MSD

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids: 83.8

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	24.8	56.3	44	75-125	1	20	F	6010C
Arsenic	178	225	77	75-125	1	20		6010C
Barium	205	225	85	75-125	0	20		6010C
Beryllium	6.32	5.63	84	75-125	2	20		6010C
Cadmium	4.50	5.63	80	75-125	2	20		6010C
Chromium	40.5	22.5	73	75-125	2	20	F	6010C
Cobalt	52.7	56.3	80	75-125	2	20		6010C
Copper	65.6	28.1	115	75-125	9	20		6010C
Lead	51.6	56.3	80	75-125	2	20		6010C
Molybdenum	92.7	113	82	75-125	1	20		6010C
Nickel	75.9	56.3	82	75-125	4	20		6010C
Selenium	167	225	74	75-125	2	20	F	6010C
Silver	4.32	5.63	77	75-125	8	20		6010C
Thallium	178	225	79	75-125	2	20		6010C
Vanadium	82.5	56.3	71	75-125	4	20	F	6010C
Zinc	85.8	56.3	84	75-125	5	20		6010C
Mercury	0.187	0.192	97	11-192	2	20		7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: MT-SS19-0-2 PDS | Lab ID: 240-13043-2 PDS

Lab Name: TestAmerica Canton | Job No.: 240-13043-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	14.5		2.2	U	16.7	87	80-120		6010C
Chromium	43.4		24		22.3	87	80-120		6010C
Selenium	35.7		2.2	U	44.6	80	80-120		6010C
Silver	9.62		1.1	U	11.2	86	80-120		6010C
Vanadium	46.6		43		5.58	68	80-120	W	6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-50598/2-A

Lab Name: TestAmerica Canton Job No.: 240-13043-1

Sample Matrix: Solid LCS Source: MTICP1_00017

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	47.5		95	80	120		6010C
Arsenic	200	187		93	80	120		6010C
Barium	200	194		97	80	120		6010C
Beryllium	5.00	5.10		102	80	120		6010C
Cadmium	5.00	5.04		101	80	120		6010C
Chromium	20.0	20.4		102	80	120		6010C
Cobalt	50.0	49.0		98	80	120		6010C
Copper	25.0	25.1		100	80	120		6010C
Lead	50.0	47.1		94	80	120		6010C
Molybdenum	100	101		101	80	120		6010C
Nickel	50.0	50.5		101	80	120		6010C
Selenium	200	185		92	80	120		6010C
Silver	5.00	5.78		116	80	120		6010C
Thallium	200	192		96	80	120		6010C
Vanadium	50.0	47.0		94	80	120		6010C
Zinc	50.0	50.7		101	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-50601/2-A

Lab Name: TestAmerica Canton Job No.: 240-13043-1

Sample Matrix: Solid LCS Source: MTHGICVW_00338

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.830		100	73	121		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 240-13043-2

SDG No:

Lab Name: TestAmerica Canton Job No: 240-13043-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.2	U	11	U	NC		6010C
Arsenic	6.2		6.12	J	NC		6010C
Barium	13	J	14.3	J	9.7		6010C
Beryllium	1.6		2.01	J	NC		6010C
Cadmium	0.56	U	2.8	U	NC		6010C
Chromium	24		26.3		9.7		6010C
Cobalt	7.5		8.26		NC		6010C
Copper	33		36.2		NC		6010C
Lead	6.7		6.85		NC		6010C
Molybdenum	0.77	J	22	U	NC		6010C
Nickel	30		33.3		12	V	6010C
Selenium	2.2	U	11	U	NC		6010C
Silver	1.1	U	5.6	U	NC		6010C
Thallium	2.2	U	11	U	NC		6010C
Vanadium	43		47.0		9.8		6010C
Zinc	38		43.7		NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-13043-1

SDG Number:

Matrix: Solid Instrument ID: I5

Method: 6010C MDL Date: 03/01/2011 14:59

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	206.838	2	0.39
Arsenic	189.042	1.5	0.3
Barium	493.409	20	0.071
Beryllium	313.042	0.5	0.043
Cadmium	226.502	0.5	0.036
Chromium	267.716	1	0.2
Cobalt	228.616	1	0.16
Copper	324.753	2.5	0.74
Lead	220.353	1	0.19
Molybdenum	202.030	4	0.27
Nickel	231.604	4	0.27
Selenium	196.026	2	0.45
Silver	328.068	1	0.1
Thallium	190.864	2	0.55
Vanadium	292.402	1	0.12
Zinc	213.856	5	1

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-13043-1

SDG Number:

Matrix: Solid Instrument ID: I5

Method: 6010C XMDL Date: 03/01/2011 15:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	206.838	20	1.8
Arsenic	189.042	15	3.2
Barium	493.409	200	0.67
Beryllium	313.042	5	0.46
Cadmium	226.502	5	0.66
Chromium	267.716	10	2.2
Cobalt	228.616	10	1.7
Copper	324.753	25	4.5
Lead	220.353	10	1.9
Molybdenum	202.030	40	1.3
Nickel	231.604	40	3.2
Selenium	196.026	20	4.1
Silver	328.068	10	2.2
Thallium	190.864	20	4.7
Vanadium	292.402	10	0.64
Zinc	213.856	50	5

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-13043-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B MDL Date: 02/16/2010 09:48

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.1	0.015

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-13043-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B XMDL Date: 02/16/2010 09:48

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.6	0.12

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-50598/1-A	07/12/2012 09:59	50598	1.00		100
LCS 240-50598/2-A	07/12/2012 09:59	50598	1.00		100
240-13043-2	07/12/2012 09:59	50598	1.07		100
240-13043-2 MS	07/12/2012 09:59	50598	1.06		100
240-13043-2 MSD	07/12/2012 09:59	50598	1.06		100
240-13043-3	07/12/2012 09:59	50598	1.15		100
240-13043-4	07/12/2012 09:59	50598	1.20		100
240-13043-5	07/12/2012 09:59	50598	1.17		100
240-13043-6	07/12/2012 09:59	50598	1.27		100
240-13043-7	07/12/2012 09:59	50598	1.11		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-50601/1-A	07/12/2012 13:30	50601	0.60		100
LCS 240-50601/2-A	07/12/2012 13:30	50601	0.60		100
240-13043-2	07/12/2012 13:30	50601	0.61		100
240-13043-2 MS	07/12/2012 13:30	50601	0.62		100
240-13043-2 MSD	07/12/2012 13:30	50601	0.62		100
240-13043-3	07/12/2012 13:30	50601	0.56		100
240-13043-4	07/12/2012 13:30	50601	0.62		100
240-13043-5	07/12/2012 13:30	50601	0.58		100
240-13043-6	07/12/2012 13:30	50601	0.57		100
240-13043-7	07/12/2012 13:30	50601	0.68		100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: I5 Method: 6010C

Start Date: 07/16/2012 10:55 End Date: 07/17/2012 10:25

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
STD1 240-51051/1 IC			10:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-51051/2 IC			11:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-51051/3 IC			11:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-51051/4	1		11:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICBIS 240-51051/5	1		11:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-51051/6			11:22																				
CRI 240-51051/7	1		11:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			11:33																				
ICSA 240-51051/9			11:39																				
ICSA 240-51051/10	1		11:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-51051/11	1		11:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-51051/12			11:57																				
CCB 240-51051/13			12:02																				
ZZZZZZ			12:08																				
ZZZZZZ			12:14																				
ZZZZZZ			12:19																				
ZZZZZZ			12:25																				
ZZZZZZ			12:31																				
ZZZZZZ			12:36																				
ZZZZZZ			12:42																				
ZZZZZZ			12:48																				
ZZZZZZ			12:53																				
ZZZZZZ			12:59																				
CCV 240-51051/24			13:05																				
CCB 240-51051/25			13:10																				
ZZZZZZ			13:16																				
ZZZZZZ			13:22																				
ZZZZZZ			13:27																				
ZZZZZZ			13:33																				
ZZZZZZ			13:39																				
ZZZZZZ			13:44																				
ZZZZZZ			13:50																				
ZZZZZZ			13:56																				
ZZZZZZ			14:01																				
ZZZZZZ			14:07																				
CCV 240-51051/36			14:12																				
CCB 240-51051/37			14:18																				
CCV 240-51051/38			14:31																				
CCB 240-51051/39			14:36																				
ZZZZZZ			14:42																				
ZZZZZZ			14:48																				
ZZZZZZ			14:53																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: I5 Method: 6010C

Start Date: 07/16/2012 10:55 End Date: 07/17/2012 10:25

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			14:59																				
ZZZZZZ			15:05																				
ZZZZZZ			15:10																				
ZZZZZZ			15:16																				
ZZZZZZ			15:22																				
ZZZZZZ			15:27																				
ZZZZZZ			15:33																				
CCV 240-51051/50	1		15:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/51	1		15:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			15:50																				
ZZZZZZ			15:56																				
ZZZZZZ			16:01																				
ZZZZZZ			16:07																				
ZZZZZZ			16:13																				
MB 240-50598/1-A	1	T	16:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-50598/2-A	1	T	16:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-2	1	T	16:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-2 SD	5	T	16:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-2 MS	1	T	16:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-51051/62	1		16:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/63	1		16:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-2 MSD	1	T	16:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-2 PDS	1	T	17:04	X						X					X	X		X					
240-13043-3	1	T	17:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-4	1	T	17:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-5	1	T	17:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-6	1	T	17:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-7	1	T	17:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			17:37																				
ZZZZZZ			17:43																				
ZZZZZZ			17:49																				
CCV 240-51051/74	1		17:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/75	1		18:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			18:06																				
CRI 240-51051/77			18:11																				
CCV 240-51051/78			18:17																				
CCB 240-51051/79			18:23																				
CCV 240-51051/80			05:32																				
CCB 240-51051/81			05:38																				
ZZZZZZ			05:44																				
ZZZZZZ			05:49																				
ZZZZZZ			05:55																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: I5 Method: 6010C

Start Date: 07/16/2012 10:55 End Date: 07/17/2012 10:25

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			06:01																				
ZZZZZZ			06:06																				
ZZZZZZ			06:12																				
CCV 240-51051/88			06:18																				
CCB 240-51051/89			06:23																				
CCV 240-51051/90			07:20																				
CCB 240-51051/91			07:26																				
ZZZZZZ			07:31																				
ZZZZZZ			07:37																				
ZZZZZZ			07:43																				
ZZZZZZ			07:48																				
ZZZZZZ			07:54																				
ZZZZZZ			08:00																				
ZZZZZZ			08:05																				
ZZZZZZ			08:11																				
ZZZZZZ			08:17																				
ZZZZZZ			08:22																				
CCV 240-51051/102			08:28																				
CCB 240-51051/103			08:34																				
ZZZZZZ			08:43																				
ZZZZZZ			08:48																				
ZZZZZZ			08:54																				
CRI 240-51051/107	1		09:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			09:05																				
ZZZZZZ			09:11																				
ZZZZZZ			09:17																				
ZZZZZZ			09:22																				
ZZZZZZ			09:28																				
ZZZZZZ			09:34																				
CCV 240-51051/114			09:39																				
CCB 240-51051/115			09:45																				
ZZZZZZ			09:51																				
ZZZZZZ			09:56																				
ZZZZZZ			10:02																				
ZZZZZZ			10:08																				
ZZZZZZ			10:13																				
CCV 240-51051/121			10:19																				
CCB 240-51051/122			10:25																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 07/13/2012 11:47 End Date: 07/13/2012 14:02

Lab Sample ID	D / F	Type	Time	Analytes																					
				Hg																					
IC 240-50907/1-A			11:47	X																					
IC 240-50907/2-A			11:49	X																					
IC 240-50907/3-A			11:51	X																					
IC 240-50907/4-A			11:55	X																					
IC 240-50907/5-A			11:57	X																					
IC 240-50907/6-A			11:59	X																					
ICV 240-50907/7-A	1		12:08	X																					
ICB 240-50907/8-A	1		12:10	X																					
CRA 240-50907/9-B	1		12:12	X																					
CCV 240-50907/11-A			12:23																						
CCB 240-50907/10-A			12:25																						
ZZZZZZ			12:27																						
ZZZZZZ			12:29																						
ZZZZZZ			12:31																						
ZZZZZZ			12:32																						
ZZZZZZ			12:34																						
ZZZZZZ			12:36																						
ZZZZZZ			12:38																						
ZZZZZZ			12:40																						
ZZZZZZ			12:43																						
ZZZZZZ			12:45																						
CCV 240-50907/11-A			12:47																						
CCB 240-50907/10-A			12:50																						
ZZZZZZ			12:52																						
ZZZZZZ			12:54																						
ZZZZZZ			12:56																						
ZZZZZZ			12:58																						
ZZZZZZ			13:00																						
ZZZZZZ			13:02																						
ZZZZZZ			13:04																						
ZZZZZZ			13:06																						
ZZZZZZ			13:08																						
ZZZZZZ			13:10																						
CCV 240-50907/11-A	1		13:12	X																					
CCB 240-50907/10-A	1		13:14	X																					
ZZZZZZ			13:16																						
MB 240-50601/1-A	1	T	13:18	X																					
LCS 240-50601/2-A	1	T	13:20	X																					
240-13043-2	1	T	13:22	X																					
240-13043-2 MS	1	T	13:24	X																					
240-13043-2 MSD	1	T	13:26	X																					
240-13043-3	1	T	13:28	X																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13043-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 07/13/2012 11:47 End Date: 07/13/2012 14:02

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
240-13043-4	1	T	13:30	X																				
240-13043-5	1	T	13:32	X																				
240-13043-6	1	T	13:34	X																				
CCV 240-50907/11-A	1		13:36	X																				
CCB 240-50907/10-A	1		13:39	X																				
240-13043-7	1	T	13:41	X																				
ZZZZZZ			13:43																					
ZZZZZZ			13:47																					
ZZZZZZ			13:49																					
ZZZZZZ			13:51																					
ZZZZZZ			13:53																					
ZZZZZZ			13:55																					
ZZZZZZ			13:57																					
CCV 240-50907/11-A	1		14:00	X																				
CCB 240-50907/10-A	1		14:02	X																				

Prep Types
T = Total/NA

Sample MT-SS20-8-10

Method: TOTAL Sample Name: 240-13043-g-5-a Operator: KLC
Run Time: 07/16/12 17:20 Filename: I50716B
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-4.599	36890.	47.993	13.34	175.9	38.52
SDev	.0329	13.06	.78177	.0618	.2078	.0304
%RSD	.7148	.0354	1.6289	.4632	.1181	.079

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4473.	-.4592	124.9	230.3	368.5	347800.
SDev	4.641	.04	.0142	.0737	.164	536.5
%RSD	.1037	8.713	.0114	.032	.0445	.1542

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9845.	4940.	1240.	5.541	-705.8	422.1
SDev	3.962	2.633	1.085	.5495	53.94	.7235
%RSD	.0402	.0533	.0874	9.917	7.642	.1714

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-18.944	60.151	6.3972	-.5782	3409.	-5.3766
SDev	2.7549	.0072	.36326	.9007	2.512	1.6142
%RSD	14.543	.01198	5.6785	155.8	.0737	30.024

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	365.9	704.9	51.341	64.549	-24.928	-15.956
SDev	.2391	.2248	1.4602	.71819	1.7584	3.2525
%RSD	.0653	.0319	2.8441	1.1126	7.0541	20.384

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-5.1865	12.180	5.0000	14832.1
SDev	1.6014	.25487	0	47.6586
%RSD	30.876	2.0925	0	.32132

Copper result 38 mg/kg

$$\left(\frac{368.5\,ug}{L}\right)\left(\frac{0.10L}{1.17g}\right)\left(\frac{1\,mg}{1000\,ug}\right)\left(\frac{1000g}{1kg}\right)\left(\frac{1}{.822}\right) = 38.3\ mg/kg$$

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE: NOVEMBER 29, 2012**

FROM: **TERRI L. SOLOMON** **COPIES: DV FILE / Rev. 1**

SUBJECT: **INORGANIC DATA VALIDATION – SELECT TOTAL METALS, TCLP METALS**
MARTIN STATE AIRPORT – MAIN TERMINAL
SAMPLE DELIVERY GROUP (SDG) – 240-13070-1

SAMPLES: 4/Soil/

MT-SS17-0-2 MT-SS17-8-10 MT-SS18-0-2
MT-SS18-8-10

1/TCLP/

MT-TCLP-8-10

Overview

The sample set for Martin State Airport – Main Terminal, SDG 240-13070-1, consists of four (4) soil environmental samples and one TCLP sample. No field duplicate pairs were included within this SDG.

All soil samples were analyzed for select total metals including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium and zinc. The TCLP sample was analyzed for arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver. The samples were collected by Tetra Tech on July 10, 2012 and analyzed by Test America. Metals analyses were conducted using SW-846 method 6010C. Mercury analyses were conducted using SW-846 method 7470A.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, initial and continuing calibration verification results, laboratory method / preparation blank results, ICP interference results, laboratory control sample recoveries, matrix spike / matrix spike duplicate recoveries, ICP serial dilution results, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems

None.

Minor Problems

- The contract required detection limit (CRDL) percent recovery for selenium was < 90% quality control limit affecting sample MT-TCLP-8-10. The nondetected result reported for selenium was qualified as biased low, "UL".

- The CRDL percent recoveries for arsenic, cobalt, silver and thallium were < 90% quality control limit affecting the soil samples. The nondetected results reported for silver and thallium were qualified as biased low, "UL". The positive results < 2X CRDL reported for arsenic and cobalt were qualified as either biased low, "L", or estimated, "J", as a result of conflicting noncompliances.

- The CRDL percent recovery for zinc was > 110% quality control limit affecting the soil samples. The positive results < 2X CRDL reported for zinc were qualified as estimated, "J", as a result of conflicting noncompliances.

- The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Lead[1]	3.83 ug/L	0.01915 mg/L
Selenium[1]	4.40 ug/L	0.022 mg/L
Barium[2]	0.00337 mg/L	0.01685 mg/L
Beryllium[3]	0.963 ug/L	0.4815 mg/kg
Molybdenum[3]	2.75 ug/L	1.375 mg/kg
Vanadium[3]	1.31 ug/L	0.655 mg/kg
Zinc[3]	6.29 ug/L	3.145 mg/kg
Antimony[4]	0.497 mg/kg	2.485 mg/kg
Barium[4]	0.315 mg/kg	1.575 mg/kg

[1] Maximum concentration present in a method blank affecting sample MT-TCLP-8-10.
[2] Maximum concentration present in a TCLP blank affecting sample MT-TCLP-8-10.
[3] Maximum concentration present in a method blank affecting the soil samples.
[4] Maximum concentration present in a soil preparation blank.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot, percent solids and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive results less than the blank action level reported for antimony, beryllium and molybdenum were qualified "B" as a result of laboratory blank contamination.

- Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated, "J".

Notes

The continuing calibration percent recoveries for arsenic and silver on 07/16/2012 at 18:22 were > 110% quality control limit affecting sample MT-TCLP-8-10. No validation actions were warranted as all sample results were nondetects.

Executive Summary

Laboratory Performance: Several CRDL percent recoveries were outside the 90-110% quality control limits. Several analytes were present in the laboratory method / preparation blanks.

Other Factors Affecting Data Quality: Positive results reported below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to Region III modifications to the "National Functional Guidelines for Inorganic Data Validation", April 1993.

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Terri L. Solomon
Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

MT-SS17-02 MT-SS17-8-10

PROJ_NO: 04054	NSAMPLE	~~MT-SB17-8~~-2 TS 11/29/12			~~MT-SB17-8-10~~ TS 11/29/12			MT-SS18-0-2			MT-SS18-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-5			240-13070-6			240-13070-2			240-13070-3		
FRACTION: M	SAMP_DATE	7/10/2012			7/10/2012			7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	MG/KG			MG/KG			MG/KG			MG/KG		
	PCT_SOLIDS	83.6			82.4			83.9			85.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.42	U		0.4	U		0.79	B	A	0.44	U	
ARSENIC		5.7			2.4	L	C	6.7			1	J	CP
BARIUM		20	J	P	13	J	P	9.3	J	P	10	J	P
BERYLLIUM		2.4			1.8			2.4			0.44	B	A
CADMIUM		0.039	U		0.037	U		0.035	U		0.04	U	
CHROMIUM		19			25			29			20		
COBALT		9.7			4.7			7			1.8	L	C
COPPER		17			13			36			4.7		
LEAD		7.8			5.2			1.9			1	J	P
MERCURY		0.017	U		0.019	U		0.017	U		0.018	U	
MOLYBDENUM		0.29	U		0.55	B	A	0.26	U		0.3	U	
NICKEL		22			17			16			3.3	J	P
SELENIUM		0.48	U		0.46	U		0.98	J	P	0.5	U	
SILVER		0.11	UL	C	0.1	UL	C	0.096	UL	C	0.11	UL	C
THALLIUM		0.59	UL	C	0.56	UL	C	0.53	UL	C	0.62	UL	C
VANADIUM		28			46			80			14		
ZINC		79			17			20			4.9	J	CP

PROJ_NO: 04054	NSAMPLE	MT-TCLP-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-4		
FRACTION: TCLPM	SAMP_DATE	7/10/2012		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	MG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
ARSENIC		0.0032	U	
BARIUM		0.17	J	P
CADMIUM		0.0013	J	P
CHROMIUM		0.0047	J	P
LEAD		0.05	J	P
MERCURY		0.00012	U	
SELENIUM		0.0041	UL	C
SILVER		0.0022	U	

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: ~~MT-SB17-0-2~~ MT-SS17-0-2 TLS 11/30/12

Lab Sample ID: 240-13070-5

Lab Name: TestAmerica Canton

Job No.: 240-13070-1

SDG ID.:

Matrix: Solid

Date Sampled: 07/10/2012 10:25

Reporting Basis: DRY

Date Received: 07/11/2012 08:00

% Solids: 83.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.42	mg/Kg	U		1	6010C
7440-38-2	Arsenic	5.7	1.6	0.32	mg/Kg			1	6010C
7440-39-3	Barium	20	22	0.077	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	2.4	0.54	0.046	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.54	0.54	0.039	mg/Kg	U		1	6010C
7440-47-3	Chromium	19	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	9.7	1.1	0.17	mg/Kg			1	6010C
7440-50-8	Copper	17	2.7	0.80	mg/Kg			1	6010C
7439-92-1	Lead	7.8	1.1	0.20	mg/Kg			1	6010C
7439-98-7	Molybdenum	4.3	4.3	0.29	mg/Kg	U		1	6010C
7440-02-0	Nickel	22	4.3	0.29	mg/Kg			1	6010C
7782-49-2	Selenium	2.2	2.2	0.48	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.59	mg/Kg	U		1	6010C
7440-62-2	Vanadium	28	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	79	5.4	1.1	mg/Kg			1	6010C
7439-97-6	Mercury	0.11	0.11	0.017	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: ~~MT-SB17-8-10~~ MT-SB17-8-10 RS 11/29/12

Lab Sample ID: 240-13070-6

Lab Name: TestAmerica Canton

Job No.: 240-13070-1

SDG ID.:

Matrix: Solid

Date Sampled: 07/10/2012 10:30

Reporting Basis: DRY

Date Received: 07/11/2012 08:00

% Solids: 82.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.0	2.0	0.40	mg/Kg	U		1	6010C
7440-38-2	Arsenic	2.4	1.5	0.31	mg/Kg			1	6010C
7440-39-3	Barium	13	20	0.072	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	1.8	0.51	0.044	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.51	0.51	0.037	mg/Kg	U		1	6010C
7440-47-3	Chromium	25	1.0	0.20	mg/Kg			1	6010C
7440-48-4	Cobalt	4.7	1.0	0.16	mg/Kg			1	6010C
7440-50-8	Copper	13	2.5	0.75	mg/Kg			1	6010C
7439-92-1	Lead	5.2	1.0	0.19	mg/Kg			1	6010C
7439-98-7	Molybdenum	0.55	4.1	0.28	mg/Kg	J		1	6010C
7440-02-0	Nickel	17	4.1	0.28	mg/Kg			1	6010C
7782-49-2	Selenium	2.0	2.0	0.46	mg/Kg	U		1	6010C
7440-22-4	Silver	1.0	1.0	0.10	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.0	2.0	0.56	mg/Kg	U		1	6010C
7440-62-2	Vanadium	46	1.0	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	17	5.1	1.0	mg/Kg			1	6010C
7439-97-6	Mercury	0.13	0.13	0.019	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-SS18-0-2 | Lab Sample ID: 240-13070-2

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG ID.:

Matrix: Solid | Date Sampled: 07/10/2012 09:15

Reporting Basis: DRY | Date Received: 07/11/2012 08:00

% Solids: 83.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.79	1.9	0.37	mg/Kg	J	B	1	6010C
7440-38-2	Arsenic	6.7	1.4	0.29	mg/Kg			1	6010C
7440-39-3	Barium	9.3	19	0.068	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	2.4	0.48	0.041	mg/Kg		B	1	6010C
7440-43-9	Cadmium	0.48	0.48	0.035	mg/Kg	U		1	6010C
7440-47-3	Chromium	29	0.96	0.19	mg/Kg			1	6010C
7440-48-4	Cobalt	7.0	0.96	0.15	mg/Kg			1	6010C
7440-50-8	Copper	36	2.4	0.71	mg/Kg			1	6010C
7439-92-1	Lead	1.9	0.96	0.18	mg/Kg			1	6010C
7439-98-7	Molybdenum	3.8	3.8	0.26	mg/Kg	U		1	6010C
7440-02-0	Nickel	16	3.8	0.26	mg/Kg			1	6010C
7782-49-2	Selenium	0.98	1.9	0.43	mg/Kg	J		1	6010C
7440-22-4	Silver	0.96	0.96	0.096	mg/Kg	U		1	6010C
7440-28-0	Thallium	1.9	1.9	0.53	mg/Kg	U		1	6010C
7440-62-2	Vanadium	80	0.96	0.12	mg/Kg			1	6010C
7440-66-6	Zinc	20	4.8	0.96	mg/Kg			1	6010C
7439-97-6	Mercury	0.12	0.12	0.017	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-SS18-8-10 | Lab Sample ID: 240-13070-3

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG ID.:

Matrix: Solid | Date Sampled: 07/10/2012 09:20

Reporting Basis: DRY | Date Received: 07/11/2012 08:00

% Solids: 85.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	2.2	2.2	0.44	mg/Kg	U		1	6010C
7440-38-2	Arsenic	1.0	1.7	0.34	mg/Kg	J		1	6010C
7440-39-3	Barium	10	22	0.079	mg/Kg	J	B	1	6010C
7440-41-7	Beryllium	0.44	0.56	0.048	mg/Kg	J	B	1	6010C
7440-43-9	Cadmium	0.56	0.56	0.040	mg/Kg	U		1	6010C
7440-47-3	Chromium	20	1.1	0.22	mg/Kg			1	6010C
7440-48-4	Cobalt	1.8	1.1	0.18	mg/Kg			1	6010C
7440-50-8	Copper	4.7	2.8	0.83	mg/Kg			1	6010C
7439-92-1	Lead	1.0	1.1	0.21	mg/Kg	J		1	6010C
7439-98-7	Molybdenum	4.5	4.5	0.30	mg/Kg	U		1	6010C
7440-02-0	Nickel	3.3	4.5	0.30	mg/Kg	J		1	6010C
7782-49-2	Selenium	2.2	2.2	0.50	mg/Kg	U		1	6010C
7440-22-4	Silver	1.1	1.1	0.11	mg/Kg	U		1	6010C
7440-28-0	Thallium	2.2	2.2	0.62	mg/Kg	U		1	6010C
7440-62-2	Vanadium	14	1.1	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	4.9	5.6	1.1	mg/Kg	J		1	6010C
7439-97-6	Mercury	0.12	0.12	0.018	mg/Kg	U		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TCLP

Client Sample ID: MT-TCLP-8-10 Lab Sample ID: 240-13070-4

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG ID.:

Matrix: Solid Date Sampled: 07/10/2012 09:25

Reporting Basis: WET Date Received: 07/11/2012 08:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	0.50	0.50	0.0032	mg/L	U	^	1	6010B
7440-39-3	Barium	0.17	10	0.00067	mg/L	J	B	1	6010B
7440-43-9	Cadmium	0.0013	0.10	0.00066	mg/L	J		1	6010B
7440-47-3	Chromium	0.0047	0.50	0.0022	mg/L	J		1	6010B
7439-92-1	Lead	0.050	0.50	0.0019	mg/L	J		1	6010B
7782-49-2	Selenium	0.25	0.25	0.0041	mg/L	U		1	6010B
7440-22-4	Silver	0.50	0.50	0.0022	mg/L	U	^	1	6010B
7439-97-6	Mercury	0.0020	0.0020	0.00012	mg/L	U		1	7470A

APPENDIX C
SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: LM MSA Main Terminal Phase II Investigat

Report Number: 240-13070-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 07/11/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.6 C.

Samples MT-TCLP-8-10 was not logged for PCB's per client. Samples MT-SS18-0-2, MM-SB18-8-10, MT-SB17-0-2, and MT-SB17-8-10 were logged for DRO per client.

TCLP VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 1311/8260B. The samples were leached on 07/12/2012 and analyzed on 07/13/2012.

No difficulties were encountered during the VOCs analysis. All quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 07/11/2012 and 07/12/2012 and analyzed on 07/16/2012 and 07/17/2012.

1,2,4-Trichlorobenzene was detected in method blank MB 240-50627/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. 1,3-Dichlorobenzene, m-Xylene & p-Xylene and Naphthalene were detected in method blank MB 240-50627/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes were detected in method blank MB 240-50900/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes were detected in method blank MB 240-51061/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

The laboratory control sample (LCS) for batch 50627 recovered outside acceptance limits for 1,2-Dichloroethane and 1,2-Dichloropropane. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 50900 exceeded control limits for the following analytes: Chlorobenzene, 1,3-Dichloropropane, and 1,2-Dichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 51061 exceeded control limits for the following analytes: 1,2-Dichloropropane and 1,3-Dichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

There was a MS/MSD prepared for batch 50627 but could not be reported because of the high dilution factor in the parent sample.

Vinyl acetate failed the recovery criteria low for the MS/MSD of sample 240-13217-1 in batch 240-50900. Vinyl acetate exceeded the rpd limit.

Vinyl acetate failed the recovery criteria low for the MS/MSD of sample 240-13194-2 in batch 240-51061.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample TB-071012 (240-13070-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/13/2012.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS of sample 240-13078-2 in batch 240-50744. Several analytes failed the recovery criteria low for the MSD of sample 240-13078-2 in batch 240-50744. 1,1,2-Trichloro-1,2,2-trichfluoroethane and Dichlorodifluoromethane exceeded the rpd limit.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

TCLP SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 1311/8270C. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/16/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No difficulties were encountered during the SVOCs analysis. All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/19/2012 and analyzed on 07/23/2012.

Hexachlorocyclopentadiene failed the recovery criteria low for the MS/MSD of sample MT-SB17-0-2 (240-13070-5) in batch 240-51606.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)
Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 07/18/2012.

Sample MT-SS18-0-2 (240-13070-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the GRO analyses. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 07/20/2012 and analyzed on 07/25/2012 and 07/26/2012.

No difficulties were encountered during the DRO analyses. All quality control parameters were within the acceptance limits.

TCLP CHLORINATED PESTICIDES
Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP chlorinated pesticides in accordance with EPA SW-846 Methods 1311/ 8081A. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/16/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are

diluted out and no corrective action is required.

The grand mean exception, as outlined in EPA Method 8000B, was applied to the opening and closing continuing calibration verification (CCV) standards associated with batch 50850 This rule states that when one or more compounds in the CCV fail to meet acceptance criteria, the initial calibration (ICAL) may be used for quantitation if the average %D (the grand mean) of all the compounds in the CCV is less than or equal to 15 %D. Sample MT-TCLP-8-10 (240-13070-4), associated with these CCVs, was non-detect for the affected analytes; therefore, the data were reported.

No other difficulties were encountered during the pesticides analysis. All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)
Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 07/19/2012 and analyzed on 07/23/2012.

The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: MT-SB17-0-2 (240-13070-5), MT-SB17-8-10 (240-13070-6), and MT-SS18-0-2 (240-13070-2). Lot # S65830.

No other difficulties were encountered during the PCBs analyses. All quality control parameters were within the acceptance limits.

TCLP CHLORINATED HERBICIDES
Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP chlorinated herbicides in accordance with EPA SW-846 Methods 1311/ 8151A. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/23/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

No difficulties were encountered during the herbicides analysis. All quality control parameters were within the acceptance limits.

TCLP METALS (ICP)
Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP metals (ICP) in accordance with EPA SW-846 Methods 1311/ 6010B. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/16/2012.

Barium was detected in method blank LB 240-50668/1-D at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)
Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/12/2012 and analyzed on 07/16/2012 and 07/17/2012.

Antimony, Barium and Beryllium were detected in method blank MB 240-50598/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes failed the recovery criteria low for the MS of sample 240-13043-2 in batch 240-51051. Antimony, Chromium, Selenium and Vanadium failed the recovery criteria low for the MSD of sample 240-13043-2 in batch 240-51051.

The continuing calibration verification (CCV) for Silver and Arsenic associated with batch 50963 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data for the following associated sample have been reported. MT-TCLP-8-10 (240-13070-4)

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

TCLP MERCURY
Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/16/2012.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

MERCURY
Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 07/12/2012 and analyzed on 07/13/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 07/11/2012 and 07/12/2012.

No difficulties were encountered during the % solids analyses. All quality control parameters were within the acceptance limits.

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech Inc.	Client Project Manager: Tony Apanavage	Site Contact: Stu Cameron	Lab Contact: Pat O'Meara	COC No:
Address: 20251 Century Blvd.	Telephone: 301 528-3021	Telephone: 703 342-8389	Telephone: 330 497-9396	1 of 1 COCs
City/State/Zip: Germantown, MD 20874	Email:			
Phone: 301 528-3021		TAT if different from below ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: MSA-MT Soil Boring Sampling	Method of Shipment/Carrier: Fed EX			
Project Number: 112IC04054-04	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other	MeOH/Tbl		VOCs	SVOCs, PCBs	Metals	Gas	VOCs	Sample Specific Notes / Special Instructions:
TB-070912	7-9-12	—		X						2					N	G	X					
MT-SS19-0-2	↓	1140				X							4	3			X	X	X	X	X	
~~MT-SB19-8-10~~ MT-SS19-8-10		1145				X							4	3			X	X	X	X	X	
MT-SS20-0-2		1340				X							4	3			X	X	X	X	X	
~~MT-SB20-8-10~~ MT-SS20-8-10		1345				X							4	3			X	X	X	X	X	
~~MT-SB21-0-2~~ MT-SS21-0-2		1430				X							4	3			X	X	X	X	X	
~~MT-SB21-8-10~~ MT-SS21-8-10		1435				X							4	3			X	X	X	X	X	

AC 11/29/12

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tt mus	7-9-12 / 1515			
			Received in Laboratory by: [signature]	TAL	7/10/12 830

TAL-0016 (1008)

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07/26/2012

HOLDTIME

SDG 240-13070-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/12/2012	7/13/2012	2	1	3
HG	MG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/12/2012	7/13/2012	2	1	3
HG	MG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/12/2012	7/13/2012	2	1	3
HG	MG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/12/2012	7/13/2012	2	1	3
M	MG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/12/2012	7/16/2012	2	4	6
M	MG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/12/2012	7/16/2012	2	4	6
M	MG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/12/2012	7/16/2012	2	4	6
M	MG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/12/2012	7/17/2012	2	5	7
M	MG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/12/2012	7/16/2012	2	4	6
M	MG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/12/2012	7/17/2012	2	5	7
OS	UG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
OS	UG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
OS	UG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
OS	UG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
OV	UG/KG	MT-SS18-0-2	240-13070-2	NM	7/12/2012	7/12/2012	7/17/2012	0	5	5

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/KG	MT-SB17-8-10	240-13070-6	NM	7/11/2012	7/11/2012	7/16/2012	0	5	5
OV	UG/KG	MT-SB17-0-2	240-13070-5	NM	7/11/2012	7/11/2012	7/16/2012	0	5	5
OV	UG/KG	MT-SS18-8-10	240-13070-3	NM	7/11/2012	7/11/2012	7/17/2012	0	6	6
OV	UG/L	TB-071012	240-13070-1	NM	7/10/2012	7/13/2012	7/13/2012	3	0	3
PCB	UG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
PCB	UG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
PCB	UG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
PCB	UG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
DRO	MG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/20/2012	7/26/2012	10	6	16
DRO	MG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/20/2012	7/25/2012	10	5	15
DRO	MG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/20/2012	7/25/2012	10	5	15
DRO	MG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/20/2012	7/26/2012	10	6	16
GRO	UG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/18/2012	7/18/2012	8	0	8
GRO	UG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/18/2012	7/18/2012	8	0	8
GRO	UG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/18/2012	7/18/2012	8	0	8
GRO	UG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/18/2012	7/18/2012	8	0	8
TCLPH	MG/L	MT-TCLP-8-10	240-13070-4	NM	7/10/2012	7/13/2012	7/23/2012	3	10	13
TCLPM	MG/L	MT-TCLP-8-10	240-13070-4	NM	7/10/2012	7/13/2012	7/16/2012	3	3	6

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-13070-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Closed System Purge and Trap	TAL NC		SW846 5035
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
TCLP Extraction	TAL NC		SW846 1311
Purge and Trap	TAL NC		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270C	
TCLP Extraction	TAL NC		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL NC		SW846 3510C
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270D	
Soxhlet Extraction	TAL NC		SW846 3540C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL NC	SW846 8015C	
Purge and Trap	TAL NC		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL NC	SW846 8015C	
Soxhlet Extraction	TAL NC		SW846 3540C
Organochlorine Pesticides (GC)	TAL NC	SW846 8081A	
TCLP Extraction	TAL NC		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL NC		SW846 3510C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL NC	SW846 8082A	
Soxhlet Extraction	TAL NC		SW846 3540C
Herbicides (GC)	TAL NC	SW846 8151A	
TCLP Extraction	TAL NC		SW846 1311
Extraction (Herbicides)	TAL NC		SW846 8151A
Metals (ICP)	TAL NC	SW846 6010B	
TCLP Extraction	TAL NC		SW846 1311
Preparation, Total Metals	TAL NC		SW846 3010A
Metals (ICP)	TAL NC	SW846 6010C	
Preparation, Metals	TAL NC		SW846 3050B
Mercury (CVAA)	TAL NC	SW846 7470A	
TCLP Extraction	TAL NC		SW846 1311
Preparation, Mercury	TAL NC		SW846 7470A
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	TAL NC	SW846 7471B	
Preparation, Mercury	TAL NC		SW846 7471B
Percent Moisture	TAL NC	EPA Moisture	
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Purge and Trap	TAL NC		SW846 5030B

Lab References:

TAL NC = TestAmerica Canton

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-13070-1

Description	Lab Location	Method	Preparation Method

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-13070-1

SDG No.:

Project: LM MSA Main Terminal Phase II Investigat

Client Sample ID	Lab Sample ID
MT-SS18-0-2	240-13070-2
MT-SS18-8-10	240-13070-3
MT-TCLP-8-10	240-13070-4
MT-SB17-0-2	240-13070-5
MT-SB17-8-10	240-13070-6

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTTRICV_00014 Concentration Units: ug/L

CCV Source: MTTRCCV_00028

Analyte	ICV 240-51051/4 07/16/2012 11:10				CCV 240-51051/50 07/16/2012 15:39				CCV 240-51051/62 07/16/2012 16:47			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	250		250	100	467		500	93	465		500	93
Arsenic	245		250	98	475		500	95	470		500	94
Barium	1020		1000	102	1870		2000	93	1860		2000	93
Beryllium	1040		1000	104	1990		2000	100	1980		2000	99
Cadmium	253		250	101	484		500	97	484		500	97
Chromium	1020		1000	102	1970		2000	98	1950		2000	98
Cobalt	1020		1000	102	1950		2000	98	1940		2000	97
Copper	1010		1000	101	1990		2000	99	1990		2000	100
Lead	247		250	99	477		500	95	472		500	94
Molybdenum	997		1000	100	2010		2000	100	2020		2000	101
Nickel	1020		1000	102	1960		2000	98	2040		2000	102
Selenium	247		250	99	477		500	95	472		500	94
Silver	494		500	99	1000		1000	100	1020		1000	102
Thallium	498		500	100	960		1000	96	954		1000	95
Vanadium	1000		1000	100	1890		2000	94	1830		2000	92
Zinc	1040		1000	104	1990		2000	100	2010		2000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTTRICV_00014 Concentration Units: ug/L

CCV Source: MTTRCCV_00028

Analyte	CCV 240-51051/74 07/16/2012 17:54				CCV 240-51051/78 07/16/2012 18:17				CCV 240-51051/102 07/17/2012 08:28			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	458		500	92	461		500	92	497		500	99
Arsenic	470		500	94	466		500	93	488		500	98
Barium	1820		2000	91	1820		2000	91	1950		2000	97
Beryllium	1970		2000	99	1970		2000	99	2000		2000	100
Cadmium	485		500	97	485		500	97	484		500	97
Chromium	1940		2000	97	1940		2000	97	2000		2000	100
Cobalt	1940		2000	97	1940		2000	97	2020		2000	101
Copper	1970		2000	98	1970		2000	99	2040		2000	102
Lead	471		500	94	470		500	94	485		500	97
Molybdenum	2030		2000	101	2030		2000	101	2020		2000	101
Nickel	2100		2000	105	2120		2000	106	2030		2000	102
Selenium	472		500	94	473		500	95	486		500	97
Silver	1020		1000	102	1020		1000	102	984		1000	98
Thallium	942		1000	94	938		1000	94	984		1000	98
Vanadium	1790		2000	90	1780		2000	89	2000		2000	100
Zinc	2010		2000	101	2020		2000	101	2050		2000	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTTRICV_00014 Concentration Units: ug/L

CCV Source: MTTRCCV_00028

Analyte	CCV 240-51051/114 07/17/2012 09:39											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	509		500	102								
Arsenic	484		500	97								
Barium	1940		2000	97								
Beryllium	2000		2000	100								
Cadmium	486		500	97								
Chromium	2000		2000	100								
Cobalt	2010		2000	100								
Copper	2030		2000	101								
Lead	484		500	97								
Molybdenum	2010		2000	100								
Nickel	2010		2000	100								
Selenium	485		500	97								
Silver	984		1000	98								
Thallium	990		1000	99								
Vanadium	1990		2000	99								
Zinc	2040		2000	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTTRICV_00014 Concentration Units: ug/L

CCV Source: MTTRCCV_00028

Analyte	ICV 240-50963/5 07/16/2012 07:04				CCV 240-50963/90 07/16/2012 15:55				CCV 240-50963/102 07/16/2012 17:08			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	252	J	250	101	531		500	106	539		500	108
Barium	1080	J	1000	108	2120	J	2000	106	2170	J	2000	109
Cadmium	256		250	102	503		500	101	517		500	103
Chromium	1020		1000	102	2020		2000	101	2030		2000	102
Lead	256	J	250	103	498	J	500	100	514		500	103
Selenium	255		250	102	513		500	103	523		500	105
Silver	504		500	101	1060		1000	106	1070		1000	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTTRICV_00014 Concentration Units: ug/L

CCV Source: MTTRCCV_00028

Analyte	CCV 240-50963/114 07/16/2012 18:22											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	558		500	112								
Barium	2180	J	2000	109								
Cadmium	511		500	102								
Chromium	2050		2000	103								
Lead	515		500	103								
Selenium	538		500	108								
Silver	1130		1000	113								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTHGICVW_00340 Concentration Units: ug/L

CCV Source: MTHGCALW_00222

Analyte	ICV 240-50896/7-A 07/16/2012 16:05				CCVL 240-50896/10-A 07/16/2012 16:10				CCV 240-50896/12-A 07/16/2012 17:22			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.55		2.50	102	5.23		5.00	105	5.32		5.00	106

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTHGICVW_00340 Concentration Units: ug/L

CCV Source: MTHGCALW_00222

Analyte	CCV 240-50896/12-A 07/16/2012 17:38				CCV 240-50896/12-A 07/16/2012 17:49							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.24		5.00	105	5.31		5.00	106				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTHGICVW_00340 Concentration Units: ug/L

CCV Source: MTHGCALW_00222

Analyte	ICV 240-50907/7-A 07/13/2012 12:08				CCV 240-50907/11-A 07/13/2012 13:12				CCV 240-50907/11-A 07/13/2012 13:36			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.41		2.50	97	5.22		5.00	104	5.36		5.00	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

ICV Source: MTHGICVW_00340 Concentration Units: ug/L

CCV Source: MTHGCALW_00222

Analyte	CCV 240-50907/11-A 07/13/2012 14:00											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.34		5.00	107								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Method: 6010B Instrument ID: I6

Lab Sample ID: CRI 240-50963/7 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIW_00008

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	15.0	15.3	J	102	50-150
Barium	10.0	10.3	J	103	50-150
Cadmium	5.00	5.27	J	105	50-150
Chromium	5.00	5.17	J	103	50-150
Lead	10.0	10.4	J	104	50-150
Selenium	20.0	16.5	J	82	50-150
Silver	5.00	5.20	J	104	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Method: 6010C Instrument ID: I5

Lab Sample ID: CRI 240-51051/7 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00007

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	18.9	J	95	70-130
Arsenic	15.0	11.9	J	79	70-130
Barium	200	198	J	99	70-130
Beryllium	5.00	5.03		101	70-130
Cadmium	5.00	4.97	J	99	70-130
Chromium	10.0	9.02	J	90	70-130
Cobalt	10.0	8.83	J	88	70-130
Copper	20.0	19.2	J	96	70-130
Lead	10.0	8.97	J	90	70-130
Molybdenum	40.0	37.5	J	94	70-130
Nickel	40.0	39.3	J	98	70-130
Selenium	20.0	20.5		103	70-130
Silver	10.0	8.43	J	84	70-130
Thallium	20.0	14.5	J	72	70-130
Vanadium	10.0	10.4		104	70-130
Zinc	50.0	64.0		128	70-130

Lab Sample ID: CRI 240-51051/107 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00007

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	20.9		104	70-130
Arsenic	15.0	14.6	J	97	70-130
Barium	200	201		100	70-130
Beryllium	5.00	5.02		100	70-130
Cadmium	5.00	5.18		104	70-130
Chromium	10.0	9.70	J	97	70-130
Cobalt	10.0	8.98	J	90	70-130
Copper	20.0	21.0	J	105	70-130
Lead	10.0	9.12	J	91	70-130
Molybdenum	40.0	38.5	J	96	70-130
Nickel	40.0	39.1	J	98	70-130
Selenium	20.0	20.4		102	70-130
Silver	10.0	8.47	J	85	70-130
Thallium	20.0	17.0	J	85	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Method: 6010C Instrument ID: I5

Lab Sample ID: CRI 240-51051/107 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00007

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	11.1		111	70-130
Zinc	50.0	60.1		120	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-50896/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00222

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.234	J	117	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Method: 7471B Instrument ID: H4

Lab Sample ID: CRA 240-50907/9-B Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00222

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.169	J	84	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICBIS 240-50963/6 07/16/2012 07:10		CCB 240-50963/91 07/16/2012 16:01		CCB 240-50963/103 07/16/2012 17:14		CCB 240-50963/115 07/16/2012 18:28	
		Found	C	Found	C	Found	C	Found	C
Arsenic	500	500	U	500	U	500	U	500	U
Barium	10000	10000	U	10000	U	10000	U	10000	U
Cadmium	100	100	U	100	U	100	U	100	U
Chromium	500	500	U	2.23	J	500	U	500	U
Lead	500	500	U	2.60	J	2.73	J	3.83	J
Selenium	250	250	U	250	U	250	U	4.40	J
Silver	500	500	U	500	U	500	U	500	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICBIS 240-51051/5 07/16/2012 11:16		CCB 240-51051/51 07/16/2012 15:44		CCB 240-51051/63 07/16/2012 16:52		CCB 240-51051/75 07/16/2012 18:00	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	2.75	J	2.38	J	20	U
Arsenic	15	15	U	15	U	15	U	15	U
Barium	200	200	U	200	U	200	U	200	U
Beryllium	5.0	5.0	U	0.655	J	0.835	J	0.963	J
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	25	25	U	25	U	25	U	25	U
Lead	10	10	U	10	U	10	U	10	U
Molybdenum	40	1.90	J	2.94	J	2.75	J	2.11	J
Nickel	40	40	U	40	U	40	U	40	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Thallium	20	20	U	20	U	20	U	20	U
Vanadium	10	1.08	J	1.48	J	1.06	J	1.31	J
Zinc	50	50	U	50	U	5.90	J	6.29	J

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-51051/79 07/16/2012 18:23		CCB 240-51051/103 07/17/2012 08:34		CCB 240-51051/115 07/17/2012 09:45			
		Found	C	Found	C	Found	C	Found	C
Antimony	20	20	U	2.06	J	3.02	J		
Arsenic	15	15	U	15	U	15	U		
Barium	200	200	U	200	U	200	U		
Beryllium	5.0	0.908	J	5.0	U	5.0	U		
Cadmium	5.0	5.0	U	5.0	U	5.0	U		
Chromium	10	10	U	10	U	10	U		
Cobalt	10	10	U	10	U	10	U		
Copper	25	25	U	25	U	25	U		
Lead	10	10	U	10	U	10	U		
Molybdenum	40	40	U	2.27	J	2.29	J		
Nickel	40	40	U	40	U	40	U		
Selenium	20	20	U	20	U	20	U		
Silver	10	10	U	10	U	10	U		
Thallium	20	20	U	20	U	20	U		
Vanadium	10	1.20	J	1.19	J	1.30	J		
Zinc	50	5.81	J	50	U	50	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-50896/8-A 07/16/2012 16:06		CCB 240-50896/11-A 07/16/2012 17:23		CCB 240-50896/11-A 07/16/2012 17:40		CCB 240-50896/11-A 07/16/2012 17:51	
		Found	C	Found	C	Found	C	Found	C
Mercury	2.0	2.0	U	2.0	U	2.0	U	2.0	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-50907/8-A 07/13/2012 12:10		CCB 240-50907/10-A 07/13/2012 13:14		CCB 240-50907/10-A 07/13/2012 13:39		CCB 240-50907/10-A 07/13/2012 14:02	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.60	0.60	U	0.60	U	0.60	U	0.60	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 240-50701/2-A

Instrument Code: I6 Batch No.: 50963

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.50	U		6010B
7440-39-3	Barium	10	U		6010B
7440-43-9	Cadmium	0.10	U		6010B
7440-47-3	Chromium	0.50	U		6010B
7439-92-1	Lead	0.50	U		6010B
7782-49-2	Selenium	0.25	U		6010B
7440-22-4	Silver	0.50	U		6010B

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: LB 240-50668/1-D

Instrument Code: I6 Batch No.: 50963

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	0.50	U		6010B
7440-39-3	Barium	0.00337	J		6010B
7440-43-9	Cadmium	0.10	U		6010B
7440-47-3	Chromium	0.50	U		6010B
7439-92-1	Lead	0.50	U		6010B
7782-49-2	Selenium	0.25	U		6010B
7440-22-4	Silver	0.50	U		6010B

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-50598/1-A

Instrument Code: I5 Batch No.: 51051

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	0.497	J		6010C
7440-38-2	Arsenic	1.5	U		6010C
7440-39-3	Barium	0.315	J		6010C
7440-41-7	Beryllium	0.0478	J		6010C
7440-43-9	Cadmium	0.50	U		6010C
7440-47-3	Chromium	1.0	U		6010C
7440-48-4	Cobalt	1.0	U		6010C
7440-50-8	Copper	2.5	U		6010C
7439-92-1	Lead	1.0	U		6010C
7439-98-7	Molybdenum	4.0	U		6010C
7440-02-0	Nickel	4.0	U		6010C
7782-49-2	Selenium	2.0	U		6010C
7440-22-4	Silver	1.0	U		6010C
7440-28-0	Thallium	2.0	U		6010C
7440-62-2	Vanadium	1.0	U		6010C
7440-66-6	Zinc	5.0	U		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 240-50703/2-A

Instrument Code: H1 Batch No.: 51048

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.0020	U		7470A

3-IN
METHOD BLANK
METALS - TCLP

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: LB 240-50668/1-E

Instrument Code: H1 Batch No.: 51048

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.0020	U		7470A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-50601/1-A

Instrument Code: H4 Batch No.: 50942

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.10	U		7471B

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICSA 240-50963/9 Instrument ID: I6

Lab File ID: I60716A ICS Source: MTTRICSAW_00013

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**4.63**	
Barium		**2.02**	
Cadmium		**-0.949**	
Chromium		**0.570**	
Lead		**-1.74**	
Selenium		**4.74**	
Silver		**0.166**	
Aluminum	*500000*	*483644*	*97*
Antimony		*-1.37*	
Beryllium		*0.0696*	
Boron		*-0.767*	
Calcium	*500000*	*476856*	*95*
Cobalt		*-0.384*	
Copper		*2.38*	
Iron	*200000*	*197267*	*99*
Magnesium	*500000*	*502417*	*100*
Manganese		*2.41*	
Molybdenum		*-1.73*	
Nickel		*0.889*	
Potassium		*203*	
Sodium		*-116*	
Thallium		*-4.92*	
Tin		*2.41*	
Vanadium		*0.176*	
Zinc		*-1.25*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICSAB 240-50963/10 Instrument ID: I6

Lab File ID: I60716A ICS Source: MTTRICSABW_00009

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Arsenic	**1000**	**1004**	**100**
Barium	**500**	**546**	**109**
Cadmium	**1000**	**962**	**96**
Chromium	**500**	**489**	**98**
Lead	**1000**	**958**	**96**
Selenium	**1000**	**1000**	**100**
Silver	**1000**	**1051**	**105**
Aluminum	*500000*	*481790*	*96*
Antimony	*1000*	*1012*	*101*
Beryllium	*500*	*508*	*102*
Boron	*1000*	*1030*	*103*
Calcium	*500000*	*475372*	*95*
Cobalt	*500*	*477*	*95*
Copper	*500*	*523*	*105*
Iron	*200000*	*198044*	*99*
Magnesium	*500000*	*503903*	*101*
Manganese	*500*	*502*	*100*
Molybdenum	*1000*	*973*	*97*
Nickel	*1000*	*951*	*95*
Potassium	*10000*	*10751*	*108*
Sodium	*10000*	*10146*	*101*
Thallium	*1000*	*937*	*94*
Tin	*1000*	*979*	*98*
Vanadium	*500*	*492*	*98*
Zinc	*1000*	*1013*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICSA 240-51051/10 Instrument ID: I5

Lab File ID: I50716B ICS Source: MTTRICSAW_00013

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**2.18**	
Arsenic		**1.34**	
Barium		**2.11**	
Beryllium		**0.113**	
Cadmium		**-1.13**	
Chromium		**3.03**	
Cobalt		**-0.270**	
Copper		**3.83**	
Lead		**-2.04**	
Molybdenum		**1.19**	
Nickel		**3.30**	
Selenium		**4.17**	
Silver		**-0.0197**	
Thallium		**5.20**	
Vanadium		**-0.0500**	
Zinc		**-0.157**	
Aluminum	*500000*	*490448*	*98*
Boron		*-5.05*	
Calcium	*500000*	*480367*	*96*
Iron	*200000*	*193609*	*97*
Magnesium	*500000*	*517394*	*103*
Manganese		*2.22*	
Potassium		*188*	
Sodium		*501*	
Tin		*1.96*	
Titanium		*-7.15*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICSAB 240-51051/11 Instrument ID: I5

Lab File ID: I50716B ICS Source: MTTRICSABW_00009

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**1000**	**1009**	**101**
Arsenic	**1000**	**978**	**98**
Barium	**500**	**513**	**103**
Beryllium	**500**	**508**	**102**
Cadmium	**1000**	**951**	**95**
Chromium	**500**	**489**	**98**
Cobalt	**500**	**476**	**95**
Copper	**500**	**516**	**103**
Lead	**1000**	**944**	**94**
Molybdenum	**1000**	**983**	**98**
Nickel	**1000**	**960**	**96**
Selenium	**1000**	**966**	**97**
Silver	**1000**	**1048**	**105**
Thallium	**1000**	**969**	**97**
Vanadium	**500**	**482**	**96**
Zinc	**1000**	**1021**	**102**
Aluminum	*500000*	*489942*	*98*
Boron	*1000*	*983*	*98*
Calcium	*500000*	*480092*	*96*
Iron	*200000*	*192991*	*96*
Magnesium	*500000*	*517715*	*104*
Manganese	*500*	*493*	*99*
Potassium	*10000*	*11444*	*114*
Sodium	*10000*	*10896*	*109*
Tin	*1000*	*980*	*98*
Titanium	*1000*	*974*	*97*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Sample not in SDG

Client ID: _____ Lab ID: 240-13043-H-2-B MS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/Kg

% Solids: 83.8

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	24.5		2.2	U	56.3	44	75-125	F	6010C
Arsenic	177		6.2		225	76	75-125		6010C
Barium	204		13	J	225	85	75-125		6010C
Beryllium	6.18		1.6		5.63	81	75-125		6010C
Cadmium	4.44		0.56	U	5.63	79	75-125		6010C
Chromium	39.5		24		22.5	69	75-125	F	6010C
Cobalt	51.9		7.5		56.3	79	75-125		6010C
Copper	59.8		33		28.1	94	75-125		6010C
Lead	50.5		6.7		56.3	78	75-125		6010C
Molybdenum	91.4		0.77	J	113	80	75-125		6010C
Nickel	73.2		30		56.3	77	75-125		6010C
Selenium	164		2.2	U	225	73	75-125	F	6010C
Silver	4.00		1.1	U	5.63	71	75-125	F	6010C
Thallium	175		2.2	U	225	78	75-125		6010C
Vanadium	79.2		43		56.3	65	75-125	F	6010C
Zinc	82.0		38		56.3	77	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Sample not in SDG

Client ID: Lab ID: 240-13043-H-2-E MS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids: 83.8

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.192		0.12	U	0.192	100	11-192		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TCLP

Sample not in SDG

Client ID: _____ Lab ID: 240-12781-C-8-K MS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.00470		0.0020	U	0.00500	94	50-150		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Sample not in SDG

Client ID: Lab ID: 240-13043-H-2-C MSD

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids: 83.8

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Antimony	24.8		56.3	44	75-125	1	20	F	6010C
Arsenic	178		225	77	75-125	1	20		6010C
Barium	205		225	85	75-125	0	20		6010C
Beryllium	6.32		5.63	84	75-125	2	20		6010C
Cadmium	4.50		5.63	80	75-125	2	20		6010C
Chromium	40.5		22.5	73	75-125	2	20	F	6010C
Cobalt	52.7		56.3	80	75-125	2	20		6010C
Copper	65.6		28.1	115	75-125	9	20		6010C
Lead	51.6		56.3	80	75-125	2	20		6010C
Molybdenum	92.7		113	82	75-125	1	20		6010C
Nickel	75.9		56.3	82	75-125	4	20		6010C
Selenium	167		225	74	75-125	2	20	F	6010C
Silver	4.32		5.63	77	75-125	8	20		6010C
Thallium	178		225	79	75-125	2	20		6010C
Vanadium	82.5		56.3	71	75-125	4	20	F	6010C
Zinc	85.8		56.3	84	75-125	5	20		6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Sample not in SDG

Client ID: _____ Lab ID: 240-13043-H-2-F MSD

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/Kg

% Solids: 83.8

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.187		0.192	97	11-192	2	20		7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TCLP

Sample not in SDG

Client ID: _____ Lab ID: 240-12781-C-8-L MSD

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.00466		0.00500	93	50-150	1	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Sample not in SDG

Client ID: _____ Lab ID: 240-13043-H-2-A PDS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.: _____

Matrix: Solid Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	14.5		2.2	U	16.7	87	80-120		6010C
Chromium	43.4		24		22.3	87	80-120		6010C
Selenium	35.7		2.2	U	44.6	80	80-120		6010C
Silver	9.62		1.1	U	11.2	86	80-120		6010C
Vanadium	46.6		43		5.58	68	80-120	W	6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-50701/3-A

Lab Name: TestAmerica Canton Job No.: 240-13070-1

Sample Matrix: Water LCS Source: MTICP1_00017

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	2.00	2.24		112	50	150		6010B
Barium	2.00	2.33	J	117	50	150		6010B
Cadmium	0.0500	0.0535	J	107	50	150		6010B
Chromium	0.200	0.207	J	103	50	150		6010B
Lead	0.500	0.527		105	50	150		6010B
Selenium	2.00	2.21		110	50	150		6010B
Silver	0.0500	0.0576	J	115	50	150		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-50598/2-A

Lab Name: TestAmerica Canton Job No.: 240-13070-1

Sample Matrix: Solid LCS Source: MTICP1_00017

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	47.5		95	80	120		6010C
Arsenic	200	187		93	80	120		6010C
Barium	200	194		97	80	120		6010C
Beryllium	5.00	5.10		102	80	120		6010C
Cadmium	5.00	5.04		101	80	120		6010C
Chromium	20.0	20.4		102	80	120		6010C
Cobalt	50.0	49.0		98	80	120		6010C
Copper	25.0	25.1		100	80	120		6010C
Lead	50.0	47.1		94	80	120		6010C
Molybdenum	100	101		101	80	120		6010C
Nickel	50.0	50.5		101	80	120		6010C
Selenium	200	185		92	80	120		6010C
Silver	5.00	5.78		116	80	120		6010C
Thallium	200	192		96	80	120		6010C
Vanadium	50.0	47.0		94	80	120		6010C
Zinc	50.0	50.7		101	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-50703/3-A

Lab Name: TestAmerica Canton Job No.: 240-13070-1

Sample Matrix: Water LCS Source: MTHGICVW_00339

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.00500	0.00479		96	50	150		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-50601/2-A

Lab Name: TestAmerica Canton Job No.: 240-13070-1

Sample Matrix: Solid LCS Source: MTHGICVW_00338

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.833	0.830		100	73	121		7471B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Sample not in SDG

Lab ID: 240-13043-H-2-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-13070-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.2	U	11	U	NC		6010C
Arsenic	6.2		6.12	J	NC		6010C
Barium	13	J	14.3	J	9.7		6010C
Beryllium	1.6		2.01	J	NC		6010C
Cadmium	0.56	U	2.8	U	NC		6010C
Chromium	24		26.3		9.7		6010C
Cobalt	7.5		8.26		NC		6010C
Copper	33		36.2		NC		6010C
Lead	6.7		6.85		NC		6010C
Molybdenum	0.77	J	22	U	NC		6010C
Nickel	30		33.3		12	V	6010C
Selenium	2.2	U	11	U	NC		6010C
Silver	1.1	U	5.6	U	NC		6010C
Thallium	2.2	U	11	U	NC		6010C
Vanadium	43		47.0		9.8		6010C
Zinc	38		43.7		NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TCLP

Sample not in SDG

Lab ID: 240-12781-C-8-G SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-13070-1

Matrix: Solid Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	0.50	U	2.5	U	NC		6010B
Barium	1.2	J	1.17	J	0.25		6010B
Cadmium	0.017	J	0.0154	J	NC		6010B
Chromium	0.0024	J	2.5	U	NC		6010B
Lead	0.0060	J	2.5	U	NC		6010B
Selenium	0.0060	J	1.3	U	NC		6010B
Silver	0.50	U	2.5	U	NC		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-13070-1

SDG Number:

Matrix: Solid Instrument ID: I6

Method: 6010B MDL Date: 02/09/2010 07:14

Prep Method: 3010A

Leach Method: 1311

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Arsenic	189.042	0.5	0.0032
Barium	455.403	10	0.00067
Cadmium	228.802	0.1	0.00066
Chromium	267.716	0.5	0.0022
Lead	220.353	0.5	0.0019
Selenium	196.090	0.25	0.0041
Silver	328.068	0.5	0.0022

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-13070-1

SDG Number:

Matrix: Solid Instrument ID: I5

Method: 6010C MDL Date: 03/01/2011 14:59

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Antimony	206.838	2	0.39
Arsenic	189.042	1.5	0.3
Barium	493.409	20	0.071
Beryllium	313.042	0.5	0.043
Cadmium	226.502	0.5	0.036
Chromium	267.716	1	0.2
Cobalt	228.616	1	0.16
Copper	324.753	2.5	0.74
Lead	220.353	1	0.19
Molybdenum	202.030	4	0.27
Nickel	231.604	4	0.27
Selenium	196.026	2	0.45
Silver	328.068	1	0.1
Thallium	190.864	2	0.55
Vanadium	292.402	1	0.12
Zinc	213.856	5	1

9-IN
DETECTION LIMITS
METALS - TCLP

Lab Name: TestAmerica Canton Job Number: 240-13070-1

SDG Number:

Matrix: Solid Instrument ID: H1

Method: 7470A MDL Date: 02/16/2010 09:34

Prep Method: 7470A

Leach Method: 1311

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Mercury	253.7	0.002	0.00012

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-13070-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471B MDL Date: 02/16/2010 09:48

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.1	0.015

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-50598/1-A	07/12/2012 09:59	50598	1.00		100
LCS 240-50598/2-A	07/12/2012 09:59	50598	1.00		100
240-13043-H-2-B MS	07/12/2012 09:59	50598	1.06		100
240-13043-H-2-C MSD	07/12/2012 09:59	50598	1.06		100
240-13070-2 SS1B-0.2	07/12/2012 09:59	50598	1.24		100
240-13070-3 SS1B-8.0	07/12/2012 09:59	50598	1.04		100
240-13070-5 SS1F-0.2	07/12/2012 09:59	50598	1.11		100
240-13070-6 SS1F-6.0	07/12/2012 09:59	50598	1.19		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB 240-50668/1-D	07/13/2012 07:52	50701		50	50
MB 240-50701/2-A	07/13/2012 07:52	50701		50	50
LCS 240-50701/3-A	07/13/2012 07:52	50701		50	50
240-13070-4 TCLP-8-10	07/13/2012 07:52	50701		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 240-50601/1-A	07/12/2012 13:30	50601	0.60		100
LCS 240-50601/2-A	07/12/2012 13:30	50601	0.60		100
240-13043-H-2-E MS	07/12/2012 13:30	50601	0.62		100
240-13043-H-2-F MSD	07/12/2012 13:30	50601	0.62		100
240-13070-2	07/12/2012 13:30	50601	0.62		100
240-13070-3	07/12/2012 13:30	50601	0.58		100
240-13070-5	07/12/2012 13:30	50601	0.63		100
240-13070-6	07/12/2012 13:30	50601	0.58		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LB 240-50668/1-E	07/13/2012 12:45	50703		100	100
MB 240-50703/2-A	07/13/2012 12:45	50703		100	100
LCS 240-50703/3-A	07/13/2012 12:45	50703		100	100
240-12781-C-8-K MS	07/13/2012 12:45	50703		100	100
240-12781-C-8-L MSD	07/13/2012 12:45	50703		100	100
240-13070-4	07/13/2012 12:45	50703		100	100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: I6 Method: 6010B

Start Date: 07/16/2012 06:42 End Date: 07/17/2012 05:46

Lab Sample ID	D/F	Type	Time	Analytes																						
				Ag	As	Ba	Cd	Cr	Pb	Se																
STD 240-50963/1 IC			06:42	X	X	X	X	X	X	X																
CALSTD 240-50963/2 IC			06:48	X	X	X	X	X	X	X																
CALSTD 240-50963/3 IC			06:54	X	X	X	X	X	X	X																
CALSTD 240-50963/4 IC			06:59	X	X	X	X	X	X	X																
ICV 240-50963/5	1		07:04	X	X	X	X	X	X	X																
ICBIS 240-50963/6	1		07:10	X	X	X	X	X	X	X																
CRI 240-50963/7 ✓	1		07:16	X	X	X	X	X	X	X																
ZZZZZZ			07:22																							
ICSA 240-50963/9	1		07:32	X	X	X	X	X	X	X																
ICSAB 240-50963/10	1		07:38	X	X	X	X	X	X	X																
CCV 240-50963/11			07:44																							
CCB 240-50963/12			07:51																							
ZZZZZZ			07:57																							
ZZZZZZ			08:03																							
ZZZZZZ			08:09																							
ZZZZZZ			08:16																							
ZZZZZZ			08:22																							
ZZZZZZ			08:28																							
ZZZZZZ			08:34																							
ZZZZZZ			08:40																							
ZZZZZZ			08:46																							
ZZZZZZ			08:52																							
CCV 240-50963/23			08:58																							
CCB 240-50963/24			09:04																							
ZZZZZZ			09:10																							
ZZZZZZ			09:17																							
ZZZZZZ			09:23																							
ZZZZZZ			09:29																							
ZZZZZZ			09:35																							
ZZZZZZ			09:41																							
ZZZZZZ			09:47																							
ZZZZZZ			09:53																							
ZZZZZZ			09:59																							
ZZZZZZ			10:05																							
CCV 240-50963/35			10:11																							
CCB 240-50963/36			10:18																							
ZZZZZZ			10:24																							
ZZZZZZ			10:30																							
ZZZZZZ			10:36																							
ZZZZZZ			10:42																							
ZZZZZZ			10:48																							
ZZZZZZ			10:56																							

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: I6 Method: 6010B

Start Date: 07/16/2012 06:42 End Date: 07/17/2012 05:46

Lab Sample ID	D / F	Type	Time	Analytes																					
				Ag	As	Ba	Cd	Cr	Pb	Se															
ZZZZZZ			11:02																						
ZZZZZZ			11:08																						
ZZZZZZ			11:14																						
ZZZZZZ			11:20																						
CCV 240-50963/47			11:26																						
CCB 240-50963/48			11:32																						
ZZZZZZ			11:38																						
ZZZZZZ			11:44																						
ZZZZZZ			11:50																						
CCV 240-50963/52			11:58																						
CCB 240-50963/53			12:04																						
CCV 240-50963/54			12:15																						
CCB 240-50963/55			12:22																						
ZZZZZZ			12:28																						
ZZZZZZ			12:34																						
ZZZZZZ			12:40																						
ZZZZZZ			12:46																						
ZZZZZZ			12:52																						
ZZZZZZ			12:58																						
ZZZZZZ			13:04																						
ZZZZZZ			13:10																						
ZZZZZZ			13:16																						
ZZZZZZ			13:23																						
CCV 240-50963/66			13:29																						
CCB 240-50963/67			13:35																						
ZZZZZZ			13:41																						
ZZZZZZ			13:47																						
ZZZZZZ			13:53																						
ZZZZZZ			13:59																						
ZZZZZZ			14:05																						
ZZZZZZ			14:11																						
ZZZZZZ			14:17																						
ZZZZZZ			14:24																						
ZZZZZZ			14:30																						
ZZZZZZ			14:36																						
CCV 240-50963/78			14:42																						
CCB 240-50963/79			14:48																						
ZZZZZZ			14:54																						
ZZZZZZ			15:00																						
ZZZZZZ			15:06																						
ZZZZZZ			15:12																						
ZZZZZZ			15:18																						

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: I6 Method: 6010B

Start Date: 07/16/2012 06:42 End Date: 07/17/2012 05:46

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	As	Ba	Cd	Cr	Pb	Se														
ZZZZZZ			15:25																					
ZZZZZZ			15:31																					
ZZZZZZ			15:37																					
ZZZZZZ			15:43																					
ZZZZZZ			15:49																					
CCV 240-50963/90	1		15:55	X	X	X	X	X	X	X														
CCB 240-50963/91	1		16:01	X	X	X	X	X	X	X														
ZZZZZZ			16:07																					
ZZZZZZ			16:13																					
ZZZZZZ			16:20																					
ZZZZZZ			16:26																					
ZZZZZZ			16:32																					
LB 240-50668/1-D	1	P	16:38	X	X	X	X	X	X	X														
MB 240-50701/2-A	1	T	16:44	X	X	X	X	X	X	X														
LCS 240-50701/3-A	1	T	16:50	X	X	X	X	X	X	X														
ZZZZZZ			16:56																					
240-12781-C-8-G SD ^5	5	P	17:02	X	X	X	X	X	X	X														
CCV 240-50963/102	1		17:08	X	X	X	X	X	X	X														
CCB 240-50963/103 ✓	1		17:14	X	X	X	X	X	X	X														
ZZZZZZ			17:21																					
ZZZZZZ			17:27																					
ZZZZZZ			17:33																					
240-13070-4	1	P	17:39	X	X	X	X	X	X	X														
ZZZZZZ			17:45																					
ZZZZZZ			17:51																					
ZZZZZZ			17:57																					
ZZZZZZ			18:03																					
ZZZZZZ			18:09																					
ZZZZZZ			18:16																					
CCV 240-50963/114	1		18:22	X	X	X	X	X	X	X														
CCB 240-50963/115 ✓	1		18:28	X	X	X	X	X	X	X														
ZZZZZZ			18:34																					
ZZZZZZ			18:40																					
ZZZZZZ			18:46																					
CCV 240-50963/119			18:52																					
CCB 240-50963/120			18:58																					
CCV 240-50963/121			05:00																					
CCB 240-50963/122			05:10																					
ZZZZZZ			05:16																					
ZZZZZZ			05:27																					
ZZZZZZ			05:33																					
CCV 240-50963/126			05:39																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: I6 Method: 6010B

Start Date: 07/16/2012 06:42 End Date: 07/17/2012 05:46

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Cd	Cr	Pb	Se													
CCB 240-50963/127			05:46																				

Prep Types

P = TCLP

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: I5 Method: 6010C

Start Date: 07/16/2012 10:55 End Date: 07/17/2012 10:25

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
STD1 240-51051/1 IC			10:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-51051/2 IC			11:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CALSTD 240-51051/3 IC			11:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-51051/4	1		11:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICBIS 240-51051/5	1		11:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-51051/6			11:22																				
CRI 240-51051/7	1		11:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			11:33																				
ICSA 240-51051/9			11:39																				
ICSA 240-51051/10	1		11:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-51051/11	1		11:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-51051/12			11:57																				
CCB 240-51051/13			12:02																				
ZZZZZZ			12:08																				
ZZZZZZ			12:14																				
ZZZZZZ			12:19																				
ZZZZZZ			12:25																				
ZZZZZZ			12:31																				
ZZZZZZ			12:36																				
ZZZZZZ			12:42																				
ZZZZZZ			12:48																				
ZZZZZZ			12:53																				
ZZZZZZ			12:59																				
CCV 240-51051/24			13:05																				
CCB 240-51051/25			13:10																				
ZZZZZZ			13:16																				
ZZZZZZ			13:22																				
ZZZZZZ			13:27																				
ZZZZZZ			13:33																				
ZZZZZZ			13:39																				
ZZZZZZ			13:44																				
ZZZZZZ			13:50																				
ZZZZZZ			13:56																				
ZZZZZZ			14:01																				
ZZZZZZ			14:07																				
CCV 240-51051/36			14:12																				
CCB 240-51051/37			14:18																				
CCV 240-51051/38			14:31																				
CCB 240-51051/39			14:36																				
ZZZZZZ			14:42																				
ZZZZZZ			14:48																				
ZZZZZZ			14:53																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: I5 Method: 6010C

Start Date: 07/16/2012 10:55 End Date: 07/17/2012 10:25

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			14:59																				
ZZZZZZ			15:05																				
ZZZZZZ			15:10																				
ZZZZZZ			15:16																				
ZZZZZZ			15:22																				
ZZZZZZ			15:27																				
ZZZZZZ			15:33																				
CCV 240-51051/50	1		15:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/51	1		15:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			15:50																				
ZZZZZZ			15:56																				
ZZZZZZ			16:01																				
ZZZZZZ			16:07																				
ZZZZZZ			16:13																				
MB 240-50598/1-A	1	T	16:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-50598/2-A	1	T	16:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			16:30																				
240-13043-H-2-A SD ^5	5	T	16:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-H-2-B MS	1	T	16:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-51051/62	1		16:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/63	1		16:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-H-2-C MSD	1	T	16:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13043-H-2-A PDS	1	T	17:04	X						X					X	X		X					
ZZZZZZ			17:09																				
ZZZZZZ			17:15																				
ZZZZZZ			17:20																				
ZZZZZZ			17:26																				
ZZZZZZ			17:32																				
240-13070-2	1	T	17:37	X	X	X	X	X	X	X	X	X	X	X			X	X	X				
240-13070-3	1	T	17:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13070-5	1	T	17:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-51051/74	1		17:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/75	1		18:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-13070-6	1	T	18:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X				
CRI 240-51051/77			18:11																				
CCV 240-51051/78	1		18:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/79	1		18:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-51051/80			05:32																				
CCB 240-51051/81			05:38																				
ZZZZZZ			05:44																				
ZZZZZZ			05:49																				
ZZZZZZ			05:55																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: I5 Method: 6010C

Start Date: 07/16/2012 10:55 End Date: 07/17/2012 10:25

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ZZZZZZ			06:01																				
ZZZZZZ			06:06																				
ZZZZZZ			06:12																				
CCV 240-51051/88			06:18																				
CCB 240-51051/89			06:23																				
CCV 240-51051/90			07:20																				
CCB 240-51051/91			07:26																				
ZZZZZZ			07:31																				
ZZZZZZ			07:37																				
ZZZZZZ			07:43																				
ZZZZZZ			07:48																				
ZZZZZZ			07:54																				
ZZZZZZ			08:00																				
ZZZZZZ			08:05																				
ZZZZZZ			08:11																				
ZZZZZZ			08:17																				
ZZZZZZ			08:22																				
CCV 240-51051/102	1		08:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/103	1		08:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			08:43																				
240-13070-2	1	T	08:48												X	X							
240-13070-6	1	T	08:54															X					
CRI 240-51051/107	1		09:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			09:05																				
ZZZZZZ			09:11																				
ZZZZZZ			09:17																				
ZZZZZZ			09:22																				
ZZZZZZ			09:28																				
ZZZZZZ			09:34																				
CCV 240-51051/114	1		09:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-51051/115	1		09:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			09:51																				
ZZZZZZ			09:56																				
ZZZZZZ			10:02																				
ZZZZZZ			10:08																				
ZZZZZZ			10:13																				
CCV 240-51051/121			10:19																				
CCB 240-51051/122			10:25																				

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 07/16/2012 15:57 End Date: 07/16/2012 17:51

Lab Sample ID	D/F	Type	Time	Analytes
				Hg
IC 240-50896/1-A			15:57	X
IC 240-50896/2-A			15:58	X
IC 240-50896/3-A			15:59	X
IC 240-50896/4-A			16:01	X
IC 240-50896/5-A			16:02	X
IC 240-50896/6-A			16:03	X
ICV 240-50896/7-A	1		16:05	X
ICB 240-50896/8-A	1		16:06	X
CRA 240-50896/9-A	1		16:08	X
CCVL 240-50896/10-A	1		16:10	X
CCB 240-50896/11-A			16:11	
ZZZZZZ			16:12	
ZZZZZZ			16:14	
ZZZZZZ			16:15	
ZZZZZZ			16:17	
ZZZZZZ			16:18	
ZZZZZZ			16:19	
ZZZZZZ			16:21	
ZZZZZZ			16:22	
ZZZZZZ			16:23	
ZZZZZZ			16:25	
CCV 240-50896/12-A			16:26	
CCB 240-50896/11-A			16:28	
ZZZZZZ			16:29	
ZZZZZZ			16:31	
ZZZZZZ			16:32	
ZZZZZZ			16:34	
ZZZZZZ			16:35	
ZZZZZZ			16:37	
ZZZZZZ			16:38	
ZZZZZZ			16:40	
ZZZZZZ			16:41	
ZZZZZZ			16:44	
CCV 240-50896/12-A			16:45	
CCB 240-50896/11-A			16:47	
ZZZZZZ			16:48	
ZZZZZZ			16:50	
ZZZZZZ			16:51	
ZZZZZZ			16:53	
ZZZZZZ			16:54	
ZZZZZZ			16:56	
ZZZZZZ			16:57	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 07/16/2012 15:57 End Date: 07/16/2012 17:51

Lab Sample ID	D/F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			16:58																					
ZZZZZZ			17:00																					
ZZZZZZ			17:01																					
CCV 240-50896/12-A			17:03																					
CCB 240-50896/11-A			17:04																					
ZZZZZZ			17:06																					
ZZZZZZ			17:07																					
ZZZZZZ			17:09																					
ZZZZZZ			17:10																					
ZZZZZZ			17:12																					
ZZZZZZ			17:13																					
ZZZZZZ			17:15																					
ZZZZZZ			17:16																					
ZZZZZZ			17:18																					
ZZZZZZ			17:19																					
CCV 240-50896/12-A	1		17:22	X																				
CCB 240-50896/11-A	1		17:23	X																				
ZZZZZZ			17:25																					
ZZZZZZ			17:26																					
ZZZZZZ			17:28																					
ZZZZZZ			17:29																					
LB 240-50668/1-E	1	P	17:30	X																				
MB 240-50703/2-A	1	T	17:32	X																				
LCS 240-50703/3-A	1	T	17:33	X																				
ZZZZZZ			17:34																					
240-12781-C-8-K MS	1	P	17:36	X																				
240-12781-C-8-L MSD	1	P	17:37	X																				
CCV 240-50896/12-A	1		17:38	X																				
CCB 240-50896/11-A	1		17:40	X																				
240-13070-4	1	P	17:41	X																				
ZZZZZZ			17:42																					
ZZZZZZ			17:44																					
ZZZZZZ			17:45																					
ZZZZZZ			17:46																					
ZZZZZZ			17:48																					
CCV 240-50896/12-A	1		17:49	X																				
CCB 240-50896/11-A	1		17:51	X																				

Prep Types

P = TCLP

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 07/13/2012 11:47 End Date: 07/13/2012 14:02

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-50907/1-A			11:47	X																				
IC 240-50907/2-A			11:49	X																				
IC 240-50907/3-A			11:51	X																				
IC 240-50907/4-A			11:55	X																				
IC 240-50907/5-A			11:57	X																				
IC 240-50907/6-A			11:59	X																				
ICV 240-50907/7-A	1		12:08	X																				
ICB 240-50907/8-A	1		12:10	X																				
CRA 240-50907/9-B	1		12:12	X																				
CCV 240-50907/11-A			12:23																					
CCB 240-50907/10-A			12:25																					
ZZZZZZ			12:27																					
ZZZZZZ			12:29																					
ZZZZZZ			12:31																					
ZZZZZZ			12:32																					
ZZZZZZ			12:34																					
ZZZZZZ			12:36																					
ZZZZZZ			12:38																					
ZZZZZZ			12:40																					
ZZZZZZ			12:43																					
ZZZZZZ			12:45																					
CCV 240-50907/11-A			12:47																					
CCB 240-50907/10-A			12:50																					
ZZZZZZ			12:52																					
ZZZZZZ			12:54																					
ZZZZZZ			12:56																					
ZZZZZZ			12:58																					
ZZZZZZ			13:00																					
ZZZZZZ			13:02																					
ZZZZZZ			13:04																					
ZZZZZZ			13:06																					
ZZZZZZ			13:08																					
ZZZZZZ			13:10																					
CCV 240-50907/11-A	1		13:12	X																				
CCB 240-50907/10-A	1		13:14	X																				
ZZZZZZ			13:16																					
MB 240-50601/1-A	1	T	13:18	X																				
LCS 240-50601/2-A	1	T	13:20	X																				
ZZZZZZ			13:22																					
240-13043-H-2-E MS	1	T	13:24	X																				
240-13043-H-2-F MSD	1	T	13:26	X																				
ZZZZZZ			13:28																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: H4 Method: 7471B

Start Date: 07/13/2012 11:47 End Date: 07/13/2012 14:02

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			13:30																					
ZZZZZZ			13:32																					
ZZZZZZ			13:34																					
CCV 240-50907/11-A	1		13:36	X																				
CCB 240-50907/10-A	1		13:39	X																				
ZZZZZZ			13:41																					
240-13070-2	1	T	13:43	X																				
240-13070-3	1	T	13:47	X																				
240-13070-5	1	T	13:49	X																				
240-13070-6	1	T	13:51	X																				
ZZZZZZ			13:53																					
ZZZZZZ			13:55																					
ZZZZZZ			13:57																					
CCV 240-50907/11-A	1		14:00	X																				
CCB 240-50907/10-A	1		14:02	X																				

Prep Types
T = Total/NA

Sample MT-5518-0-2 Arsenic 6.7 mg/kg

$\left(\frac{70.199\ ug}{L}\right)\left(\frac{0.1L}{1.24g}\right)\left(\frac{1}{.839}\right)\left(\frac{1g}{1000ug}\right)\left(\frac{1000mg}{kg}\right) = 6.748\ mg/kg$

Method: TOTAL Sample Name: 240-13070-h-2-a Operator: KLC
Run Time: 07/16/12 17:37 Filename: I50716B
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-4.666	33390.	70.199	6.096	97.11	24.87
SDev	5.4	27.49	5.9489	1.36	.1333	.0295
%RSD	115.7	.0823	8.4744	22.31	.1373	.1187

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1817.	-.9674	73.29	304.9	375.3	280700.
SDev	4.019	.0562	4.348	1.119	.0306	445.3
%RSD	.2212	5.812	5.933	.3671	.0082	.1586

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4576.	1317.	185.1	1.303	-510.2	167.5
SDev	14.42	1.813	.0084	2.402	133.7	4.249
%RSD	.3151	.1376	.0045	184.4	26.21	2.537

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-20.419	19.577	14.829	11.50	1281.	-8.5553
SDev	3.6562	.90918	11.94	.4802	.8579	3.6544
%RSD	17.906	4.644	80.518	4.175	.067	42.715

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	833.5	211.4	-3.7018	31.200	-46.447	-7.4244
SDev	.485	.1646	24.094	13.392	31.748	10.369
%RSD	.0582	.0778	650.87	42.923	68.353	139.66

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-18.181	31.309	5.0000	14130
SDev	11.453	23.619	0	25.4558
%RSD	62.995	75.438	0	.18015

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. AVANAVAGE** **DATE:** **NOVEMBER 29, 2012**

FROM: **A. COGNETTI** **COPIES:** **DV FILE/REV.1**

SUBJECT: **ORGANIC DATA VALIDATION- VOC / SVOC / PCB/ GRO / DRO / TCLP HERB/ TCLP PEST/ TCLPSVOC/ TCLP VOC**
MARTIN STATE AIRPORT– FULL REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-13070-1

SAMPLES: 4/Soil/VOC/SVOC/PCB/GRO/DRO

MT-SS17-0-2 MT-SS17-8-10 MT-SS18-0-2 MT-SS18-8-10

1/Soil/TCLP HERB/TCLP PEST/TCLP VOC/TCLP SVOC

MT-TCLP-8-10

1/Aqueous/VOC

TB-071012

Overview

The sample set for Martin State Airport, SDG 240-13070-1 consists of five (5) soil environmental samples and a trip blank. Four (4) soil environmental samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs) gasoline range organics (GRO), diesel range organics (DRO) and polychlorinated biphenyls. GRO is listed on the form 1s and EDD as total petroleum hydrocarbons (TPH) (C6-C10) and DRO as TPH (C10-C32). One (1) soil environmental sample was also analyzed for toxicity characteristic leaching procedure (TCLP) herbicides (HERB), pesticides (PEST), VOCs and SVOCs. The trip blank was analyzed for VOCs. There are no field duplicate pairs included in this SDG.

The samples were collected on July 10, 2012 and analyzed by Test America Laboratories, Inc. Analyses were conducted in accordance to SW-846 Methods 8260B, 8270C, 8270D, 8015C, 8081A, 8082A and 8151A analytical and reporting protocol.

Summary

The data contained in this SDG were validated with regard to the following parameters: data completeness, system performance, holding times, GC/MS tuning, initial / continuing calibrations, laboratory method blank results, surrogate spike/internal standard recoveries, laboratory control sample results, matrix spike/matrix spike duplicate results, compound identification, compound quantitation, and detection limits.

Areas of concern with respect to data quality are listed below.

Major Problems

- In the initial calibration of instrument A3UX14 on June 28, 2012 and the continuing calibration on July 16, 2012 @ 11:51 and July 17, 2012 @ 12:38, tert-butyl alcohol and vinyl acetate had relative response factors (RRFs) less than the 0.05 quality control limit. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected samples.

- In the initial calibration of instrument A3UX11 on June 19, 2012 and the continuing calibration on July 13, 2012 @ 11:51, tert-butyl alcohol had a RRF less than the 0.05 quality control limit. In addition, in the continuing calibration on July 13, 2012 @ 11:51, vinyl acetate had a RRF less than the 0.05 quality control limit. The nondetected tert-butyl alcohol and vinyl acetate results were qualified as rejected (UR) in the affected sample TB-071012.

- In the initial calibration of instrument A3UX12 on February 7, 2012 and the continuing calibration on July 13, 2012 @ 15:11, 2-butanone had a RRF less than the 0.05 quality control limit. The nondetected 2-butanone result in the affected TCLP sample MT-TCLP-8-10 was qualified as rejected (UR).

- Tentatively identified compounds (TICs) containing siloxane were qualified as rejected (R) in several samples. This compound is indicative of column bleed.

- The matrix spike/ matrix spike duplicate (MS/MSD) percent recoveries (%Rs) of hexachlorocyclopentadiene were 0% in sample MT-SS17-0-2. The nondetected hexachlorocyclopentadiene result in sample MT-SS17-0-2 was qualified as rejected (UR).

Minor Problems

- In the continuing calibration of instrument A3UX14 on July 16, 2012 @ 11:51, carbon disulfide, 4-methyl-2-pentanone and 1,2,3-trichlorobenzene had percent differences (%Ds) greater than the 20% quality control limit and less than 50%. The positive carbon disulfide result in the affected sample MT-SS17-0-2 was qualified as estimated (J). No action was taken on the nondetected carbon disulfide, 4-methyl-2-pentanone and 1,2,3-trichlorobenzene result in the affected samples MT-SS17-0-2 and MT-SS17-8-10.

- Contamination was detected in the laboratory method blank associated with batch 240-50900 analyzed on July 16, 2012 @ 12:56 on instrument A3UX14.

Compound	Maximum Concentration (ug/kg)	Action Level (ug/kg)
1,2,3-trichlorobenzene	0.413	2.07
1,2,4-trichlorobenzene	0.330	1.65
Cis-1,3-dichloropropene	0.54	2.7
Naphthalene	0.682	3.41
n-butylbenzene	0.446	2.23
styrene	0.164	0.82

An action level of 5X the maximum concentration of contaminant was established in order to evaluate samples for blank contamination. Sample aliquot, percent solids and dilution factors were taken into account when applying the action level. Positive results less than the action level were qualified as (B) in the affected samples MT-SS17-0-2 and MT-SS17-8-10.

- In the continuing calibration of instrument A3UX14 on July 17, 2012 @ 12:38, carbon disulfide, 2,2-dichloropropane, 4-methyl-2-pentanone, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene had %Ds greater than the 20% quality control limit and less than 50%. The positive carbon disulfide result in sample MT-SS18-8-10 was qualified as estimated (J). No action was taken on the nondetected carbon disulfide, 2,2-dichloropropane, 4-methyl-2-pentanone, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene results in the affected samples MT-SS18-0-2 and MT-SS18-8-10.

- Contamination was detected in the laboratory method blank associated with batch 240-51061 analyzed on July 17, 2012 @ 13:44 on instrument A3UX14.

Compound	Maximum Concentration (ug/kg)	Action Level (ug/kg)
1,2,3-trichlorobenzene	0.427	2.14
1,2,3-trimethylbenzene	0.13	0.65
1,2,4-trichlorobenzene	0.361	1.81
1,3-dichlorobenzene	0.214	1.07
1,4-dichlorobenzene	0.239	1.20
2-hexanone	0.669	3.35
2-butanone	0.974	4.87
m&p xylenes	0.189	0.95
Naphthalene	0.491	2.46
n-butylbenzene	0.454	2.27
styrene	0.172	0.86
trans-1,3-dichloropropene	0.516	2.58
total xylenes	0.189	0.95

An action level of 5X the maximum concentration of contaminant was established in order to evaluate samples for blank contamination. Sample aliquot, percent solids and dilution factors were taken into account when applying the action level. Positive results less than the action level were qualified as (B) in the affected samples MT-SS18-0-2 and MT-SS18-8-10.

- TICs were qualified as presumptively present (NJ) in several samples.

- The continuing calibration %D for DRO (TPH C10-C32) exceeded the 20% quality control limit on July 25, 2012 @ 13:32. The nondetected DRO (TPH C10-C32) results were qualified as estimated (UJ) in samples MT-SS18-0-2 and MT-SS18-8-10.

- The continuing calibration %Ds for heptachlor exceeded the 15% quality control limit on both columns on July 16, 2012 @ 18:22. The nondetected heptachlor result in TCLP sample MT-TCLP-8-10 was qualified as estimated (UJ). In addition, the %Ds for gamma-BHC, heptachlor epoxide, endrin and methoxychlor exceeded quality control limits on column CLP-1. No action was taken on the nondetected gamma-BHC, heptachlor epoxide, endrin and methoxychlor results in the affected sample.

- The continuing calibration %Ds for heptachlor and endrin exceeded than 15% quality control limit on both columns on July 17, 2012 @ 4:06. The nondetected heptachlor and endrin results were qualified as estimated (UJ) in the affected TCLP sample MT-TCLP-8-10. In addition, the %Ds for gamma-BHC, heptachlor epoxide and methoxychlor exceeded quality control limits on column CLP-1. No action was taken on the nondetected gamma-BHC, heptachlor epoxide and methoxychlor results in the affected TCLP sample.

- Positive results reported below the reporting limit (RL) but above the method detection limit (MDL) for the organic analyses were qualified as estimated, (J).

Notes

The continuing calibration %Ds for vinyl acetate, 1,2-dibromo-3-chloropropane and naphthalene were greater than the 20% quality control limit and less than 50% on July 13, 2012 @ 11:51. No action was taken on the nondetected vinyl acetate, 1,2-dibromo-3-chloropropane and naphthalene results in the affected sample TB-071012.

The laboratory control sample (LCS) percent recoveries (%Rs) of 1,2-dichloroethane and 1,2-dichloropropane were greater than the upper quality control limit in batch 240-50627. No action was taken on the nondetected 1,2-dichloroethane and 1,2-dichloropropane results in the affected sample MT-SS18-0-2.

The LCS %Rs of 1,2-dichloroethane, 1,3-dichloropropane and chlorobenzene were greater than the upper quality control limit in batch 240-50900. No action was taken on the nondetected 1,2-dichloroethane, 1,3-dichloropropane and chlorobenzene results in the affected samples.

The LCS %Rs of 1,2-dichloropropane and 1,3-dichloropropane were greater than the upper quality control limit in batch 240-51061. No action was taken on the nondetected 1,2-dichloropropane and 1,3-dichloropropane results in the affected samples.

The MS/MSD %Rs of 2-chloroethyl vinyl ether were 0% in sample 240-13078. In addition, MSD %Rs of several targetanalytes were less than the lower quality control limit. No action was taken because this is not a sample in this SDG.

The MS/MSD %Rs of vinyl acetate were less than the lower quality control limit in sample 240-13217. In addition the relative percent difference (RPD) exceeded quality control limits. No action was taken because this is not a sample in this SDG.

The MS/MSD %Rs of vinyl acetate were less than the lower quality control limit in sample 240-13194. No action was taken because this is not a sample in this SDG.

The continuing calibration %Ds for 2,4-D and 2,4,5-TP exceeded the 15% quality control limit on July 23, 2012 @ 23:36 on column CLP-2. No action was taken on the nondetected 2,4-D and 2,4,5-TP results in the affected TCLP sample.

Nondetected results were reported to the MDL.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Several VOC target analytes had RRFs less than quality control limits in the initial and continuing calibrations. Contamination was detected in the VOC laboratory method blanks. Continuing calibrations %D noncompliances were found in the VOC, DRO and TCLP Pest fractions.

Other Factors Affecting Data Quality: TICs were detected in several samples. The MS/MSD %Rs of hexachlorocyclopentadiene were 0% in sample MT-SS17-0-2.

The data for these analyses were reviewed with reference to the Region III EPA Functional Guidelines for Organic Data Validation (9/94). The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Ann Cognetti
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

MT-SS17-0-2 AC 11/29/12

PROJ_NO: 04054	NSAMPLE	~~MT-SB17-0-2~~			~~MT-SB17-8-10~~ MT-SS17-8-10			MT-SS18-0-2			MT-SS18-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-5			240-13070-6			240-13070-2			240-13070-3		
FRACTION: OV	SAMP_DATE	7/11/2012			7/11/2012			7/12/2012			7/11/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.6			82.4			83.9			85.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.52	U		0.57	U		10	U		0.62	U	
1,1,1-TRICHLOROETHANE		0.47	U		0.51	U		24	U		0.56	U	
1,1,2,2-TETRACHLOROETHANE		0.29	U		0.31	U		10	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		1.1	U		1.2	U		44	U		1.3	U	
1,1-DICHLOROETHANE		0.3	U		0.33	U		19	U		0.36	U	
1,1-DICHLOROETHENE		0.44	U		0.48	U		20	U		0.52	U	
1,1-DICHLOROPROPENE		0.25	U		0.28	U		11	U		0.3	U	
1,2,3-TRICHLOROBENZENE		0.32	U		0.35	U		11	U		0.38	U	
1,2,3-TRICHLOROPROPANE		0.76	U		0.83	U		24	U		0.9	U	
1,2,3-TRIMETHYLBENZENE		1.9	J	P	0.16	U		33	J	P	3.9	J	P
1,2,4-TRICHLOROBENZENE		0.23	U		0.25	U		8.2	U		0.27	U	
1,2,4-TRIMETHYLBENZENE		2.3	J	P	0.6	U		34	J	P	0.65	U	
1,2-DIBROMO-3-CHLOROPROPANE		1.1	U		1.2	U		56	U		1.3	U	
1,2-DIBROMOETHANE		0.42	U		0.46	U		11	U		0.5	U	
1,2-DICHLOROBENZENE		0.3	U		0.33	U		9.6	U		0.36	U	
1,2-DICHLOROETHANE		0.29	U		0.31	U		11	U		0.34	U	
1,2-DICHLOROPROPANE		0.58	U		0.63	U		9.2	U		0.69	U	
1,3,5-TRIMETHYLBENZENE		1.3	NJ	Z1				45	NJ	Z1			
1,3-DICHLOROBENZENE		0.29	U		0.32	U		5.4	U		0.35	U	
1,3-DICHLOROPROPANE		0.29	U		0.31	U		25	U		0.34	U	
1,4-DICHLOROBENZENE		0.55	U		0.61	U		9	U		0.66	U	
2,2-DICHLOROPROPANE		0.79	U		0.86	U		26	U		0.94	U	
2-BUTANONE		4.1	J	P	3	J	P	48	U		1.4	U	
2-CHLOROETHYL VINYL ETHER		1.2	U		1.3	U		48	U		1.4	U	
2-CHLOROTOLUENE		0.34	U		0.37	U		10	U		0.4	U	
2-HEXANONE		0.53	U		0.58	U		22	U		0.63	U	
4-CHLOROTOLUENE		0.34	U		0.38	U		11	U		0.41	U	
4-ISOPROPYLTOLUENE		1.3	J	P	0.19	U		26	J	P	0.21	U	
4-METHYL-2-PENTANONE		0.45	U		0.5	U		54	U		0.54	U	
ACETONE		42			65			190	U		6.3	U	
BENZENE		0.19	U		0.21	U		13	U		5.4		
BENZENE, 1-ETHYL-2,3-DIMETHYL-		4.6	NJ	Z1									
BENZENE, 1-METHYL-2-(1-METHYLETHYL)-		8.2	NJ	Z1									
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-		5.1	NJ	Z1									

MT-SS17-0-2 AC 11-29-12

PROJ_NO: 04054	NSAMPLE	~~MT-SB17-0-2~~	~~MT-SB17-8-10~~ MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10
SDG: 240-13070-1	LAB_ID	240-13070-5	240-13070-6	240-13070-2	240-13070-3
FRACTION: OV	SAMP_DATE	7/11/2012	7/11/2012	7/12/2012	7/11/2012
MEDIA: SOIL	QC_TYPE	NM	NM	NM	NM
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG
	PCT_SOLIDS	83.6	82.4	83.9	85.9
	DUP_OF				

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BROMOBENZENE	0.28	U		0.3	U		15	U		0.33	U	
BROMOCHLOROMETHANE	0.6	U		0.65	U		15	U		0.71	U	
BROMODICHLOROMETHANE	0.23	U		0.26	U		11	U		0.28	U	
BROMOFORM	0.28	U		0.3	U		21	U		0.33	U	
BROMOMETHANE	0.45	U		0.5	U		33	U		0.54	U	
BUTANE, 2,2,3,3-TETRAMETHYL-										26	NJ	Z1
BUTANE, 2-METHYL-										30	NJ	Z1
CARBON DISULFIDE	3	J	CP	0.4	U		13	U		4.2	J	CP
CARBON TETRACHLORIDE	0.31	U		0.34	U		490			78		
CHLOROBENZENE	0.28	U		0.3	U		7.2	U		0.33	U	
CHLORODIBROMOMETHANE	0.46	U		0.51	U		13	U		0.55	U	
CHLOROETHANE	0.72	U		0.79	U		68	U		0.86	U	
CHLOROFORM	0.24	U		0.27	U		55	J	P	32		
CHLOROMETHANE	0.34	U		0.38	U		16	U		0.41	U	
CIS-1,2-DICHLOROETHENE	5.2			0.33	U		7.7	U		0.36	U	
CIS-1,3-DICHLOROPROPENE	0.29	U		0.31	U		8.9	U		0.34	U	
CYCLOHEXANE				0.32	J	Z1	140	J	Z1	16	J	Z1
CYCLOHEXANE, 1,1,3-TRIMETHYL-	4.4	NJ	Z1									
CYCLOTETRASILOXANE, OCTAMETHYL-	21	R	Z2							11	R	Z2
DIBROMOMETHANE	0.53	U		0.58	U		16	U		0.63	U	
DICHLORODIFLUOROMETHANE	0.42	U		0.46	U		18	U		0.5	U	
DIISOPROPYL ETHER	1.3	U		1.4	U		56	U		1.5	U	
ETHYL TERT-BUTYL ETHER	0.18	U		0.2	U		0.25	U		0.22	U	
ETHYLBENZENE	0.34	J	P	0.24	U		27	J	P	0.26	U	
HEXACHLOROBUTADIENE	1	U		1.1	U		16	U		1.2	U	
HEXANE	1.2	J	Z1									
HEXANE, 2,2,4-TRIMETHYL-										6.6	NJ	Z1
ISOPROPYLBENZENE	0.24	J	P	0.15	U		8.3	J	P	0.95	J	P
M+P-XYLENES	1	U		1.1	U		67	J	P	1.2	U	
METHYL TERT-BUTYL ETHER	0.36	U		0.39	U		8	U		0.43	U	
METHYLCYCLOHEXANE	2.6	J	Z1				28	J	Z1			
METHYLENE CHLORIDE	0.56	U		0.62	U		86	U		0.71	J	P
NAPHTHALENE	0.62	B	A	0.17	U		23	J	P	1.1	B	A
N-BUTYLBENZENE	0.19	U		0.21	U		9	U		0.46	B	A
N-PROPYLBENZENE	0.34	U		0.37	U		16	U		0.4	U	

MT-SS17-02 AC 11-29-12

PROJ_NO: 04054	NSAMPLE	~~MT-SB17-0-2~~			~~MT-SB17-8-10~~ MT-SS17-8-10			MT-SS18-0-2			MT-SS18-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-5			240-13070-6			240-13070-2			240-13070-3		
FRACTION: OV	SAMP_DATE	7/11/2012			7/11/2012			7/12/2012			7/11/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.6			82.4			83.9			85.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
O-XYLENE		0.46	J	P	0.32	U		49	J	P	2.5	J	P
PENTANE, 2,3,3-TRIMETHYL-											13	NJ	Z1
PENTANE, 2,3,4-TRIMETHYL-											9.7	NJ	Z1
PENTANE, 2,3-DIMETHYL-											8.2	NJ	Z1
PENTANE, 2,4-DIMETHYL-											8.8	NJ	Z1
PENTANE, 3-METHYL-											11	NJ	Z1
SEC-BUTYLBENZENE		0.64	J	P	0.17	U		5.3	U		0.54	J	P
STYRENE		0.13	U		0.14	U		6.3	U		0.15	U	
TERT-AMYL METHYL ETHER		0.31	U		0.34	U		0.41	U		0.37	U	
TERT-BUTYLBENZENE		0.24	U		0.27	U		7.3	U		0.45	J	P
TERTIARY-BUTYL ALCOHOL		6.4	UR	C	7	UR	C	270	UR	C	7.6	UR	C
TETRACHLOROETHENE		0.44	U		0.48	U		13	U		0.52	U	
TETRAHYDROFURAN								80	NJ	Z1			
TOLUENE		0.49	J	P	0.28	J	P	19	U		0.48	J	P
TOTAL XYLENES		0.56	U		0.62	U		120	J	P	2.5	J	P
TRANS-1,2-DICHLOROETHENE		0.34	U		0.38	U		10	U		0.41	U	
TRANS-1,3-DICHLOROPROPENE		0.45	U		0.5	U		22	U		0.54	U	
TRICHLOROETHENE		0.35	U		0.39	U		11	U		0.42	U	
TRICHLOROFLUOROMETHANE		0.29	U		0.31	U		18	U		0.34	U	
UNKNOWN		6.3	NJ	Z1									
VINYL ACETATE		0.21	UR	C	0.23	UR	C	26	UR	C	0.25	UR	C
VINYL CHLORIDE		2.5	J	P	0.36	U		20	U		0.39	U	

PROJ_NO: 04054	NSAMPLE	TB-071012		
SDG: 240-13070-1	LAB_ID	240-13070-1		
FRACTION: OV	SAMP_DATE	7/10/2012		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U	
1,1-DICHLOROETHANE		0.15	U	
1,1-DICHLOROETHENE		0.19	U	
1,1-DICHLOROPROPENE		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U	
1,2-DIBROMOETHANE		0.24	U	
1,2-DICHLOROBENZENE		0.13	U	
1,2-DICHLOROETHANE		0.22	U	
1,2-DICHLOROPROPANE		0.18	U	
1,3-DICHLOROBENZENE		0.14	U	
1,3-DICHLOROPROPANE		0.16	U	
1,4-DICHLOROBENZENE		0.13	U	
2,2-DICHLOROPROPANE		0.13	U	
2-BUTANONE		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U	
2-CHLOROTOLUENE		0.11	U	
2-HEXANONE		0.41	U	
4-CHLOROTOLUENE		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U	
4-METHYL-2-PENTANONE		0.32	U	
ACETONE		1.1	U	
BENZENE		0.13	U	
BROMOBENZENE		0.13	U	
BROMOCHLOROMETHANE		0.29	U	
BROMODICHLOROMETHANE		0.15	U	
BROMOFORM		0.64	U	
BROMOMETHANE		0.41	U	

PROJ_NO: 04054	NSAMPLE	TB-071012		
SDG: 240-13070-1	LAB_ID	240-13070-1		
FRACTION: OV	SAMP_DATE	7/10/2012		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CARBON DISULFIDE		0.13	U	
CARBON TETRACHLORIDE		0.13	U	
CHLOROBENZENE		0.15	U	
CHLORODIBROMOMETHANE		0.18	U	
CHLOROETHANE		0.29	U	
CHLOROFORM		0.16	U	
CHLOROMETHANE		0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U	
DIBROMOMETHANE		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U	
DIISOPROPYL ETHER		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U	
ETHYLBENZENE		0.17	U	
HEXACHLOROBUTADIENE		0.3	U	
ISOPROPYLBENZENE		0.13	U	
M+P-XYLENES		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U	
METHYLENE CHLORIDE		0.33	U	
NAPHTHALENE		0.24	U	
N-BUTYLBENZENE		0.12	U	
N-PROPYLBENZENE		0.14	U	
O-XYLENE		0.14	U	
SEC-BUTYLBENZENE		0.13	U	
STYRENE		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U	
TERT-BUTYLBENZENE		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C
TETRACHLOROETHENE		0.29	U	
TOLUENE		0.13	U	
TOTAL XYLENES		0.28	U	
TRANS-1,2-DICHLOROETHENE		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U	
TRICHLOROETHENE		0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U	

PROJ_NO: 04054	NSAMPLE	TB-071012		
SDG: 240-13070-1	LAB_ID	240-13070-1		
FRACTION: OV	SAMP_DATE	7/10/2012		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C
VINYL CHLORIDE		0.22	U	

MT-SS17-0-2 AC 11-29-12

PROJ_NO: 04054	NSAMPLE	~~MT-SB17-0-2~~	~~MT-SB17-8-10~~ MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10
SDG: 240-13070-1	LAB_ID	240-13070-5	240-13070-6	240-13070-2	240-13070-3
FRACTION: OS	SAMP_DATE	7/10/2012	7/10/2012	7/10/2012	7/10/2012
MEDIA: SOIL	QC_TYPE	NM	NM	NM	NM
	UNITS	UG/KG	UG/KG	UG/KG	UG/KG
	PCT_SOLIDS	83.6	82.4	83.9	85.9
	DUP_OF				

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL	33	U		32	U		32	U		32	U	
1,4-DIOXANE	27	U		26	U		26	U		26	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	11	U		11	U		11	U		11	U	
2,4,5-TRICHLOROPHENOL	30	U		30	U		29	U		29	U	
2,4,6-TRICHLOROPHENOL	97	U		96	U		94	U		94	U	
2,4-DICHLOROPHENOL	24	U		24	U		24	U		23	U	
2,4-DIMETHYLPHENOL	25	J	P	24	U		24	U		23	U	
2,4-DINITROPHENOL	97	U		96	U		94	U		94	U	
2,4-DINITROTOLUENE	33	U		32	U		32	U		32	U	
2,6-DINITROTOLUENE	25	U		25	U		25	U		25	U	
2-CHLORONAPHTHALENE	4	U		4	U		3.9	U		3.9	U	
2-CHLOROPHENOL	33	U		32	U		32	U		32	U	
2-METHYLNAPHTHALENE	18			4	U		3.9	U		3.9	U	
2-METHYLPHENOL	97	U		96	U		94	U		94	U	
2-NITROANILINE	11	U		11	U		11	U		11	U	
2-NITROPHENOL	33	U		32	U		32	U		32	U	
3&4-METHYLPHENOL	24	U		24	U		24	U		23	U	
3,3'-DICHLOROBENZIDINE	22	U		22	U		21	U		21	U	
3-NITROANILINE	19	U		19	U		19	U		19	U	
4,6-DINITRO-2-METHYLPHENOL	97	U		96	U		94	U		94	U	
4-BROMOPHENYL PHENYL ETHER	16	U		16	U		15	U		15	U	
4-CHLORO-3-METHYLPHENOL	25	U		25	U		25	U		25	U	
4-CHLOROANILINE	21	U		20	U		20	U		20	U	
4-CHLOROPHENYL PHENYL ETHER	16	U		16	U		15	U		15	U	
4-NITROANILINE	31	U		31	U		31	U		31	U	
4-NITROPHENOL	97	U		96	U		94	U		94	U	
ACENAPHTHENE	4	U		4	U		3.9	U		3.9	U	
ACENAPHTHYLENE	15			17			3.9	U		3.9	U	
ACETOPHENONE	25	J	P	11	U		11	U		11	U	
ANTHRACENE	25			39			3.9	U		3.9	U	
ATRAZINE	11	U		11	U		11	U		11	U	
BENZALDEHYDE	15	U		14	U		14	U		14	U	
BENZO(A)ANTHRACENE	110			240			3.9	U		3.9	U	
BENZO(A)PYRENE	150			310			3.9	U		3.9	U	
BENZO(B)FLUORANTHENE	190			440			3.9	U		3.9	U	

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MT-SS17-0-2 AC 11-29-12

PROJ_NO: 04054	NSAMPLE	~~MT-SB17-0-2~~			~~MT-SB17-8-10~~ MT-SS17-8-10			MT-SS18-0-2			MT-SS18-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-5			240-13070-6			240-13070-2			240-13070-3		
FRACTION: OS	SAMP_DATE	7/10/2012			7/10/2012			7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.6			82.4			83.9			85.9		
	DUP_OF												

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE	130			280			3.9	U		3.9	U	
BENZO(K)FLUORANTHENE	99			230			3.9	U		3.9	U	
BIS(2-CHLOROETHOXY)METHANE	27	U		26	U		26	U		26	U	
BIS(2-CHLOROETHYL)ETHER	2.4	U		2.4	U		2.4	U		2.3	U	
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	P	58	J	P	34	J	P	25	J	P
BUTYL BENZYL PHTHALATE	12	U		12	U		12	U		12	U	
CAPROLACTAM	45	U		45	U		43	U		43	U	
CARBAZOLE	33	U		32	U		32	U		32	U	
CHRYSENE	160			350			1.3	U		1.3	U	
DIBENZO(A,H)ANTHRACENE	28			62			3.9	U		3.9	U	
DIBENZOFURAN	4	U		4	U		3.9	U		3.9	U	
DIETHYL PHTHALATE	19	U		19	U		19	U		19	U	
DIMETHYL PHTHALATE	21	U		20	U		20	U		20	U	
DI-N-BUTYL PHTHALATE	35	J	P	29	J	P	20	J	P	18	U	
DI-N-OCTYL PHTHALATE	33	U		32	U		32	U		32	U	
FLUORANTHENE	190			510			8.7			3.9	U	
FLUORENE	4	U		10			3.9	U		3.9	U	
HEXACHLOROBENZENE	2.5	U		2.5	U		2.5	U		2.5	U	
HEXACHLOROBUTADIENE	33	U		32	U		32	U		32	U	
HEXACHLOROCYCLOPENTADIENE	33	UR	D	32	U		32	U		32	U	
HEXACHLOROETHANE	11	U		11	U		11	U		11	U	
INDENO(1,2,3-CD)PYRENE	98			230			3.9	U		3.9	U	
ISOPHORONE	16	U		16	U		15	U		15	U	
NAPHTHALENE	30			4	U		3.9	U		3.9	U	
NITROBENZENE	2.7	U		2.6	U		2.6	U		2.6	U	
N-NITROSODIMETHYLAMINE	19	U		19	U		19	U		19	U	
N-NITROSO-DI-N-PROPYLAMINE	33	U		32	U		32	U		32	U	
N-NITROSODIPHENYLAMINE	25	U		25	U		25	U		25	U	
PENTACHLOROPHENOL	97	U		96	U		94	U		94	U	
PHENANTHRENE	65			150			3.9	U		3.9	U	
PHENOL	37	J	P	32	U		32	U		32	U	
PYRENE	210			450			3.9	U		3.9	U	

MT-SS17-0-2 AC 11-29-12

PROJ_NO: 04054	NSAMPLE	~~MT-SB17-0-2~~			~~MT-SB17-8-10~~ MT-SS17-8-10			MT-SS18-0-2			MT-SS18-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-5			240-13070-6			240-13070-2			240-13070-3		
FRACTION: PCB	SAMP_DATE	7/10/2012			7/10/2012			7/10/2012			7/10/2012		
MEDIA: SOIL	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	83.6			82.4			83.9			85.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
AROCLOR-1016		25	U		26	U		25	U		25	U	
AROCLOR-1221		19	U		20	U		19	U		19	U	
AROCLOR-1232		17	U		17	U		17	U		17	U	
AROCLOR-1242		16	U		16	U		16	U		15	U	
AROCLOR-1248		20	U		21	U		20	U		20	U	
AROCLOR-1254		20	U		21	U		20	U		20	U	
AROCLOR-1260		20	U		21	U		20	U		20	U	

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MT-5517-0-2 11-29-12 AC

PROJ_NO: 04054	NSAMPLE	~~MT-SB17-0-2~~						~~MT-SB17-8-10~~ MT-5517-8-10					
SDG: 240-13070-1	LAB_ID	240-13070-5						240-13070-6					
FRACTION: PET	SAMP_DATE	7/10/2012						7/10/2012					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	83.6			83.6			82.4			82.4		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					130						56	U	
TPH (C10-C32)		240						28					

PROJ_NO: 04054	NSAMPLE	MT-SS18-0-2						MT-SS18-8-10					
SDG: 240-13070-1	LAB_ID	240-13070-2						240-13070-3					
FRACTION: PET	SAMP_DATE	7/10/2012						7/10/2012					
MEDIA: SOIL	QC_TYPE	NM						NM					
	UNITS	MG/KG			UG/KG			MG/KG			UG/KG		
	PCT_SOLIDS	83.9			83.9			85.9			85.9		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)					380						54	U	
TPH (C10-C32)		11	UJ	C				11	UJ	C			

PROJ_NO: 04054	NSAMPLE	MT-TCLP-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-4		
FRACTION: TCLPP	SAMP_DATE	7/10/2012		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	MG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
CHLORDANE		7E-05	U	
ENDRIN		2E-05	UJ	C
GAMMA-BHC (LINDANE)		1E-05	U	
HEPTACHLOR		1E-05	UJ	C
HEPTACHLOR EPOXIDE		1E-05	U	
METHOXYCHLOR		7E-05	U	
TOXAPHENE		0.00077	U	

PROJ_NO: 04054	NSAMPLE	MT-TCLP-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-4		
FRACTION: TCLPH	SAMP_DATE	7/10/2012		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	MG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
2,4,5-TP (SILVEX)		0.0001	U	
2,4-D		0.00021	U	

PROJ_NO: 04054	NSAMPLE	MT-TCLP-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-4		
FRACTION: TCLPS	SAMP_DATE	7/10/2012		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	MG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,4-DICHLOROBENZENE		0.00034	U	
2,4,5-TRICHLOROPHENOL		0.0003	U	
2,4,6-TRICHLOROPHENOL		0.0008	U	
2,4-DINITROTOLUENE		0.00027	U	
2-METHYLPHENOL		0.0008	U	
3&4-METHYLPHENOL		0.00075	U	
HEXACHLOROBENZENE		0.0001	U	
HEXACHLOROBUTADIENE		0.00027	U	
HEXACHLOROETHANE		0.0008	U	
NITROBENZENE		4E-05	U	
PENTACHLOROPHENOL		0.0024	U	
PYRIDINE		0.00035	U	

PROJ_NO: 04054	NSAMPLE	MT-TCLP-8-10		
SDG: 240-13070-1	LAB_ID	240-13070-4		
FRACTION: TCLPV	SAMP_DATE	7/10/2012		
MEDIA: SOIL	QC_TYPE	NM		
	UNITS	MG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
1,1-DICHLOROETHENE		0.0095	U	
1,2-DICHLOROETHANE		0.011	U	
2-BUTANONE		0.029	UR	C
BENZENE		0.0065	U	
CARBON TETRACHLORIDE		0.0065	U	
CHLOROBENZENE		0.0075	U	
CHLOROFORM		0.008	U	
TETRACHLOROETHENE		0.015	U	
TRICHLOROETHENE		0.0085	U	
VINYL CHLORIDE		0.011	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-TCLP-8-10 Lab Sample ID: 240-13070-4

Matrix: Solid (TCLP) Lab File ID: UX124995.D

Analysis Method: 8260B Date Collected: 07/10/2012 09:25

Sample wt/vol: 0.1(mL) Date Analyzed: 07/13/2012 21:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50783 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	0.025	U	0.025	0.0095
107-06-2	1,2-Dichloroethane	0.025	U	0.025	0.011
78-93-3	2-Butanone (MEK)	0.25	U	0.25	0.029
71-43-2	Benzene	0.025	U	0.025	0.0065
56-23-5	Carbon tetrachloride	0.025	U	0.025	0.0065
108-90-7	Chlorobenzene	0.025	U	0.025	0.0075
67-66-3	Chloroform	0.025	U	0.025	0.0080
127-18-4	Tetrachloroethene	0.025	U	0.025	0.015
79-01-6	Trichloroethene	0.025	U	0.025	0.0085
75-01-4	Vinyl chloride	0.025	U	0.025	0.011

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-121
460-00-4	4-Bromofluorobenzene (Surr)	94		70-124
2037-26-5	Toluene-d8 (Surr)	106		90-115
1868-53-7	Dibromofluoromethane (Surr)	115		84-128

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 Lab Sample ID: 240-13070-5

Matrix: Solid Lab File ID: 146741.D

Analysis Method: 8260B Date Collected: 07/10/2012 10:25

Sample wt/vol: 7.129(g) Date Analyzed: 07/16/2012 19:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.4 Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.2	U	4.2	0.52
71-55-6	1,1,1-Trichloroethane	4.2	U	4.2	0.47
79-34-5	1,1,2,2-Tetrachloroethane	4.2	U	4.2	0.29
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.2	U	4.2	1.1
75-34-3	1,1-Dichloroethane	4.2	U	4.2	0.30
75-35-4	1,1-Dichloroethene	4.2	U	4.2	0.44
563-58-6	1,1-Dichloropropene	4.2	U	4.2	0.25
87-61-6	1,2,3-Trichlorobenzene	4.2	U	4.2	0.32
96-18-4	1,2,3-Trichloropropane	4.2	U	4.2	0.76
526-73-8	1,2,3-Trimethylbenzene	1.9	J	4.2	0.14
120-82-1	1,2,4-Trichlorobenzene	4.2	U	4.2	0.23
95-63-6	1,2,4-Trimethylbenzene	2.3	J	4.2	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	8.4	U	8.4	1.1
106-93-4	1,2-Dibromoethane	4.2	U	4.2	0.42
95-50-1	1,2-Dichlorobenzene	4.2	U	4.2	0.30
107-06-2	1,2-Dichloroethane	4.2	U	4.2	0.29
78-87-5	1,2-Dichloropropane	4.2	U *	4.2	0.58
541-73-1	1,3-Dichlorobenzene	4.2	U	4.2	0.29
142-28-9	1,3-Dichloropropane	4.2	U *	4.2	0.29
106-46-7	1,4-Dichlorobenzene	4.2	U	4.2	0.55
594-20-7	2,2-Dichloropropane	4.2	U	4.2	0.79
78-93-3	2-Butanone	4.1	J	17	1.2
110-75-8	2-Chloroethyl vinyl ether	42	U	42	1.2
95-49-8	2-Chlorotoluene	4.2	U	4.2	0.34
591-78-6	2-Hexanone	17	U	17	0.53
106-43-4	4-Chlorotoluene	4.2	U	4.2	0.34
108-10-1	4-Methyl-2-pentanone	17	U	17	0.45
67-64-1	Acetone	42		17	5.3
71-43-2	Benzene	4.2	U	4.2	0.19
108-86-1	Bromobenzene	4.2	U	4.2	0.28
74-97-5	Bromochloromethane	4.2	U	4.2	0.60
75-27-4	Bromodichloromethane	4.2	U	4.2	0.23
75-25-2	Bromoform	4.2	U	4.2	0.28
74-83-9	Bromomethane	4.2	U	4.2	0.45
75-15-0	Carbon disulfide	3.0	J	4.2	0.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 Lab Sample ID: 240-13070-5

Matrix: Solid Lab File ID: 146741.D

Analysis Method: 8260B Date Collected: 07/10/2012 10:25

Sample wt/vol: 7.129(g) Date Analyzed: 07/16/2012 19:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.4 Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.2	U	4.2	0.31
108-90-7	Chlorobenzene	4.2	U *	4.2	0.28
75-00-3	Chloroethane	4.2	U	4.2	0.72
67-66-3	Chloroform	4.2	U	4.2	0.24
74-87-3	Chloromethane	4.2	U	4.2	0.34
156-59-2	cis-1,2-Dichloroethene	5.2		4.2	0.30
10061-01-5	cis-1,3-Dichloropropene	4.2	U	4.2	0.29
124-48-1	Dibromochloromethane	4.2	U	4.2	0.46
74-95-3	Dibromomethane	4.2	U	4.2	0.53
75-71-8	Dichlorodifluoromethane	4.2	U	4.2	0.42
108-20-3	Diisopropyl ether	8.4	U	8.4	1.3
100-41-4	Ethylbenzene	0.34	J	4.2	0.22
637-92-3	Ethyl-t-butyl ether (ETBE)	4.2	U	4.2	0.18
87-68-3	Hexachlorobutadiene	4.2	U	4.2	1.0
98-82-8	Isopropylbenzene	0.24	J	4.2	0.13
1634-04-4	Methyl tert-butyl ether	17	U	17	0.36
75-09-2	Methylene Chloride	4.2	U	4.2	0.56
179601-23-1	m-Xylene & p-Xylene	8.4	U	8.4	1.0
91-20-3	Naphthalene	0.62	J B	4.2	0.16
104-51-8	n-Butylbenzene	4.2	U	4.2	0.19
103-65-1	n-Propylbenzene	4.2	U	4.2	0.34
95-47-6	o-Xylene	0.46	J	4.2	0.29
99-87-6	p-Isopropyltoluene	1.3	J	4.2	0.18
135-98-8	sec-Butylbenzene	0.64	J	4.2	0.15
100-42-5	Styrene	4.2	U	4.2	0.13
994-05-8	Tert-amyl-methyl ether (TAME)	4.2	U	4.2	0.31
75-65-0	tert-Butyl alcohol	170	U	170	6.4
98-06-6	tert-Butylbenzene	4.2	U	4.2	0.24
127-18-4	Tetrachloroethene	4.2	U	4.2	0.44
108-88-3	Toluene	0.49	J	4.2	0.23
156-60-5	trans-1,2-Dichloroethene	4.2	U	4.2	0.34
10061-02-6	trans-1,3-Dichloropropene	4.2	U	4.2	0.45
79-01-6	Trichloroethene	4.2	U	4.2	0.35
75-69-4	Trichlorofluoromethane	4.2	U	4.2	0.29
108-05-4	Vinyl acetate	8.4	U	8.4	0.21
75-01-4	Vinyl chloride	2.5	J	4.2	0.33

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 | Lab Sample ID: 240-13070-5

Matrix: Solid | Lab File ID: 146741.D

Analysis Method: 8260B | Date Collected: 07/10/2012 10:25

Sample wt/vol: 7.129(g) | Date Analyzed: 07/16/2012 19:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.4 | Level: (low/med) Low

Analysis Batch No.: 50900 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	8.4	U	8.4	0.56

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		58-123
460-00-4	4-Bromofluorobenzene (Surr)	102		52-136
1868-53-7	Dibromofluoromethane (Surr)	90		37-132
2037-26-5	Toluene-d8 (Surr)	104		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 Lab Sample ID: 240-13070-5

Matrix: Solid Lab File ID: 146741.D

Analysis Method: 8260B Date Collected: 07/10/2012 10:25

Sample wt/vol: 7.129(g) Date Analyzed: 07/16/2012 19:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.4 Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

Number TICs Found: 10 TIC Result Total: 60.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Unknown	2.16	5.8	T J
110-54-3	Hexane	4.74	1.2	J
108-87-2	Methylcyclohexane	7.42	2.6	J
3073-66-3	Cyclohexane, 1,1,3-trimethyl-	9.18	4.4	T J N
556-67-2	Cyclotetrasiloxane, octamethyl-	10.73	21	T J N
108-67-8	1,3,5-Trimethylbenzene	10.94	1.3	J
933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	11.85	4.6	T J N
99-87-6	Benzene, 1-methyl-4-(1-methylethyl)-	12.12	5.1	T J N
	Unknown	12.28	6.3	T J
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	12.91	8.2	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 | Lab Sample ID: 240-13070-6

Matrix: Solid | Lab File ID: 146742.D

Analysis Method: 8260B | Date Collected: 07/10/2012 10:30

Sample wt/vol: 6.607(g) | Date Analyzed: 07/16/2012 20:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.6 | Level: (low/med) Low

Analysis Batch No.: 50900 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.6	U	4.6	0.57
71-55-6	1,1,1-Trichloroethane	4.6	U	4.6	0.51
79-34-5	1,1,2,2-Tetrachloroethane	4.6	U	4.6	0.31
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	4.6	U	4.6	1.2
75-34-3	1,1-Dichloroethane	4.6	U	4.6	0.33
75-35-4	1,1-Dichloroethene	4.6	U	4.6	0.48
563-58-6	1,1-Dichloropropene	4.6	U	4.6	0.28
87-61-6	1,2,3-Trichlorobenzene	4.6	U	4.6	0.35
96-18-4	1,2,3-Trichloropropane	4.6	U	4.6	0.83
526-73-8	1,2,3-Trimethylbenzene	4.6	U	4.6	0.16
120-82-1	1,2,4-Trichlorobenzene	4.6	U	4.6	0.25
95-63-6	1,2,4-Trimethylbenzene	4.6	U	4.6	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	9.2	U	9.2	1.2
106-93-4	1,2-Dibromoethane	4.6	U	4.6	0.46
95-50-1	1,2-Dichlorobenzene	4.6	U	4.6	0.33
107-06-2	1,2-Dichloroethane	4.6	U	4.6	0.31
78-87-5	1,2-Dichloropropane	4.6	U *	4.6	0.63
541-73-1	1,3-Dichlorobenzene	4.6	U	4.6	0.32
142-28-9	1,3-Dichloropropane	4.6	U *	4.6	0.31
106-46-7	1,4-Dichlorobenzene	4.6	U	4.6	0.61
594-20-7	2,2-Dichloropropane	4.6	U	4.6	0.86
78-93-3	2-Butanone	3.0	J	18	1.3
110-75-8	2-Chloroethyl vinyl ether	46	U	46	1.3
95-49-8	2-Chlorotoluene	4.6	U	4.6	0.37
591-78-6	2-Hexanone	18	U	18	0.58
106-43-4	4-Chlorotoluene	4.6	U	4.6	0.38
108-10-1	4-Methyl-2-pentanone	18	U	18	0.50
67-64-1	Acetone	65		18	5.8
71-43-2	Benzene	4.6	U	4.6	0.21
108-86-1	Bromobenzene	4.6	U	4.6	0.30
74-97-5	Bromochloromethane	4.6	U	4.6	0.65
75-27-4	Bromodichloromethane	4.6	U	4.6	0.26
75-25-2	Bromoform	4.6	U	4.6	0.30
74-83-9	Bromomethane	4.6	U	4.6	0.50
75-15-0	Carbon disulfide	4.6	U	4.6	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 | Lab Sample ID: 240-13070-6

Matrix: Solid | Lab File ID: 146742.D

Analysis Method: 8260B | Date Collected: 07/10/2012 10:30

Sample wt/vol: 6.607(g) | Date Analyzed: 07/16/2012 20:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.6 | Level: (low/med) Low

Analysis Batch No.: 50900 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	4.6	U	4.6	0.34
108-90-7	Chlorobenzene	4.6	U *	4.6	0.30
75-00-3	Chloroethane	4.6	U	4.6	0.79
67-66-3	Chloroform	4.6	U	4.6	0.27
74-87-3	Chloromethane	4.6	U	4.6	0.38
156-59-2	cis-1,2-Dichloroethene	4.6	U	4.6	0.33
10061-01-5	cis-1,3-Dichloropropene	4.6	U	4.6	0.31
124-48-1	Dibromochloromethane	4.6	U	4.6	0.51
74-95-3	Dibromomethane	4.6	U	4.6	0.58
75-71-8	Dichlorodifluoromethane	4.6	U	4.6	0.46
108-20-3	Diisopropyl ether	9.2	U	9.2	1.4
100-41-4	Ethylbenzene	4.6	U	4.6	0.24
637-92-3	Ethyl-t-butyl ether (ETBE)	4.6	U	4.6	0.20
87-68-3	Hexachlorobutadiene	4.6	U	4.6	1.1
98-82-8	Isopropylbenzene	4.6	U	4.6	0.15
1634-04-4	Methyl tert-butyl ether	18	U	18	0.39
75-09-2	Methylene Chloride	4.6	U	4.6	0.62
179601-23-1	m-Xylene & p-Xylene	9.2	U	9.2	1.1
91-20-3	Naphthalene	4.6	U	4.6	0.17
104-51-8	n-Butylbenzene	4.6	U	4.6	0.21
103-65-1	n-Propylbenzene	4.6	U	4.6	0.37
95-47-6	o-Xylene	4.6	U	4.6	0.32
99-87-6	p-Isopropyltoluene	4.6	U	4.6	0.19
135-98-8	sec-Butylbenzene	4.6	U	4.6	0.17
100-42-5	Styrene	4.6	U	4.6	0.14
994-05-8	Tert-amyl-methyl ether (TAME)	4.6	U	4.6	0.34
75-65-0	tert-Butyl alcohol	180	U	180	7.0
98-06-6	tert-Butylbenzene	4.6	U	4.6	0.27
127-18-4	Tetrachloroethene	4.6	U	4.6	0.48
108-88-3	Toluene	0.28	J	4.6	0.25
156-60-5	trans-1,2-Dichloroethene	4.6	U	4.6	0.38
10061-02-6	trans-1,3-Dichloropropene	4.6	U	4.6	0.50
79-01-6	Trichloroethene	4.6	U	4.6	0.39
75-69-4	Trichlorofluoromethane	4.6	U	4.6	0.31
108-05-4	Vinyl acetate	9.2	U	9.2	0.23
75-01-4	Vinyl chloride	4.6	U	4.6	0.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 Lab Sample ID: 240-13070-6

Matrix: Solid Lab File ID: 146742.D

Analysis Method: 8260B Date Collected: 07/10/2012 10:30

Sample wt/vol: 6.607(g) Date Analyzed: 07/16/2012 20:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.6 Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	9.2	U	9.2	0.62

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		58-123
460-00-4	4-Bromofluorobenzene (Surr)	100		52-136
1868-53-7	Dibromofluoromethane (Surr)	91		37-132
2037-26-5	Toluene-d8 (Surr)	101		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 Lab Sample ID: 240-13070-6

Matrix: Solid Lab File ID: 146742.D

Analysis Method: 8260B Date Collected: 07/10/2012 10:30

Sample wt/vol: 6.607(g) Date Analyzed: 07/16/2012 20:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 17.6 Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

Number TICs Found: 1 TIC Result Total: 0.32

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
110-82-7	Cyclohexane	6.26	0.32	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 | Lab Sample ID: 240-13070-2

Matrix: Solid | Lab File ID: 146763.D

Analysis Method: 8260B | Date Collected: 07/10/2012 09:15

Sample wt/vol: 5.313(g) | Date Analyzed: 07/17/2012 16:36

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.1 | Level: (low/med) Medium

Analysis Batch No.: 51061 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	280	U	280	10
71-55-6	1,1,1-Trichloroethane	280	U	280	24
79-34-5	1,1,2,2-Tetrachloroethane	280	U	280	10
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	280	U	280	44
75-34-3	1,1-Dichloroethane	280	U	280	19
75-35-4	1,1-Dichloroethene	280	U	280	20
563-58-6	1,1-Dichloropropene	280	U	280	11
87-61-6	1,2,3-Trichlorobenzene	280	U	280	11
96-18-4	1,2,3-Trichloropropane	280	U	280	24
526-73-8	1,2,3-Trimethylbenzene	33	J	280	0.19
120-82-1	1,2,4-Trichlorobenzene	280	U	280	8.2
95-63-6	1,2,4-Trimethylbenzene	34	J	280	5.6
96-12-8	1,2-Dibromo-3-Chloropropane	560	U	560	56
106-93-4	1,2-Dibromoethane	280	U	280	11
95-50-1	1,2-Dichlorobenzene	280	U	280	9.6
107-06-2	1,2-Dichloroethane	280	U *	280	11
78-87-5	1,2-Dichloropropane	280	U *	280	9.2
541-73-1	1,3-Dichlorobenzene	280	U	280	5.4
142-28-9	1,3-Dichloropropane	280	U	280	25
106-46-7	1,4-Dichlorobenzene	280	U	280	9.0
594-20-7	2,2-Dichloropropane	280	U	280	26
78-93-3	2-Butanone	1100	U	1100	48
110-75-8	2-Chloroethyl vinyl ether	1100	U	1100	48
95-49-8	2-Chlorotoluene	280	U	280	10
591-78-6	2-Hexanone	1100	U	1100	22
106-43-4	4-Chlorotoluene	280	U	280	11
108-10-1	4-Methyl-2-pentanone	1100	U	1100	54
67-64-1	Acetone	1100	U	1100	190
71-43-2	Benzene	280	U	280	13
108-86-1	Bromobenzene	280	U	280	15
74-97-5	Bromochloromethane	280	U	280	15
75-27-4	Bromodichloromethane	280	U	280	11
75-25-2	Bromoform	280	U	280	21
74-83-9	Bromomethane	280	U	280	33
75-15-0	Carbon disulfide	280	U	280	13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 Lab Sample ID: 240-13070-2

Matrix: Solid Lab File ID: 146763.D

Analysis Method: 8260B Date Collected: 07/10/2012 09:15

Sample wt/vol: 5.313(g) Date Analyzed: 07/17/2012 16:36

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.1 Level: (low/med) Medium

Analysis Batch No.: 51061 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	490		280	7.2
108-90-7	Chlorobenzene	280	U	280	7.2
75-00-3	Chloroethane	280	U	280	68
67-66-3	Chloroform	55	J	280	9.9
74-87-3	Chloromethane	280	U	280	16
156-59-2	cis-1,2-Dichloroethene	280	U	280	7.7
10061-01-5	cis-1,3-Dichloropropene	280	U	280	8.9
124-48-1	Dibromochloromethane	280	U	280	13
74-95-3	Dibromomethane	280	U	280	16
75-71-8	Dichlorodifluoromethane	280	U	280	18
108-20-3	Diisopropyl ether	560	U	560	56
100-41-4	Ethylbenzene	27	J	280	6.1
637-92-3	Ethyl-t-butyl ether (ETBE)	280	U	280	0.25
87-68-3	Hexachlorobutadiene	280	U	280	16
98-82-8	Isopropylbenzene	8.3	J	280	7.3
1634-04-4	Methyl tert-butyl ether	1100	U	1100	8.0
75-09-2	Methylene Chloride	280	U	280	86
179601-23-1	m-Xylene & p-Xylene	67	J B	560	7.0
91-20-3	Naphthalene	23	J B	280	7.5
104-51-8	n-Butylbenzene	280	U	280	9.0
103-65-1	n-Propylbenzene	280	U	280	16
95-47-6	o-Xylene	49	J	280	9.5
99-87-6	p-Isopropyltoluene	26	J	280	5.4
135-98-8	sec-Butylbenzene	280	U	280	5.3
100-42-5	Styrene	280	U	280	6.3
994-05-8	Tert-amyl-methyl ether (TAME)	280	U	280	0.41
75-65-0	tert-Butyl alcohol	11000	U	11000	270
98-06-6	tert-Butylbenzene	280	U	280	7.3
127-18-4	Tetrachloroethene	280	U	280	13
108-88-3	Toluene	280	U	280	19
156-60-5	trans-1,2-Dichloroethene	280	U	280	10
10061-02-6	trans-1,3-Dichloropropene	280	U	280	22
79-01-6	Trichloroethene	280	U	280	11
75-69-4	Trichlorofluoromethane	280	U	280	18
108-05-4	Vinyl acetate	560	U	560	26
75-01-4	Vinyl chloride	280	U	280	20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 Lab Sample ID: 240-13070-2

Matrix: Solid Lab File ID: 146763.D

Analysis Method: 8260B Date Collected: 07/10/2012 09:15

Sample wt/vol: 5.313(g) Date Analyzed: 07/17/2012 16:36

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.1 Level: (low/med) Medium

Analysis Batch No.: 51061 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	120	J	560	9.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		39-128
460-00-4	4-Bromofluorobenzene (Surr)	100		26-141
1868-53-7	Dibromofluoromethane (Surr)	88		30-122
2037-26-5	Toluene-d8 (Surr)	96		33-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 | Lab Sample ID: 240-13070-2

Matrix: Solid | Lab File ID: 146763.D

Analysis Method: 8260B | Date Collected: 07/10/2012 09:15

Sample wt/vol: 5.313(g) | Date Analyzed: 07/17/2012 16:36

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 16.1 | Level: (low/med) Medium

Analysis Batch No.: 51061 | Units: ug/Kg

Number TICs Found: 4 | TIC Result Total: 293

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	5.99	80	J
110-82-7	Cyclohexane	6.27	140	J
108-87-2	Methylcyclohexane	7.42	28	J
108-67-8	1,3,5-Trimethylbenzene	10.94	45	J

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 Lab Sample ID: 240-13070-3

Matrix: Solid Lab File ID: 146770.D

Analysis Method: 8260B Date Collected: 07/10/2012 09:20

Sample wt/vol: 5.823(g) Date Analyzed: 07/17/2012 19:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.1 Level: (low/med) Low

Analysis Batch No.: 51061 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.62
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.3
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.36
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.52
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.30
87-61-6	1,2,3-Trichlorobenzene	5.0	U	5.0	0.38
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	3.9	J	5.0	0.17
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	0.27
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.3
106-93-4	1,2-Dibromoethane	5.0	U	5.0	0.50
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.36
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.34
78-87-5	1,2-Dichloropropane	5.0	U *	5.0	0.69
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.35
142-28-9	1,3-Dichloropropane	5.0	U *	5.0	0.34
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.66
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.94
78-93-3	2-Butanone	20	U	20	1.4
110-75-8	2-Chloroethyl vinyl ether	50	U	50	1.4
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.40
591-78-6	2-Hexanone	20	U	20	0.63
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.41
108-10-1	4-Methyl-2-pentanone	20	U	20	0.54
67-64-1	Acetone	20	U	20	6.3
71-43-2	Benzene	5.4		5.0	0.23
108-86-1	Bromobenzene	5.0	U	5.0	0.33
74-97-5	Bromochloromethane	5.0	U	5.0	0.71
75-27-4	Bromodichloromethane	5.0	U	5.0	0.28
75-25-2	Bromoform	5.0	U	5.0	0.33
74-83-9	Bromomethane	5.0	U	5.0	0.54
75-15-0	Carbon disulfide	4.2	J	5.0	0.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 Lab Sample ID: 240-13070-3

Matrix: Solid Lab File ID: 146770.D

Analysis Method: 8260B Date Collected: 07/10/2012 09:20

Sample wt/vol: 5.823(g) Date Analyzed: 07/17/2012 19:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.1 Level: (low/med) Low

Analysis Batch No.: 51061 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	78		5.0	0.37
108-90-7	Chlorobenzene	5.0	U	5.0	0.33
75-00-3	Chloroethane	5.0	U	5.0	0.86
67-66-3	Chloroform	32		5.0	0.29
74-87-3	Chloromethane	5.0	U	5.0	0.41
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.36
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.34
124-48-1	Dibromochloromethane	5.0	U	5.0	0.55
74-95-3	Dibromomethane	5.0	U	5.0	0.63
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.50
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	5.0	U	5.0	0.26
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.22
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.2
98-82-8	Isopropylbenzene	0.95	J	5.0	0.16
1634-04-4	Methyl tert-butyl ether	20	U	20	0.43
75-09-2	Methylene Chloride	0.71	J	5.0	0.67
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
91-20-3	Naphthalene	1.1	J	5.0	0.19
104-51-8	n-Butylbenzene	0.46	J	5.0	0.23
103-65-1	n-Propylbenzene	5.0	U	5.0	0.40
95-47-6	o-Xylene	2.5	J	5.0	0.35
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.21
135-98-8	sec-Butylbenzene	0.54	J	5.0	0.18
100-42-5	Styrene	5.0	U	5.0	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.37
75-65-0	tert-Butyl alcohol	200	U	200	7.6
98-06-6	tert-Butylbenzene	0.45	J	5.0	0.29
127-18-4	Tetrachloroethene	5.0	U	5.0	0.52
108-88-3	Toluene	0.48	J	5.0	0.27
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.41
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.54
79-01-6	Trichloroethene	5.0	U	5.0	0.42
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.34
108-05-4	Vinyl acetate	10	U	10	0.25
75-01-4	Vinyl chloride	5.0	U	5.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 | Lab Sample ID: 240-13070-3

Matrix: Solid | Lab File ID: 146770.D

Analysis Method: 8260B | Date Collected: 07/10/2012 09:20

Sample wt/vol: 5.823(g) | Date Analyzed: 07/17/2012 19:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.1 | Level: (low/med) Low

Analysis Batch No.: 51061 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.5	J	10	0.67

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		58-123
460-00-4	4-Bromofluorobenzene (Surr)	102		52-136
1868-53-7	Dibromofluoromethane (Surr)	89		37-132
2037-26-5	Toluene-d8 (Surr)	104		67-125

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 Lab Sample ID: 240-13070-3

Matrix: Solid Lab File ID: 146770.D

Analysis Method: 8260B Date Collected: 07/10/2012 09:20

Sample wt/vol: 5.823(g) Date Analyzed: 07/17/2012 19:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.1 Level: (low/med) Low

Analysis Batch No.: 51061 Units: ug/Kg

Number TICs Found: 10 TIC Result Total: 140.3

CAS NO.	COMPOUND NAME	RT	RESULT	Q
78-78-4	Butane, 2-methyl-	2.27	30	T J N
96-14-0	Pentane, 3-methyl-	4.33	11	T J N
108-8-7	Pentane, 2,4-dimethyl-	5.44	8.8	T J N
110-82-7	Cyclohexane	6.26	16	
565-59-3	Pentane, 2,3-dimethyl-	6.33	8.2	T J N
594-82-1	Butane, 2,2,3,3-tetramethyl-	6.70	26	T J N
565-75-3	Pentane, 2,3,4-trimethyl-	7.82	9.7	T J N
560-21-4	Pentane, 2,3,3-trimethyl-	7.93	13	T J N
16747-26-5	Hexane, 2,2,4-trimethyl-	8.28	6.6	T J N
556-67-2	Cyclotetrasiloxane, octamethyl-	10.73	11	T J N

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: TB-071012 | Lab Sample ID: 240-13070-1

Matrix: Water | Lab File ID: UXJ5774.D

Analysis Method: 8260B | Date Collected: 07/10/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 07/13/2012 16:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50744 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: TB-071012 Lab Sample ID: 240-13070-1

Matrix: Water Lab File ID: UXJ5774.D

Analysis Method: 8260B Date Collected: 07/10/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/13/2012 16:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50744 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: TB-071012 Lab Sample ID: 240-13070-1

Matrix: Water Lab File ID: UXJ5774.D

Analysis Method: 8260B Date Collected: 07/10/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/13/2012 16:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50744 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		63-129
460-00-4	4-Bromofluorobenzene (Surr)	104		66-117
2037-26-5	Toluene-d8 (Surr)	94		74-115
1868-53-7	Dibromofluoromethane (Surr)	95		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: TB-071012 Lab Sample ID: 240-13070-1

Matrix: Water Lab File ID: UXJ5774.D

Analysis Method: 8260B Date Collected: 07/10/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/13/2012 16:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50744 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-TCLP-8-10 | Lab Sample ID: 240-13070-4

Matrix: Solid (TCLP) | Lab File ID: 0716014.D

Analysis Method: 8270C | Date Collected: 07/10/2012 09:25

Extract. Method: 3510C | Date Extracted: 07/13/2012 09:58

Sample wt/vol: 250(mL) | Date Analyzed: 07/16/2012 11:16

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 50843 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-46-7	1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034
95-95-4	2,4,5-Trichlorophenol	0.020	U	0.020	0.00030
88-06-2	2,4,6-Trichlorophenol	0.020	U	0.020	0.00080
121-14-2	2,4-Dinitrotoluene	0.020	U	0.020	0.00027
95-48-7	2-Methylphenol	0.0040	U	0.0040	0.00080
15831-10-4	3 & 4 Methylphenol	0.040	U	0.040	0.00075
118-74-1	Hexachlorobenzene	0.020	U	0.020	0.00010
87-68-3	Hexachlorobutadiene	0.020	U	0.020	0.00027
67-72-1	Hexachloroethane	0.020	U	0.020	0.00080
98-95-3	Nitrobenzene	0.0040	U	0.0040	0.000040
87-86-5	Pentachlorophenol	0.040	U	0.040	0.0024
110-86-1	Pyridine	0.020	U	0.020	0.00035

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	46		17-117
321-60-8	2-Fluorobiphenyl (Surr)	40		22-110
367-12-4	2-Fluorophenol (Surr)	42		10-110
4165-60-0	Nitrobenzene-d5 (Surr)	44		29-111
4165-62-2	Phenol-d5 (Surr)	38		10-110
1718-51-0	Terphenyl-d14 (Surr)	67		40-119

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 | Lab Sample ID: 240-13070-5

Matrix: Solid | Lab File ID: 20723021.D

Analysis Method: 8270D | Date Collected: 07/10/2012 10:25

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 29.65(g) | Date Analyzed: 07/23/2012 14:41

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	61	U	61	33
123-91-1	1,4-Dioxane	120	U	120	27
88-06-2	2,4,6-Trichlorophenol	180	U	180	97
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	25	J	180	24
51-28-5	2,4-Dinitrophenol	400	U	400	97
121-14-2	2,4-Dinitrotoluene	240	U	240	33
91-58-7	2-Chloronaphthalene	61	U	61	4.0
95-57-8	2-Chlorophenol	61	U	61	33
91-57-6	2-Methylnaphthalene	18		8.1	4.0
95-48-7	2-Methylphenol	240	U	240	97
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	61	U	61	33
15831-10-4	3 & 4 Methylphenol	480	U	480	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	22
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	97
101-55-3	4-Bromophenyl phenyl ether	61	U	61	16
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	21
7005-72-3	4-Chlorophenyl phenyl ether	61	U	61	16
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	8.1	U	8.1	4.0
208-96-8	Acenaphthylene	15		8.1	4.0
98-86-2	Acetophenone	25	J	120	11
120-12-7	Anthracene	25		8.1	4.0
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U	120	15
56-55-3	Benzo[a]anthracene	110		8.1	4.0
50-32-8	Benzo[a]pyrene	150		8.1	4.0
205-99-2	Benzo[b]fluoranthene	190		8.1	4.0
191-24-2	Benzo[g,h,i]perylene	130		8.1	4.0
207-08-9	Benzo[k]fluoranthene	99		8.1	4.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 | Lab Sample ID: 240-13070-5

Matrix: Solid | Lab File ID: 20723021.D

Analysis Method: 8270D | Date Collected: 07/10/2012 10:25

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 29.65(g) | Date Analyzed: 07/23/2012 14:41

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	27
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	38	J	61	23
85-68-7	Butyl benzyl phthalate	61	U	61	12
105-60-2	Caprolactam	400	U	400	45
86-74-8	Carbazole	61	U	61	33
218-01-9	Chrysene	160		8.1	1.3
84-74-2	Di-n-butyl phthalate	35	J	61	18
117-84-0	Di-n-octyl phthalate	61	U	61	33
53-70-3	Dibenzo(a,h)anthracene	28		8.1	4.0
132-64-9	Dibenzofuran	61	U	61	4.0
84-66-2	Diethyl phthalate	61	U	61	19
131-11-3	Dimethyl phthalate	61	U	61	21
206-44-0	Fluoranthene	190		8.1	4.0
86-73-7	Fluorene	8.1	U	8.1	4.0
118-74-1	Hexachlorobenzene	8.1	U	8.1	2.5
87-68-3	Hexachlorobutadiene	61	U	61	33
77-47-4	Hexachlorocyclopentadiene	400	U	400	33
67-72-1	Hexachloroethane	61	U	61	11
193-39-5	Indeno[1,2,3-cd]pyrene	98		8.1	4.0
78-59-1	Isophorone	61	U	61	16
621-64-7	N-Nitrosodi-n-propylamine	61	U	61	33
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	61	U	61	25
91-20-3	Naphthalene	30		8.1	4.0
98-95-3	Nitrobenzene	120	U	120	2.7
87-86-5	Pentachlorophenol	180	U	180	97
85-01-8	Phenanthrene	65		8.1	4.0
108-95-2	Phenol	37	J	61	33
129-00-0	Pyrene	210		8.1	4.0
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	400	U	400	97

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 | Lab Sample ID: 240-13070-5

Matrix: Solid | Lab File ID: 20723021.D

Analysis Method: 8270D | Date Collected: 07/10/2012 10:25

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 29.65(g) | Date Analyzed: 07/23/2012 14:41

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	85		41-119
4165-62-2	Phenol-d5 (Surr)	75		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	58		24-112
367-12-4	2-Fluorophenol (Surr)	69		26-110
321-60-8	2-Fluorobiphenyl (Surr)	58		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	81		10-118

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 | Lab Sample ID: 240-13070-6

Matrix: Solid | Lab File ID: 20723020.D

Analysis Method: 8270D | Date Collected: 07/10/2012 10:30

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.27(g) | Date Analyzed: 07/23/2012 14:22

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	60	U	60	32
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	96
95-95-4	2,4,5-Trichlorophenol	180	U	180	30
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	400	U	400	96
121-14-2	2,4-Dinitrotoluene	240	U	240	32
91-58-7	2-Chloronaphthalene	60	U	60	4.0
95-57-8	2-Chlorophenol	60	U	60	32
91-57-6	2-Methylnaphthalene	8.0	U	8.0	4.0
95-48-7	2-Methylphenol	240	U	240	96
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	60	U	60	32
15831-10-4	3 & 4 Methylphenol	480	U	480	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	22
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	96
101-55-3	4-Bromophenyl phenyl ether	60	U	60	16
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	60	U	60	16
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	8.0	U	8.0	4.0
208-96-8	Acenaphthylene	17		8.0	4.0
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	39		8.0	4.0
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U	120	14
56-55-3	Benzo[a]anthracene	240		8.0	4.0
50-32-8	Benzo[a]pyrene	310		8.0	4.0
205-99-2	Benzo[b]fluoranthene	440		8.0	4.0
191-24-2	Benzo[g,h,i]perylene	280		8.0	4.0
207-08-9	Benzo[k]fluoranthene	230		8.0	4.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 | Lab Sample ID: 240-13070-6

Matrix: Solid | Lab File ID: 20723020.D

Analysis Method: 8270D | Date Collected: 07/10/2012 10:30

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.27(g) | Date Analyzed: 07/23/2012 14:22

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	58	J	60	23
85-68-7	Butyl benzyl phthalate	60	U	60	12
105-60-2	Caprolactam	400	U	400	45
86-74-8	Carbazole	60	U	60	32
218-01-9	Chrysene	350		8.0	1.3
84-74-2	Di-n-butyl phthalate	29	J	60	18
117-84-0	Di-n-octyl phthalate	60	U	60	32
53-70-3	Dibenzo(a,h)anthracene	62		8.0	4.0
132-64-9	Dibenzofuran	60	U	60	4.0
84-66-2	Diethyl phthalate	60	U	60	19
131-11-3	Dimethyl phthalate	60	U	60	20
206-44-0	Fluoranthene	510		8.0	4.0
86-73-7	Fluorene	10		8.0	4.0
118-74-1	Hexachlorobenzene	8.0	U	8.0	2.5
87-68-3	Hexachlorobutadiene	60	U	60	32
77-47-4	Hexachlorocyclopentadiene	400	U	400	32
67-72-1	Hexachloroethane	60	U	60	11
193-39-5	Indeno[1,2,3-cd]pyrene	230		8.0	4.0
78-59-1	Isophorone	60	U	60	16
621-64-7	N-Nitrosodi-n-propylamine	60	U	60	32
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	60	U	60	25
91-20-3	Naphthalene	8.0	U	8.0	4.0
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	96
85-01-8	Phenanthrene	150		8.0	4.0
108-95-2	Phenol	60	U	60	32
129-00-0	Pyrene	450		8.0	4.0
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	400	U	400	96

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 Lab Sample ID: 240-13070-6

Matrix: Solid Lab File ID: 20723020.D

Analysis Method: 8270D Date Collected: 07/10/2012 10:30

Extract. Method: 3540C Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.27(g) Date Analyzed: 07/23/2012 14:22

Con. Extract Vol.: 2.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: 17.6 GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	81		41-119
4165-62-2	Phenol-d5 (Surr)	58		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	44		24-112
367-12-4	2-Fluorophenol (Surr)	54		26-110
321-60-8	2-Fluorobiphenyl (Surr)	44		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	75		10-118

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 | Lab Sample ID: 240-13070-2

Matrix: Solid | Lab File ID: 20723018.D

Analysis Method: 8270D | Date Collected: 07/10/2012 09:15

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.41(g) | Date Analyzed: 07/23/2012 13:44

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	59	U	59	32
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	94
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	24
105-67-9	2,4-Dimethylphenol	180	U	180	24
51-28-5	2,4-Dinitrophenol	390	U	390	94
121-14-2	2,4-Dinitrotoluene	240	U	240	32
91-58-7	2-Chloronaphthalene	59	U	59	3.9
95-57-8	2-Chlorophenol	59	U	59	32
91-57-6	2-Methylnaphthalene	7.8	U	7.8	3.9
95-48-7	2-Methylphenol	240	U	240	94
88-74-4	2-Nitroaniline	240	U	240	11
88-75-5	2-Nitrophenol	59	U	59	32
15831-10-4	3 & 4 Methylphenol	470	U	470	24
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	240	U	240	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	94
101-55-3	4-Bromophenyl phenyl ether	59	U	59	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	59	U	59	15
100-01-6	4-Nitroaniline	240	U	240	31
83-32-9	Acenaphthene	7.8	U	7.8	3.9
208-96-8	Acenaphthylene	7.8	U	7.8	3.9
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.8	U	7.8	3.9
1912-24-9	Atrazine	240	U	240	11
100-52-7	Benzaldehyde	120	U	120	14
56-55-3	Benzo[a]anthracene	7.8	U	7.8	3.9
50-32-8	Benzo[a]pyrene	7.8	U	7.8	3.9
205-99-2	Benzo[b]fluoranthene	7.8	U	7.8	3.9
191-24-2	Benzo[g,h,i]perylene	7.8	U	7.8	3.9
207-08-9	Benzo[k]fluoranthene	7.8	U	7.8	3.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 | Lab Sample ID: 240-13070-2

Matrix: Solid | Lab File ID: 20723018.D

Analysis Method: 8270D | Date Collected: 07/10/2012 09:15

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.41(g) | Date Analyzed: 07/23/2012 13:44

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	34	J	59	22
85-68-7	Butyl benzyl phthalate	59	U	59	12
105-60-2	Caprolactam	390	U	390	43
86-74-8	Carbazole	59	U	59	32
218-01-9	Chrysene	7.8	U	7.8	1.3
84-74-2	Di-n-butyl phthalate	20	J	59	18
117-84-0	Di-n-octyl phthalate	59	U	59	32
53-70-3	Dibenzo(a,h)anthracene	7.8	U	7.8	3.9
132-64-9	Dibenzofuran	59	U	59	3.9
84-66-2	Diethyl phthalate	59	U	59	19
131-11-3	Dimethyl phthalate	59	U	59	20
206-44-0	Fluoranthene	8.7		7.8	3.9
86-73-7	Fluorene	7.8	U	7.8	3.9
118-74-1	Hexachlorobenzene	7.8	U	7.8	2.5
87-68-3	Hexachlorobutadiene	59	U	59	32
77-47-4	Hexachlorocyclopentadiene	390	U	390	32
67-72-1	Hexachloroethane	59	U	59	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.8	U	7.8	3.9
78-59-1	Isophorone	59	U	59	15
621-64-7	N-Nitrosodi-n-propylamine	59	U	59	32
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	59	U	59	25
91-20-3	Naphthalene	7.8	U	7.8	3.9
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	94
85-01-8	Phenanthrene	7.8	U	7.8	3.9
108-95-2	Phenol	59	U	59	32
129-00-0	Pyrene	7.8	U	7.8	3.9
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	390	U	390	94

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 | Lab Sample ID: 240-13070-2

Matrix: Solid | Lab File ID: 20723018.D

Analysis Method: 8270D | Date Collected: 07/10/2012 09:15

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.41(g) | Date Analyzed: 07/23/2012 13:44

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	84		41-119
4165-62-2	Phenol-d5 (Surr)	71		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	54		24-112
367-12-4	2-Fluorophenol (Surr)	68		26-110
321-60-8	2-Fluorobiphenyl (Surr)	46		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	68		10-118

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 | Lab Sample ID: 240-13070-3

Matrix: Solid | Lab File ID: 20723019.D

Analysis Method: 8270D | Date Collected: 07/10/2012 09:20

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 29.75(g) | Date Analyzed: 07/23/2012 14:03

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	59	U	59	32
123-91-1	1,4-Dioxane	120	U	120	26
88-06-2	2,4,6-Trichlorophenol	180	U	180	94
95-95-4	2,4,5-Trichlorophenol	180	U	180	29
120-83-2	2,4-Dichlorophenol	180	U	180	23
105-67-9	2,4-Dimethylphenol	180	U	180	23
51-28-5	2,4-Dinitrophenol	390	U	390	94
121-14-2	2,4-Dinitrotoluene	230	U	230	32
91-58-7	2-Chloronaphthalene	59	U	59	3.9
95-57-8	2-Chlorophenol	59	U	59	32
91-57-6	2-Methylnaphthalene	7.8	U	7.8	3.9
95-48-7	2-Methylphenol	230	U	230	94
88-74-4	2-Nitroaniline	230	U	230	11
88-75-5	2-Nitrophenol	59	U	59	32
15831-10-4	3 & 4 Methylphenol	470	U	470	23
91-94-1	3,3'-Dichlorobenzidine	120	U	120	21
99-09-2	3-Nitroaniline	230	U	230	19
534-52-1	4,6-Dinitro-2-methylphenol	180	U	180	94
101-55-3	4-Bromophenyl phenyl ether	59	U	59	15
59-50-7	4-Chloro-3-methylphenol	180	U	180	25
106-47-8	4-Chloroaniline	180	U	180	20
7005-72-3	4-Chlorophenyl phenyl ether	59	U	59	15
100-01-6	4-Nitroaniline	230	U	230	31
83-32-9	Acenaphthene	7.8	U	7.8	3.9
208-96-8	Acenaphthylene	7.8	U	7.8	3.9
98-86-2	Acetophenone	120	U	120	11
120-12-7	Anthracene	7.8	U	7.8	3.9
1912-24-9	Atrazine	230	U	230	11
100-52-7	Benzaldehyde	120	U	120	14
56-55-3	Benzo[a]anthracene	7.8	U	7.8	3.9
50-32-8	Benzo[a]pyrene	7.8	U	7.8	3.9
205-99-2	Benzo[b]fluoranthene	7.8	U	7.8	3.9
191-24-2	Benzo[g,h,i]perylene	7.8	U	7.8	3.9
207-08-9	Benzo[k]fluoranthene	7.8	U	7.8	3.9

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 | Lab Sample ID: 240-13070-3

Matrix: Solid | Lab File ID: 20723019.D

Analysis Method: 8270D | Date Collected: 07/10/2012 09:20

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 29.75(g) | Date Analyzed: 07/23/2012 14:03

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	26
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.3
117-81-7	Bis(2-ethylhexyl) phthalate	25	J	59	22
85-68-7	Butyl benzyl phthalate	59	U	59	12
105-60-2	Caprolactam	390	U	390	43
86-74-8	Carbazole	59	U	59	32
218-01-9	Chrysene	7.8	U	7.8	1.3
84-74-2	Di-n-butyl phthalate	59	U	59	18
117-84-0	Di-n-octyl phthalate	59	U	59	32
53-70-3	Dibenzo(a,h)anthracene	7.8	U	7.8	3.9
132-64-9	Dibenzofuran	59	U	59	3.9
84-66-2	Diethyl phthalate	59	U	59	19
131-11-3	Dimethyl phthalate	59	U	59	20
206-44-0	Fluoranthene	7.8	U	7.8	3.9
86-73-7	Fluorene	7.8	U	7.8	3.9
118-74-1	Hexachlorobenzene	7.8	U	7.8	2.5
87-68-3	Hexachlorobutadiene	59	U	59	32
77-47-4	Hexachlorocyclopentadiene	390	U	390	32
67-72-1	Hexachloroethane	59	U	59	11
193-39-5	Indeno[1,2,3-cd]pyrene	7.8	U	7.8	3.9
78-59-1	Isophorone	59	U	59	15
621-64-7	N-Nitrosodi-n-propylamine	59	U	59	32
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	59	U	59	25
91-20-3	Naphthalene	7.8	U	7.8	3.9
98-95-3	Nitrobenzene	120	U	120	2.6
87-86-5	Pentachlorophenol	180	U	180	94
85-01-8	Phenanthrene	7.8	U	7.8	3.9
108-95-2	Phenol	59	U	59	32
129-00-0	Pyrene	7.8	U	7.8	3.9
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	230	U	230	25
100-02-7	4-Nitrophenol	390	U	390	94

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 | Lab Sample ID: 240-13070-3

Matrix: Solid | Lab File ID: 20723019.D

Analysis Method: 8270D | Date Collected: 07/10/2012 09:20

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 29.75(g) | Date Analyzed: 07/23/2012 14:03

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	86		41-119
4165-62-2	Phenol-d5 (Surr)	66		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	51		24-112
367-12-4	2-Fluorophenol (Surr)	62		26-110
321-60-8	2-Fluorobiphenyl (Surr)	49		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	65		10-118

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 Lab Sample ID: 240-13070-5

Matrix: Solid Lab File ID: YF071814.D

Analysis Method: 8015C Date Collected: 07/10/2012 10:25

Sample wt/vol: 5(g) Date Analyzed: 07/18/2012 21:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 16.4 Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	130		120	55

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	74		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 Lab Sample ID: 240-13070-6

Matrix: Solid Lab File ID: YF071815.D

Analysis Method: 8015C Date Collected: 07/10/2012 10:30

Sample wt/vol: 5(g) Date Analyzed: 07/18/2012 22:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 17.6 Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	56

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	85		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 Lab Sample ID: 240-13070-2

Matrix: Solid Lab File ID: YF071812.D

Analysis Method: 8015C Date Collected: 07/10/2012 09:15

Sample wt/vol: 5(g) Date Analyzed: 07/18/2012 20:06

Soil Aliquot Vol: Dilution Factor: 2

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 16.1 Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	380		240	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	78		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 Lab Sample ID: 240-13070-3

Matrix: Solid Lab File ID: YF071813.D

Analysis Method: 8015C Date Collected: 07/10/2012 09:20

Sample wt/vol: 5(g) Date Analyzed: 07/18/2012 20:45

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.1 Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	120	U	120	54

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	83		10-150

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 Lab Sample ID: 240-13070-5

Matrix: Solid Lab File ID: P5B72605.D

Analysis Method: 8015C Date Collected: 07/10/2012 10:25

Extraction Method: 3540C Date Extracted: 07/20/2012 11:12

Sample wt/vol: 29.95(g) Date Analyzed: 07/26/2012 16:09

Con. Extract Vol.: 5.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: 16.4 GPC Cleanup:(Y/N) N

Analysis Batch No.: 52120 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	240		20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	35		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 | Lab Sample ID: 240-13070-6

Matrix: Solid | Lab File ID: P5B72606.D

Analysis Method: 8015C | Date Collected: 07/10/2012 10:30

Extraction Method: 3540C | Date Extracted: 07/20/2012 11:12

Sample wt/vol: 30.12(g) | Date Analyzed: 07/26/2012 16:40

Con. Extract Vol.: 5.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: ID:

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 52120 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	28		20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	38		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 Lab Sample ID: 240-13070-2

Matrix: Solid Lab File ID: P5B72508.D

Analysis Method: 8015C Date Collected: 07/10/2012 09:15

Extraction Method: 3540C Date Extracted: 07/20/2012 11:12

Sample wt/vol: 29.67(g) Date Analyzed: 07/25/2012 15:34

Con. Extract Vol.: 5.0(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: 16.1 GPC Cleanup:(Y/N) N

Analysis Batch No.: 51968 Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	20	U	20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	36		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 | Lab Sample ID: 240-13070-3

Matrix: Solid | Lab File ID: P5B72511.D

Analysis Method: 8015C | Date Collected: 07/10/2012 09:20

Extraction Method: 3540C | Date Extracted: 07/20/2012 11:12

Sample wt/vol: 30.21(g) | Date Analyzed: 07/25/2012 17:05

Con. Extract Vol.: 5.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: ID:

% Moisture: 14.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51968 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	19	U	19	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	32		10-110

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-TCLP-8-10 Lab Sample ID: 240-13070-4

Matrix: Solid (TCLP) Lab File ID: P9701627.D

Analysis Method: 8081A Date Collected: 07/10/2012 09:25

Extraction Method: 3510C Date Extracted: 07/13/2012 10:01

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2012 19:35

Con. Extract Vol.: 3(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 50850 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
57-74-9	Chlordane (technical)	0.012	U	0.012	0.000079
72-20-8	Endrin	0.0012	U	0.0012	0.000026
58-89-9	gamma-BHC (Lindane)	0.0012	U	0.0012	0.000015
76-44-8	Heptachlor	0.0012	U	0.0012	0.000019
1024-57-3	Heptachlor epoxide	0.0012	U	0.0012	0.000017
72-43-5	Methoxychlor	0.0024	U	0.0024	0.000077
8001-35-2	Toxaphene	0.048	U	0.048	0.00077

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	88		34-141
877-09-8	Tetrachloro-m-xylene	81		46-122

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-TCLP-8-10 Lab Sample ID: 240-13070-4

Matrix: Solid (TCLP) Lab File ID: P9701627.D

Analysis Method: 8081A Date Collected: 07/10/2012 09:25

Extraction Method: 3510C Date Extracted: 07/13/2012 10:01

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2012 19:35

Con. Extract Vol.: 3(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 50850 Units: mg/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	103		34-141
877-09-8	Tetrachloro-m-xylene	91		46-122

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 | Lab Sample ID: 240-13070-5

Matrix: Solid | Lab File ID: P1100006.D

Analysis Method: 8082A | Date Collected: 07/10/2012 10:25

Extraction Method: 3540C | Date Extracted: 07/19/2012 10:47

Sample wt/vol: 29.81(g) | Date Analyzed: 07/23/2012 14:21

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 16.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51690 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	40	U	40	25
11104-28-2	Aroclor-1221	40	U	40	19
11141-16-5	Aroclor-1232	40	U	40	17
53469-21-9	Aroclor-1242	40	U	40	16
12672-29-6	Aroclor-1248	40	U	40	20
11097-69-1	Aroclor-1254	40	U	40	20
11096-82-5	Aroclor-1260	40	U	40	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	76		29-151
2051-24-3	Decachlorobiphenyl	90		14-163

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-8-10 | Lab Sample ID: 240-13070-6

Matrix: Solid | Lab File ID: P1100007.D

Analysis Method: 8082A | Date Collected: 07/10/2012 10:30

Extraction Method: 3540C | Date Extracted: 07/19/2012 10:47

Sample wt/vol: 29.64(g) | Date Analyzed: 07/23/2012 14:35

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51690 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	41	U	41	26
11104-28-2	Aroclor-1221	41	U	41	20
11141-16-5	Aroclor-1232	41	U	41	17
53469-21-9	Aroclor-1242	41	U	41	16
12672-29-6	Aroclor-1248	41	U	41	21
11097-69-1	Aroclor-1254	41	U	41	21
11096-82-5	Aroclor-1260	41	U	41	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	75		29-151
2051-24-3	Decachlorobiphenyl	108		14-163

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 | Lab Sample ID: 240-13070-2

Matrix: Solid | Lab File ID: P1100004.D

Analysis Method: 8082A | Date Collected: 07/10/2012 09:15

Extraction Method: 3540C | Date Extracted: 07/19/2012 10:47

Sample wt/vol: 29.72(g) | Date Analyzed: 07/23/2012 13:54

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 16.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51690 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	40	U	40	25
11104-28-2	Aroclor-1221	40	U	40	19
11141-16-5	Aroclor-1232	40	U	40	17
53469-21-9	Aroclor-1242	40	U	40	16
12672-29-6	Aroclor-1248	40	U	40	20
11097-69-1	Aroclor-1254	40	U	40	20
11096-82-5	Aroclor-1260	40	U	40	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	69		29-151
2051-24-3	Decachlorobiphenyl	83		14-163

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 | Lab Sample ID: 240-13070-3

Matrix: Solid | Lab File ID: P1100005.D

Analysis Method: 8082A | Date Collected: 07/10/2012 09:20

Extraction Method: 3540C | Date Extracted: 07/19/2012 10:47

Sample wt/vol: 29.59(g) | Date Analyzed: 07/23/2012 14:07

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: 14.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51690 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	39	U	39	25
11104-28-2	Aroclor-1221	39	U	39	19
11141-16-5	Aroclor-1232	39	U	39	17
53469-21-9	Aroclor-1242	39	U	39	15
12672-29-6	Aroclor-1248	39	U	39	20
11097-69-1	Aroclor-1254	39	U	39	20
11096-82-5	Aroclor-1260	39	U	39	20

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	85		29-151
2051-24-3	Decachlorobiphenyl	97		14-163

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-TCLP-8-10 Lab Sample ID: 240-13070-4

Matrix: Solid (TCLP) Lab File ID: P1000023.D

Analysis Method: 8151A Date Collected: 07/10/2012 09:25

Extraction Method: 8151A Date Extracted: 07/13/2012 10:04

Sample wt/vol: 100(mL) Date Analyzed: 07/23/2012 20:26

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 51638 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
94-75-7	2,4-D	0.0020	U	0.0020	0.00021
93-72-1	Silvex (2,4,5-TP)	0.00050	U	0.00050	0.00010

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid	48		37-116

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-TCLP-8-10 Lab Sample ID: 240-13070-4

Matrix: Solid (TCLP) Lab File ID: P1000023.D

Analysis Method: 8151A Date Collected: 07/10/2012 09:25

Extraction Method: 8151A Date Extracted: 07/13/2012 10:04

Sample wt/vol: 100(mL) Date Analyzed: 07/23/2012 20:26

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-2 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 51638 Units: mg/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid	67		37-116

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: LM MSA Main Terminal Phase II Investigat

Report Number: 240-13070-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 07/11/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.6 C.

Samples MT-TCLP-8-10 was not logged for PCB's per client. Samples MT-SS18-0-2, MM-SB18-8-10, MT-SB17-0-2, and MT-SB17-8-10 were logged for DRO per client.

TCLP VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 1311/8260B. The samples were leached on 07/12/2012 and analyzed on 07/13/2012.

No difficulties were encountered during the VOCs analysis. All quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 07/11/2012 and 07/12/2012 and analyzed on 07/16/2012 and 07/17/2012.

1,2,4-Trichlorobenzene was detected in method blank MB 240-50627/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. 1,3-Dichlorobenzene, m-Xylene & p-Xylene and Naphthalene were detected in method blank MB 240-50627/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes were detected in method blank MB 240-50900/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes were detected in method blank MB 240-51061/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

The laboratory control sample (LCS) for batch 50627 recovered outside acceptance limits for 1,2-Dichloroethane and 1,2-Dichloropropane. There was insufficient sample to perform a re-extraction or re-analysis; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 50900 exceeded control limits for the following analytes: Chlorobenzene, 1,3-Dichloropropane, and 1,2-Dichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 51061 exceeded control limits for the following analytes: 1,2-Dichloropropane and 1,3-Dichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

There was a MS/MSD prepared for batch 50627 but could not be reported because of the high dilution factor in the parent sample.

Vinyl acetate failed the recovery criteria low for the MS/MSD of sample 240-13217-1 in batch 240-50900. Vinyl acetate exceeded the rpd limit.

Vinyl acetate failed the recovery criteria low for the MS/MSD of sample 240-13194-2 in batch 240-51061.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample TB-071012 (240-13070-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 07/13/2012.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS of sample 240-13078-2 in batch 240-50744. Several analytes failed the recovery criteria low for the MSD of sample 240-13078-2 in batch 240-50744. 1,1,2-Trichloro-1,2,2-trichfluoroethane and Dichlorodifluoromethane exceeded the rpd limit.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

TCLP SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 1311/8270C. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/16/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No difficulties were encountered during the SVOCs analysis. All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 07/19/2012 and analyzed on 07/23/2012.

Hexachlorocyclopentadiene failed the recovery criteria low for the MS/MSD of sample MT-SB17-0-2 (240-13070-5) in batch 240-51606.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for gasoline range organics (GRO) in accordance with EPA-SW-846 Method 8015C - GRO. The samples were analyzed on 07/18/2012.

Sample MT-SS18-0-2 (240-13070-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the GRO analyses. All quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The samples were prepared on 07/20/2012 and analyzed on 07/25/2012 and 07/26/2012.

No difficulties were encountered during the DRO analyses. All quality control parameters were within the acceptance limits.

TCLP CHLORINATED PESTICIDES

Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP chlorinated pesticides in accordance with EPA SW-846 Methods 1311/ 8081A. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/16/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are

diluted out and no corrective action is required.

The grand mean exception, as outlined in EPA Method 8000B, was applied to the opening and closing continuing calibration verification (CCV) standards associated with batch 50850 This rule states that when one or more compounds in the CCV fail to meet acceptance criteria, the initial calibration (ICAL) may be used for quantitation if the average %D (the grand mean) of all the compounds in the CCV is less than or equal to 15 %D. Sample MT-TCLP-8-10 (240-13070-4), associated with these CCVs, was non-detect for the affected analytes; therefore, the data were reported.

No other difficulties were encountered during the pesticides analysis. All quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 07/19/2012 and analyzed on 07/23/2012.

The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: MT-SB17-0-2 (240-13070-5), MT-SB17-8-10 (240-13070-6), and MT-SS18-0-2 (240-13070-2). Lot # S65830.

No other difficulties were encountered during the PCBs analyses. All quality control parameters were within the acceptance limits.

TCLP CHLORINATED HERBICIDES

Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP chlorinated herbicides in accordance with EPA SW-846 Methods 1311/ 8151A. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/23/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

No difficulties were encountered during the herbicides analysis. All quality control parameters were within the acceptance limits.

TCLP METALS (ICP)

Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP metals (ICP) in accordance with EPA SW-846 Methods 1311/ 6010B. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/16/2012.

Barium was detected in method blank LB 240-50668/1-D at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 07/12/2012 and analyzed on 07/16/2012 and 07/17/2012.

Antimony, Barium and Beryllium were detected in method blank MB 240-50598/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Several analytes failed the recovery criteria low for the MS of sample 240-13043-2 in batch 240-51051. Antimony, Chromium, Selenium and Vanadium failed the recovery criteria low for the MSD of sample 240-13043-2 in batch 240-51051.

The continuing calibration verification (CCV) for Silver and Arsenic associated with batch 50963 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data for the following associated sample have been reported. MT-TCLP-8-10 (240-13070-4)

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

TCLP MERCURY

Sample MT-TCLP-8-10 (240-13070-4) was analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 07/12/2012, prepared on 07/13/2012 and analyzed on 07/16/2012.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

MERCURY

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for mercury in accordance with EPA SW-846 Method 7471B. The samples were prepared on 07/12/2012 and analyzed on 07/13/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples MT-SS18-0-2 (240-13070-2), MT-SS18-8-10 (240-13070-3), MT-SB17-0-2 (240-13070-5) and MT-SB17-8-10 (240-13070-6) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 07/11/2012 and 07/12/2012.

No difficulties were encountered during the % solids analyses. All quality control parameters were within the acceptance limits.

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-13070-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Closed System Purge and Trap	TAL NC		SW846 5035
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
TCLP Extraction	TAL NC		SW846 1311
Purge and Trap	TAL NC		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270C	
TCLP Extraction	TAL NC		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL NC		SW846 3510C
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270D	
Soxhlet Extraction	TAL NC		SW846 3540C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL NC	SW846 8015C	
Purge and Trap	TAL NC		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL NC	SW846 8015C	
Soxhlet Extraction	TAL NC		SW846 3540C
Organochlorine Pesticides (GC)	TAL NC	SW846 8081A	
TCLP Extraction	TAL NC		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL NC		SW846 3510C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL NC	SW846 8082A	
Soxhlet Extraction	TAL NC		SW846 3540C
Herbicides (GC)	TAL NC	SW846 8151A	
TCLP Extraction	TAL NC		SW846 1311
Extraction (Herbicides)	TAL NC		SW846 8151A
Metals (ICP)	TAL NC	SW846 6010B	
TCLP Extraction	TAL NC		SW846 1311
Preparation, Total Metals	TAL NC		SW846 3010A
Metals (ICP)	TAL NC	SW846 6010C	
Preparation, Metals	TAL NC		SW846 3050B
Mercury (CVAA)	TAL NC	SW846 7470A	
TCLP Extraction	TAL NC		SW846 1311
Preparation, Mercury	TAL NC		SW846 7470A
Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	TAL NC	SW846 7471B	
Preparation, Mercury	TAL NC		SW846 7471B
Percent Moisture	TAL NC	EPA Moisture	
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Purge and Trap	TAL NC		SW846 5030B

Lab References:

TAL NC = TestAmerica Canton

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: _____

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: Tetra Tech Inc.	Client Project Manager: Tony Apanavage	Site Contact: STU Cameron	Lab Contact: Pat O'meara	COC No:
Address: 20251 Century Blvd.	Telephone: 301 528-3021	Telephone:	Telephone: 330 497-9396	1 of 1 COCs
City/State/Zip: Germantown MD 20874	Email:			
Phone: 301 528-3021		TAT if different from below _____ ☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		
Project Name: MT Soil Sampling	Method of Shipment/Carrier: Fed EX			
Project Number: 112IC04054-04	Shipping/Tracking No:			
PO#				

Sample Identification	Sample Date	Sample Time	Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other: meoH/H2O			VOCs	SVOCs, PCBs	metals	Geo	VOCs	Pest	Herb				Sample Specific Notes / Special Instructions:
TB-071012	7-10-12	—		X						2					N	G	X										
MT-SS18-~~02~~ 0-2		0915				X							4	3			X	X	X	X	X						
MT-SB18-8-10		0920				X							4	3			X	X	X	X	X						
MT-TCLP-8-10		0925				X							2					X	X		X	X	X				
~~MT-SB17-0-2~~ MT-SS17-0-2		1025				X							4	3			X	X	X	X	X						
~~MT-SB17-8-10~~ MT-SS17-8-10		1030				X							4	3			X	X	X	X	X						

AC 11-29-12

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return to Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	7-10-12/1200			
			Received in Laboratory by: [signature]	Company: TA	Date/Time: 7/11/12 800

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07/30/2012

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TAL-0018 (1008)

TestAmerica North Canton Sample Receipt Form/Narrative Login # : 13070

Client TETRA TECH INC. Site Name MTSoil Sampling By: Terrell Vick
Cooler Received on 7-11-12 Opened on 7-11-12 (Signature)
FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other
TestAmerica Cooler # Foam Box (Client Cooler) Box Other
Packing material used: (Bubble Wrap) Foam (Plastic Bag) None Other
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   IR GUN# 1 (CF 0°C) Observed Sample Temp. ____ °C Corrected Sample Temp. ____ °C
   IR GUN# 4G (CF –1°C) Observed Sample Temp. ____ °C Corrected Sample Temp. ____ °C ☐ Multiple on Back
   IR GUN# 5G (CF –1°C) Observed Sample Temp. 1.6 °C Corrected Sample Temp. 0.6 °C
   IR GUN# 8 (CF 0°C) Observed Sample Temp. ____ °C Corrected Sample Temp. ____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? Yes No (NA)
11. Were VOAs on the COC? Yes (No)
12. Were air bubbles >6 mm in any VOA vials? Yes No (NA)
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM PM Date 7/12/12 by CSL (via Verbal) Voice Mail Other
Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Per PM/Client log dro, for tclp sample log TCLP

15. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-13070-1

Login Number: 13070

List Source: TestAmerica Canton

List Number: 1

Creator: Livengood, Chris

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

HOLDTIME

SDG 240-13070-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/12/2012	7/13/2012	2	1	3
HG	MG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/12/2012	7/13/2012	2	1	3
HG	MG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/12/2012	7/13/2012	2	1	3
HG	MG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/12/2012	7/13/2012	2	1	3
M	MG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/12/2012	7/16/2012	2	4	6
M	MG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/12/2012	7/16/2012	2	4	6
M	MG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/12/2012	7/16/2012	2	4	6
M	MG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/12/2012	7/17/2012	2	5	7
M	MG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/12/2012	7/16/2012	2	4	6
M	MG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/12/2012	7/17/2012	2	5	7
OS	UG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
OS	UG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
OS	UG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
OS	UG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
OV	UG/KG	MT-SS18-0-2	240-13070-2	NM	7/12/2012	7/12/2012	7/17/2012	0	5	5

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/KG	MT-SB17-8-10	240-13070-6	NM	7/11/2012	7/11/2012	7/16/2012	0	5	5
OV	UG/KG	MT-SB17-0-2	240-13070-5	NM	7/11/2012	7/11/2012	7/16/2012	0	5	5
OV	UG/KG	MT-SS18-8-10	240-13070-3	NM	7/11/2012	7/11/2012	7/17/2012	0	6	6
OV	UG/L	TB-071012	240-13070-1	NM	7/10/2012	7/13/2012	7/13/2012	3	0	3
PCB	UG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
PCB	UG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
PCB	UG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
PCB	UG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/19/2012	7/23/2012	9	4	13
DRO	MG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/20/2012	7/26/2012	10	6	16
DRO	MG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/20/2012	7/25/2012	10	5	15
DRO	MG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/20/2012	7/25/2012	10	5	15
DRO	MG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/20/2012	7/26/2012	10	6	16
GRO	UG/KG	MT-SS18-8-10	240-13070-3	NM	7/10/2012	7/18/2012	7/18/2012	8	0	8
GRO	UG/KG	MT-SS18-0-2	240-13070-2	NM	7/10/2012	7/18/2012	7/18/2012	8	0	8
GRO	UG/KG	MT-SB17-8-10	240-13070-6	NM	7/10/2012	7/18/2012	7/18/2012	8	0	8
GRO	UG/KG	MT-SB17-0-2	240-13070-5	NM	7/10/2012	7/18/2012	7/18/2012	8	0	8
TCLPH	MG/L	MT-TCLP-8-10	240-13070-4	NM	7/10/2012	7/13/2012	7/23/2012	3	10	13
TCLPM	MG/L	MT-TCLP-8-10	240-13070-4	NM	7/10/2012	7/13/2012	7/16/2012	3	3	6

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
TCLPP	MG/L	MT-TCLP-8-10	240-13070-4	NM	7/10/2012	7/13/2012	7/16/2012	3	3	6
TCLPS	MG/L	MT-TCLP-8-10	240-13070-4	NM	7/10/2012	7/13/2012	7/16/2012	3	3	6
TCLPV	MG/L	MT-TCLP-8-10	240-13070-4	NM	7/10/2012	7/13/2012	7/13/2012	3	0	3

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: BFB1914.D BFB Injection Date: 07/13/2012

Instrument ID: A3UX12 BFB Injection Time: 14:44

Analysis Batch No.: 50783

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	44.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	90.2	
175	5.0 - 9.0 % of mass 174	7.3	(8.1)1
176	95.0 - 101.0 % of mass 174	88.2	(97.7)1
177	5.0 - 9.0 % of mass 176	5.5	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-50783/2	UX124979.D	07/13/2012	15:11
	LB 240-50667/1-A	UX124993.D	07/13/2012	20:42
	LCS 240-50783/18	UX124994.D	07/13/2012	21:06
MT-TCLP-8-10	240-13070-4	UX124995.D	07/13/2012	21:31
	240-13101-D-3-A MS	UX125001.D	07/13/2012	23:57
	240-13101-D-3-A MSD	UX125002.D	07/14/2012	00:21

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50783/2 Calibration Date: 07/13/2012 15:11

Instrument ID: A3UX12 Calib Start Date: 02/07/2012 20:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2012 22:23

Lab File ID: UX124979.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1574	0.2494		0.0317	0.0200	58.4*	50.0
Chloromethane	Ave	0.2632	0.2724	0.1000	0.0207	0.0200	3.5	50.0
Vinyl chloride	Ave	0.3139	0.3071		0.0196	0.0200	-2.1	20.0
Bromomethane	Ave	0.1774	0.1859		0.0210	0.0200	4.8	50.0
Chloroethane	Ave	0.1983	0.1979		0.0200	0.0200	-0.2	50.0
Trichlorofluoromethane	Lin1		0.3215		0.0231	0.0200	15.5	50.0
Acrolein	Ave	0.0214	0.0178		0.167	0.200	-16.7	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1933	0.2237		0.0231	0.0200	15.7	50.0
1,1-Dichloroethene	Ave	0.3664	0.3545		0.0194	0.0200	-3.2	20.0
Acetone	Lin1		0.0470		0.0341	0.0400	-14.8	50.0
Iodomethane	Ave	0.3632	0.4070		0.0224	0.0200	12.0	50.0
Carbon disulfide	Ave	0.7762	0.7953		0.0205	0.0200	2.5	50.0
Acetonitrile	Lin1		0.0230		0.191	0.200	-4.6	50.0
Methyl acetate	Lin1		0.1259		0.0358	0.0400	-10.5	50.0
Methylene Chloride	Lin1		0.2849		0.0191	0.0200	-4.5	50.0
2-Methyl-2-propanol	Lin1		0.0124		0.316	0.400	-21.0	50.0
Acrylonitrile	Lin1		0.0677		0.0390	0.0400	-2.5	50.0
Methyl tert-butyl ether	Ave	0.6154	0.5310		0.0173	0.0200	-13.7	50.0
trans-1,2-Dichloroethene	Ave	0.2849	0.2428		0.0170	0.0200	-14.8	50.0
Hexane	Ave	0.1765	0.1442		0.0163	0.0200	-18.3	20.0
1,1-Dichloroethane	Ave	0.3611	0.3267	0.1000	0.0181	0.0200	-9.5	50.0
Vinyl acetate	Ave	0.0312	0.0289		0.0185	0.0200	-7.3	50.0
2,2-Dichloropropane	Ave	0.1653	0.1424		0.0172	0.0200	-13.9	50.0
2-Butanone (MEK)	Lin1		0.0215		0.0395	0.0400	-1.3	50.0
cis-1,2-Dichloroethene	Ave	0.3048	0.2726		0.0179	0.0200	-10.6	50.0
Chlorobromomethane	Ave	0.1816	0.1513		0.0167	0.0200	-16.7	50.0
Tetrahydrofuran	Lin1		0.0461		0.0181	0.0200	-9.5	50.0
Chloroform	Ave	0.3503	0.3406		0.0194	0.0200	-2.8	20.0
1,1,1-Trichloroethane	Ave	0.2285	0.2387		0.0209	0.0200	4.5	50.0
Cyclohexane	Ave	0.2866	0.2713		0.0189	0.0200	-5.3	50.0
1,1-Dichloropropene	Ave	0.2617	0.2536		0.0194	0.0200	-3.1	50.0
Carbon tetrachloride	Ave	0.1673	0.1939		0.0232	0.0200	15.8	50.0
1,2-Dichloroethane	Ave	0.2543	0.2352		0.0185	0.0200	-7.5	50.0
Benzene	Ave	0.8969	0.8152		0.0182	0.0200	-9.1	50.0
Trichloroethene	Ave	0.2154	0.2202		0.0204	0.0200	2.2	50.0
Methylcyclohexane	Ave	0.1795	0.1508		0.0168	0.0200	-16.0	50.0
1,2-Dichloropropane	Ave	0.2093	0.1843		0.0176	0.0200	-12.0	20.0
1,4-Dioxane	Ave	0.0022	0.0023		1.08	1.00	8.0	50.0
Dibromomethane	Ave	0.1269	0.1463		0.0231	0.0200	15.3	50.0
Dichlorobromomethane	Ave	0.2584	0.2356		0.0182	0.0200	-8.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50783/2 Calibration Date: 07/13/2012 15:11

Instrument ID: A3UX12 Calib Start Date: 02/07/2012 20:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2012 22:23

Lab File ID: UX124979.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1312	0.1156		0.0352	0.0400	-11.9	50.0
cis-1,3-Dichloropropene	Ave	0.3580	0.2874		0.0161	0.0200	-19.7	50.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.1362		0.0351	0.0400	-12.3	50.0
Toluene	Ave	1.223	1.161		0.0190	0.0200	-5.0	20.0
trans-1,3-Dichloropropene	Ave	0.4302	0.3061		0.0142	0.0200	-28.8	50.0
Ethyl methacrylate	Ave	0.3748	0.2735		0.0146	0.0200	-27.0	50.0
1,1,2-Trichloroethane	Ave	0.2500	0.2341		0.0187	0.0200	-6.4	50.0
Tetrachloroethene	Ave	0.2370	0.2607		0.0220	0.0200	10.0	50.0
1,3-Dichloropropane	Ave	0.4589	0.4187		0.0182	0.0200	-8.8	50.0
2-Hexanone	Ave	0.1537	0.1252		0.0326	0.0400	-18.5	50.0
Chlorodibromomethane	Ave	0.2354	0.2297		0.0195	0.0200	-2.4	50.0
Ethylene Dibromide	Ave	0.2558	0.2403		0.0188	0.0200	-6.1	50.0
Chlorobenzene	Ave	0.8070	0.7606	0.3000	0.0189	0.0200	-5.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2517	0.2157		0.0171	0.0200	-14.3	50.0
Ethylbenzene	Ave	0.3681	0.3591		0.0195	0.0200	-2.4	20.0
m-Xylene & p-Xylene	Ave	0.4821	0.4646		0.0385	0.0400	-3.6	50.0
o-Xylene	Ave	0.4971	0.4449		0.0179	0.0200	-10.5	50.0
Styrene	Ave	0.9268	0.8478		0.0183	0.0200	-8.5	50.0
Bromoform	Ave	0.1546	0.1345	0.1000	0.0174	0.0200	-13.0	50.0
Isopropylbenzene	Ave	1.093	0.9926		0.0182	0.0200	-9.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8260	0.6381	0.3000	0.0155	0.0200	-22.7	50.0
Bromobenzene	Ave	0.7698	0.6649		0.0173	0.0200	-13.6	50.0
1,2,3-Trichloropropane	Ave	0.2482	0.2210		0.0178	0.0200	-11.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2312	0.0956		0.00827	0.0200	-58.7*	50.0
N-Propylbenzene	Ave	0.6701	0.5385		0.0161	0.0200	-19.6	50.0
2-Chlorotoluene	Ave	0.6402	0.5408		0.0169	0.0200	-15.5	50.0
1,3,5-Trimethylbenzene	Ave	2.150	1.629		0.0152	0.0200	-24.2	50.0
4-Chlorotoluene	Ave	0.6834	0.5568		0.0163	0.0200	-18.5	50.0
tert-Butylbenzene	Ave	1.770	1.449		0.0164	0.0200	-18.2	50.0
1,2,4-Trimethylbenzene	Ave	2.262	1.721		0.0152	0.0200	-23.9	50.0
sec-Butylbenzene	Ave	2.559	2.011		0.0157	0.0200	-21.4	50.0
1,3-Dichlorobenzene	Ave	1.310	1.161		0.0177	0.0200	-11.4	50.0
4-Isopropyltoluene	Ave	2.137	1.818		0.0170	0.0200	-14.9	50.0
1,4-Dichlorobenzene	Ave	1.385	1.231		0.0178	0.0200	-11.1	50.0
n-Butylbenzene	Ave	1.946	1.493		0.0153	0.0200	-23.3	50.0
1,2-Dichlorobenzene	Ave	1.251	1.187		0.0190	0.0200	-5.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1218	0.1049		0.0172	0.0200	-13.9	50.0
1,3,5-Trichlorobenzene	Ave	0.8158	0.7603		0.0186	0.0200	-6.8	50.0
1,2,4-Trichlorobenzene	Ave	0.6371	0.6277		0.0197	0.0200	-1.5	50.0
Hexachlorobutadiene	Ave	0.3109	0.3226		0.0208	0.0200	3.8	50.0
Naphthalene	Ave	1.434	1.282		0.0179	0.0200	-10.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50783/2 Calibration Date: 07/13/2012 15:11

Instrument ID: A3UX12 Calib Start Date: 02/07/2012 20:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2012 22:23

Lab File ID: UX124979.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.4111	0.4079		0.0198	0.0200	-0.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2001	0.2380		0.0238	0.0200	18.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2323	0.2564		0.0221	0.0200	10.4	50.0
Toluene-d8 (Surr)	Ave	1.114	1.182		0.0212	0.0200	6.1	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4374	0.4127		0.0189	0.0200	-5.7	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: UX124993.D Lab Sample ID: LB 240-50667/1-A

Matrix: Solid (TCLP) Heated Purge:(Y/N) N

Instrument ID: A3UX12 Date Analyzed: 07/13/2012 20:42

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-50783/18	UX124994.D	07/13/2012 21:06
MT-TCLP-8-10	240-13070-4	UX124995.D	07/13/2012 21:31
	240-13101-D-3-A MS	UX125001.D	07/13/2012 23:57
	240-13101-D-3-A MSD	UX125002.D	07/14/2012 00:21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: LB 240-50667/1-A MB

Matrix: Solid (TCLP) Lab File ID: UX124993.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 0.1(mL) Date Analyzed: 07/13/2012 20:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50783 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-35-4	1,1-Dichloroethene	0.025	U	0.025	0.0095
107-06-2	1,2-Dichloroethane	0.025	U	0.025	0.011
71-43-2	Benzene	0.025	U	0.025	0.0065
56-23-5	Carbon tetrachloride	0.025	U	0.025	0.0065
108-90-7	Chlorobenzene	0.025	U	0.025	0.0075
67-66-3	Chloroform	0.025	U	0.025	0.0080
78-93-3	2-Butanone (MEK)	0.25	U	0.25	0.029
127-18-4	Tetrachloroethene	0.025	U	0.025	0.015
79-01-6	Trichloroethene	0.025	U	0.025	0.0085
75-01-4	Vinyl chloride	0.025	U	0.025	0.011

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-121
460-00-4	4-Bromofluorobenzene (Surr)	93		70-124
2037-26-5	Toluene-d8 (Surr)	105		90-115
1868-53-7	Dibromofluoromethane (Surr)	115		84-128

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
	MB 240-51061/6	89	102	101	100

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	30-122
DCA = 1,2-Dichloroethane-d4 (Surr)	39-128
TOL = Toluene-d8 (Surr)	33-134
BFB = 4-Bromofluorobenzene (Surr)	26-141

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MT-SS18-8-10	240-13070-3	89	98	104	102
MT-SB17-0-2	240-13070-5	90	108	104	102
MT-SB17-8-10	240-13070-6	91	108	101	100
	MB 240-50900/6	95	107	103	102
	LCS 240-50900/5	95	103	109	111
	LCS 240-51061/5	91	98	103	107
	240-13217-A-1 MS	95	104	112	123
	240-13194-A-2 MS	93	99	110	114
	240-13217-A-1 MSD	95	105	113	126
	240-13194-A-2 MSD	93	97	112	114

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	37-132
DCA = 1,2-Dichloroethane-d4 (Surr)	58-123
TOL = Toluene-d8 (Surr)	67-125
BFB = 4-Bromofluorobenzene (Surr)	52-136

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Medium

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MT-SS18-0-2	240-13070-2	88	102	96	100
	MB 240-50627/1-A	99	117	107	102
	LCS 240-50627/2-A	97	113	107	107

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	30-122
DCA = 1,2-Dichloroethane-d4 (Surr)	39-128
TOL = Toluene-d8 (Surr)	33-134
BFB = 4-Bromofluorobenzene (Surr)	26-141

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MT-TCLP-8-10	240-13070-4	115	104	106	94
	LB 240-50667/1-A MB	115	106	105	93
	LCS 240-50783/18	115	109	108	96
	240-13101-D-3-A MS	120	107	110	96
	240-13101-D-3-A MSD	120	108	109	97

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	84-128
DCA = 1,2-Dichloroethane-d4 (Surr)	80-121
TOL = Toluene-d8 (Surr)	90-115
BFB = 4-Bromofluorobenzene (Surr)	70-124

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-071012	240-13070-1	95	85	94	104
	MB 240-50744/5	97	85	97	108
	LCS 240-50744/4	97	92	97	109
	240-13078-A-2 MS	97	89	97	110
	240-13078-D-2 MSD	94	85	94	108

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: 146690.D

Lab ID: LCS 240-50627/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	500	478	96	27-121	
1,1,1-Trichloroethane	500	468	94	38-122	
1,1,2,2-Tetrachloroethane	500	525	105	54-121	
1,1,2-Trichloro-1,2,2-trichfluoroethane	500	515	103	48-151	
1,1-Dichloroethane	500	515	103	63-117	
1,1-Dichloroethene	500	520	104	44-143	
1,1-Dichloropropene	500	515	103	60-123	
1,2,3-Trichlorobenzene	500	399	80	43-129	
1,2,3-Trichloropropane	500	505	101	74-124	
1,2,3-Trimethylbenzene	500	505	101	70-130	
1,2,4-Trichlorobenzene	500	372	74	41-135	
1,2,4-Trimethylbenzene	500	510	102	62-133	
1,2-Dibromo-3-Chloropropane	500	453 J	91	10-129	
1,2-Dichlorobenzene	500	481	96	68-118	
1,2-Dichloroethane	500	610	122	68-119	*
1,2-Dichloropropane	500	585	117	73-113	*
1,3-Dichlorobenzene	500	491	98	66-121	
1,3-Dichloropropane	500	580	116	74-119	
1,4-Dichlorobenzene	500	493	99	65-119	
2,2-Dichloropropane	500	383	77	25-123	
2-Chloroethyl vinyl ether	500	475 J	95	25-140	
2-Chlorotoluene	500	530	106	68-122	
2-Hexanone	1000	1110	111	43-130	
4-Chlorotoluene	500	525	105	68-122	
Acetone	1000	915 J	92	16-156	
Benzene	500	530	106	70-117	
Bromobenzene	500	505	101	72-120	
Bromochloromethane	500	453	91	56-128	
Bromoform	500	485	97	10-117	
Bromomethane	500	472	94	10-114	
Carbon disulfide	500	414	83	10-132	
Carbon tetrachloride	500	466	93	29-118	
Chlorobenzene	500	555	111	71-116	
Chloroethane	500	423	85	10-120	
Chloroform	500	515	103	63-116	
Chloromethane	500	391	78	25-110	
cis-1,2-Dichloroethene	500	460	92	60-125	
Bromodichloromethane	500	453	91	28-123	
cis-1,3-Dichloropropene	500	429	86	25-120	
1,2-Dibromoethane	500	505	101	47-123	
Dibromomethane	500	585	117	68-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: 146690.D

Lab ID: LCS 240-50627/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	500	263	53	10-110	
Diisopropyl ether	500	457 J	91	71-113	
Ethylbenzene	500	540	108	66-119	
Hexachlorobutadiene	500	480	96	34-135	
Isopropylbenzene	500	494	99	61-123	
2-Butanone	1000	1020	102	10-199	
4-Methyl-2-pentanone	1000	1050	105	49-121	
m-Xylene & p-Xylene	1000	1040	104	67-118	
Methyl tert-butyl ether	500	485 J	97	34-157	
Naphthalene	500	341	68	37-126	
n-Butylbenzene	500	484	97	51-137	
Methylene Chloride	500	328	66	27-172	
n-Propylbenzene	500	565	113	64-130	
o-Xylene	500	493	99	68-120	
p-Isopropyltoluene	500	471	94	56-136	
sec-Butylbenzene	500	448	90	58-131	
Styrene	500	505	101	60-120	
tert-Butylbenzene	500	435	87	58-128	
Tetrachloroethene	500	565	113	58-131	
Toluene	500	515	103	66-123	
trans-1,2-Dichloroethene	500	470	94	58-121	
trans-1,3-Dichloropropene	500	493	99	22-122	
Trichloroethene	500	505	101	59-124	
Trichlorofluoromethane	500	437	87	17-145	
tert-Butyl alcohol	10000	10200	102	70-130	
Vinyl acetate	500	460 J	92	60-125	
Vinyl chloride	500	422	84	33-110	
Dibromochloromethane	500	421	84	22-113	
Xylenes, Total	1500	1530	102	68-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ5767.D

Lab ID: LCS 240-50744/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	9.21	92	72-116	
1,1,1-Trichloroethane	10.0	8.32	83	74-118	
1,1,2,2-Tetrachloroethane	10.0	9.23	92	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	10.0	100	74-151	
1,1-Dichloroethane	10.0	9.12	91	82-115	
1,1-Dichloroethene	10.0	8.95	90	78-131	
1,1-Dichloropropene	10.0	8.62	86	83-114	
1,2,3-Trichlorobenzene	10.0	8.40	84	54-126	
1,2,3-Trichloropropane	10.0	10.1	101	73-129	
1,2,3-Trimethylbenzene	10.0	9.20	92	70-130	
1,2,4-Trichlorobenzene	10.0	8.39	84	48-135	
1,2,4-Trimethylbenzene	10.0	9.86	99	76-120	
1,2-Dibromo-3-Chloropropane	10.0	8.37	84	42-136	
1,2-Dichlorobenzene	10.0	8.61	86	81-110	
1,2-Dichloroethane	10.0	8.71	87	71-127	
1,2-Dichloropropane	10.0	9.11	91	81-115	
1,3-Dichlorobenzene	10.0	9.00	90	80-110	
1,3-Dichloropropane	10.0	8.95	90	79-116	
1,4-Dichlorobenzene	10.0	8.82	88	82-110	
2,2-Dichloropropane	10.0	8.02	80	50-129	
2-Chloroethyl vinyl ether	10.0	8.68 J	87	52-131	
2-Chlorotoluene	10.0	9.49	95	76-116	
2-Hexanone	20.0	17.6	88	55-133	
4-Chlorotoluene	10.0	9.93	99	77-115	
Acetone	20.0	20.1	101	43-136	
Benzene	10.0	9.14	91	83-112	
Bromobenzene	10.0	9.78	98	76-115	
Bromochloromethane	10.0	9.42	94	77-120	
Bromoform	10.0	10.6	106	40-131	
Bromomethane	10.0	10.4	104	11-185	
Carbon disulfide	10.0	8.40	84	62-142	
Carbon tetrachloride	10.0	8.88	89	66-128	
Chlorobenzene	10.0	9.01	90	85-110	
Chloroethane	10.0	8.05	81	25-153	
Chloroform	10.0	8.85	89	79-117	
Chloromethane	10.0	7.72	77	44-126	
cis-1,2-Dichloroethene	10.0	9.33	93	80-113	
Bromodichloromethane	10.0	9.11	91	72-121	
cis-1,3-Dichloropropene	10.0	8.74	87	61-115	
1,2-Dibromoethane	10.0	8.98	90	79-113	
Dibromomethane	10.0	9.57	96	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ5767.D

Lab ID: LCS 240-50744/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	6.45	65	19-129	
Diisopropyl ether	10.0	8.84 J	88	77-118	
Ethylbenzene	10.0	8.98	90	83-112	
Hexachlorobutadiene	10.0	7.95	80	36-134	
Isopropylbenzene	10.0	9.18	92	75-114	
2-Butanone	20.0	18.2	91	60-126	
4-Methyl-2-pentanone	20.0	17.8	89	63-128	
m-Xylene & p-Xylene	20.0	17.9	90	83-113	
Methyl tert-butyl ether	10.0	8.92	89	52-144	
Naphthalene	10.0	7.42	74	32-141	
n-Butylbenzene	10.0	8.31	83	66-125	
Methylene Chloride	10.0	8.49	85	66-131	
n-Propylbenzene	10.0	9.43	94	74-121	
o-Xylene	10.0	9.21	92	83-113	
p-Isopropyltoluene	10.0	9.82	98	74-120	
sec-Butylbenzene	10.0	9.57	96	70-117	
Styrene	10.0	9.52	95	79-114	
tert-Butylbenzene	10.0	9.72	97	71-115	
Tetrachloroethene	10.0	8.86	89	79-114	
Toluene	10.0	8.69	87	84-111	
trans-1,2-Dichloroethene	10.0	9.29	93	83-117	
trans-1,3-Dichloropropene	10.0	8.62	86	58-117	
Trichloroethene	10.0	9.34	93	76-117	
Trichlorofluoromethane	10.0	8.68	87	49-157	
tert-Butyl alcohol	200	184	92	70-130	
Vinyl acetate	10.0	8.80	88	46-161	
Vinyl chloride	10.0	8.17	82	53-127	
Dibromochloromethane	10.0	8.98	90	64-119	
Xylenes, Total	30.0	27.1	90	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX124994.D

Lab ID: LCS 240-50783/18 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
1,1-Dichloroethene	1.00	0.905	91	71-133	
1,2-Dichloroethane	1.00	0.925	93	81-114	
Benzene	1.00	0.905	91	84-120	
Carbon tetrachloride	1.00	0.960	96	54-122	
Chlorobenzene	1.00	0.965	97	86-111	
Chloroform	1.00	0.945	95	87-123	
2-Butanone (MEK)	2.00	1.85	92	49-120	
Tetrachloroethene	1.00	1.01	101	79-134	
Trichloroethene	1.00	1.04	104	78-130	
Vinyl chloride	1.00	0.800	80	56-111	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146721.D

Lab ID: LCS 240-50900/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	51.9	104	81-119	
1,1,1-Trichloroethane	50.0	46.4	93	77-126	
1,1,2,2-Tetrachloroethane	50.0	56.2	112	77-123	
1,1,2-Trichloro-1,2,2-trichfluoroethane	50.0	51.8	104	82-138	
1,1-Dichloroethane	50.0	53.5	107	76-115	
1,1-Dichloroethene	50.0	54.3	109	75-135	
1,1-Dichloropropene	50.0	54.0	108	80-120	
1,2,3-Trichlorobenzene	50.0	31.9	64	61-121	
1,2,3-Trichloropropane	50.0	51.6	103	84-126	
1,2,3-Trimethylbenzene	50.0	53.3	107	70-130	
1,2,4-Trichlorobenzene	50.0	35.3	71	64-124	
1,2,4-Trimethylbenzene	50.0	55.8	112	80-129	
1,2-Dibromo-3-Chloropropane	50.0	44.5	89	61-132	
1,2-Dichlorobenzene	50.0	47.4	95	76-110	
1,2-Dichloroethane	50.0	56.6	113	72-120	
1,2-Dichloropropane	50.0	57.4	115	87-113	*
1,3-Dichlorobenzene	50.0	49.0	98	78-111	
1,3-Dichloropropane	50.0	60.4	121	82-118	*
1,4-Dichlorobenzene	50.0	48.3	97	75-110	
2,2-Dichloropropane	50.0	40.7	81	69-135	
2-Chloroethyl vinyl ether	50.0	45.0 J	90	28-173	
2-Chlorotoluene	50.0	55.6	111	78-119	
2-Hexanone	100	121	121	64-136	
4-Chlorotoluene	50.0	54.5	109	79-118	
Acetone	100	99.4	99	41-137	
Benzene	50.0	52.8	106	79-112	
Bromobenzene	50.0	56.8	114	81-115	
Bromochloromethane	50.0	46.5	93	79-111	
Bromoform	50.0	49.7	99	62-133	
Bromomethane	50.0	46.9	94	42-136	
Carbon disulfide	50.0	40.0	80	62-146	
Carbon tetrachloride	50.0	48.5	97	71-129	
Chlorobenzene	50.0	55.3	111	78-110	*
Chloroethane	50.0	45.6	91	58-117	
Chloroform	50.0	51.6	103	77-114	
Chloromethane	50.0	47.4	95	50-110	
cis-1,2-Dichloroethene	50.0	49.4	99	76-113	
Bromodichloromethane	50.0	50.3	101	84-122	
cis-1,3-Dichloropropene	50.0	49.7	99	74-128	
1,2-Dibromoethane	50.0	53.5	107	83-117	
Dibromomethane	50.0	56.4	113	85-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146721.D

Lab ID: LCS 240-50900/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	50.0	40.8	82	26-113	
Diisopropyl ether	50.0	49.2	98	82-119	
Ethylbenzene	50.0	53.6	107	79-117	
Hexachlorobutadiene	50.0	38.0	76	54-131	
Isopropylbenzene	50.0	53.2	106	76-122	
2-Butanone	100	101	101	52-131	
4-Methyl-2-pentanone	100	118	118	67-135	
m-Xylene & p-Xylene	100	106	106	80-117	
Methyl tert-butyl ether	50.0	51.9	104	49-165	
Naphthalene	50.0	36.3	73	65-123	
n-Butylbenzene	50.0	50.2	100	68-135	
Methylene Chloride	50.0	43.3	87	75-118	
n-Propylbenzene	50.0	61.8	124	81-129	
o-Xylene	50.0	50.8	102	80-120	
p-Isopropyltoluene	50.0	49.3	99	77-131	
sec-Butylbenzene	50.0	47.4	95	74-129	
Styrene	50.0	53.3	107	87-117	
tert-Butylbenzene	50.0	47.3	95	76-126	
Tetrachloroethene	50.0	57.0	114	79-114	
Toluene	50.0	53.2	106	75-111	
trans-1,2-Dichloroethene	50.0	50.7	101	78-117	
trans-1,3-Dichloropropene	50.0	57.4	115	73-131	
Trichloroethene	50.0	50.1	100	79-113	
Trichlorofluoromethane	50.0	47.6	95	57-146	
tert-Butyl alcohol	1000	852	85	60-125	
Vinyl acetate	50.0	49.8	100	70-130	
Vinyl chloride	50.0	47.8	96	57-114	
Dibromochloromethane	50.0	50.0	100	72-127	
Xylenes, Total	150	157	105	80-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146754.D

Lab ID: LCS 240-51061/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	49.0	98	81-119	
1,1,1-Trichloroethane	50.0	44.1	88	77-126	
1,1,2,2-Tetrachloroethane	50.0	57.7	115	77-123	
1,1,2-Trichloro-1,2,2-trichfluoroethane	50.0	50.2	100	82-138	
1,1-Dichloroethane	50.0	52.8	106	76-115	
1,1-Dichloroethene	50.0	52.2	104	75-135	
1,1-Dichloropropene	50.0	51.7	103	80-120	
1,2,3-Trichlorobenzene	50.0	32.3	65	61-121	
1,2,3-Trichloropropane	50.0	53.2	106	84-126	
1,2,3-Trimethylbenzene	50.0	49.4	99	70-130	
1,2,4-Trichlorobenzene	50.0	34.4	69	64-124	
1,2,4-Trimethylbenzene	50.0	51.1	102	80-129	
1,2-Dibromo-3-Chloropropane	50.0	49.8	100	61-132	
1,2-Dichlorobenzene	50.0	44.7	89	76-110	
1,2-Dichloroethane	50.0	55.8	112	72-120	
1,2-Dichloropropane	50.0	56.8	114	87-113	*
1,3-Dichlorobenzene	50.0	46.4	93	78-111	
1,3-Dichloropropane	50.0	59.3	119	82-118	*
1,4-Dichlorobenzene	50.0	45.1	90	75-110	
2,2-Dichloropropane	50.0	38.1	76	69-135	
2-Chloroethyl vinyl ether	50.0	54.7	109	28-173	
2-Chlorotoluene	50.0	50.7	101	78-119	
2-Hexanone	100	134	134	64-136	
4-Chlorotoluene	50.0	50.5	101	79-118	
Acetone	100	104	104	41-137	
Benzene	50.0	51.5	103	79-112	
Bromobenzene	50.0	53.4	107	81-115	
Bromochloromethane	50.0	46.9	94	79-111	
Bromoform	50.0	50.4	101	62-133	
Bromomethane	50.0	44.5	89	42-136	
Carbon disulfide	50.0	37.6	75	62-146	
Carbon tetrachloride	50.0	46.4	93	71-129	
Chlorobenzene	50.0	52.1	104	78-110	
Chloroethane	50.0	44.5	89	58-117	
Chloroform	50.0	50.3	101	77-114	
Chloromethane	50.0	46.3	93	50-110	
cis-1,2-Dichloroethene	50.0	49.3	99	76-113	
Bromodichloromethane	50.0	49.3	99	84-122	
cis-1,3-Dichloropropene	50.0	49.2	98	74-128	
1,2-Dibromoethane	50.0	52.6	105	83-117	
Dibromomethane	50.0	56.9	114	85-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146754.D

Lab ID: LCS 240-51061/5 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	50.0	38.1	76	26-113	
Diisopropyl ether	50.0	49.2	98	82-119	
Ethylbenzene	50.0	50.2	100	79-117	
Hexachlorobutadiene	50.0	33.7	67	54-131	
Isopropylbenzene	50.0	49.1	98	76-122	
2-Butanone	100	111	111	52-131	
4-Methyl-2-pentanone	100	126	126	67-135	
m-Xylene & p-Xylene	100	98.5	99	80-117	
Methyl tert-butyl ether	50.0	53.4	107	49-165	
Naphthalene	50.0	38.5	77	65-123	
n-Butylbenzene	50.0	44.3	89	68-135	
Methylene Chloride	50.0	42.8	86	75-118	
n-Propylbenzene	50.0	55.8	112	81-129	
o-Xylene	50.0	47.8	96	80-120	
p-Isopropyltoluene	50.0	44.2	88	77-131	
sec-Butylbenzene	50.0	43.2	86	74-129	
Styrene	50.0	50.4	101	87-117	
tert-Butylbenzene	50.0	43.2	86	76-126	
Tetrachloroethene	50.0	52.7	105	79-114	
Toluene	50.0	49.6	99	75-111	
trans-1,2-Dichloroethene	50.0	48.8	98	78-117	
trans-1,3-Dichloropropene	50.0	56.5	113	73-131	
Trichloroethene	50.0	48.9	98	79-113	
Trichlorofluoromethane	50.0	43.9	88	57-146	
tert-Butyl alcohol	1000	935	94	60-125	
Vinyl acetate	50.0	56.1	112	70-130	
Vinyl chloride	50.0	46.8	94	57-114	
Dibromochloromethane	50.0	49.0	98	72-127	
Xylenes, Total	150	146	98	80-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ5771.D

Lab ID: 240-13078-A-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	1.0 U	8.89	89	64-118	
1,1,1-Trichloroethane	10.0	1.0 U	8.44	84	68-121	
1,1,2,2-Tetrachloroethane	10.0	1.0 U	8.42	84	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	1.0 U	11.3	113	70-152	
1,1-Dichloroethane	10.0	1.0 U	9.06	91	79-116	
1,1-Dichloroethene	10.0	28	40.3	120	74-135	E
1,1-Dichloropropene	10.0	1.0 U	8.76	88	80-114	
1,2,3-Trichlorobenzene	10.0	1.0 U	7.44	74	45-129	
1,2,3-Trichloropropane	10.0	1.0 U	8.98	90	67-132	
1,2,3-Trimethylbenzene	10.0	5.0 U	8.70	87	70-130	
1,2,4-Trichlorobenzene	10.0	1.0 U	7.84	78	38-138	
1,2,4-Trimethylbenzene	10.0	1.0 U	9.55	96	67-124	
1,2-Dibromo-3-Chloropropane	10.0	2.0 U	7.20	72	32-139	
1,2-Dichlorobenzene	10.0	1.0 U	8.28	83	75-111	
1,2-Dichloroethane	10.0	1.0 U	8.35	84	68-129	
1,2-Dichloropropane	10.0	1.0 U	8.60	86	78-115	
1,3-Dichlorobenzene	10.0	1.0 U	8.60	86	73-110	
1,3-Dichloropropane	10.0	1.0 U	8.55	86	74-118	
1,4-Dichlorobenzene	10.0	1.0 U	8.40	84	75-110	
2,2-Dichloropropane	10.0	1.0 U	8.05	81	38-127	
2-Chloroethyl vinyl ether	10.0	10 U	10 U	0	10-150	F
2-Chlorotoluene	10.0	1.0 U	8.93	89	69-117	
2-Hexanone	20.0	10 U	15.7	79	47-139	
4-Chlorotoluene	10.0	1.0 U	9.54	95	71-116	
Acetone	20.0	10 U	14.8	74	33-145	
Benzene	10.0	1.0 U	8.81	88	72-121	
Bromobenzene	10.0	1.0 U	9.31	93	71-116	
Bromochloromethane	10.0	1.0 U	8.73	87	73-121	
Bromoform	10.0	1.0 U	9.51	95	32-128	
Bromomethane	10.0	1.0 U	10.5	105	10-186	
Carbon disulfide	10.0	1.0 U	8.46	85	57-147	
Carbon tetrachloride	10.0	1.0 U	8.76	88	59-129	
Chlorobenzene	10.0	1.0 U	8.68	87	80-110	
Chloroethane	10.0	1.0 U	8.99	90	21-165	
Chloroform	10.0	1.0 U	8.38	84	76-118	
Chloromethane	10.0	1.0 U	7.51	75	33-132	
cis-1,2-Dichloroethene	10.0	1.0 U	8.93	89	70-120	
Bromodichloromethane	10.0	1.0 U	8.48	85	67-120	
cis-1,3-Dichloropropene	10.0	1.0 U	8.21	82	51-110	
1,2-Dibromoethane	10.0	1.0 U	8.48	85	74-113	
Dibromomethane	10.0	1.0 U	8.81	88	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ5771.D

Lab ID: 240-13078-A-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	1.0 U	7.15	72	17-128	
Diisopropyl ether	10.0	10 U	8.51 J	85	73-118	
Ethylbenzene	10.0	1.0 U	8.56	86	75-116	
Hexachlorobutadiene	10.0	1.0 U	8.15	82	27-132	
Isopropylbenzene	10.0	1.0 U	9.11	91	68-116	
2-Butanone	20.0	10 U	15.3	77	54-129	
4-Methyl-2-pentanone	20.0	10 U	16.0	80	56-131	
m-Xylene & p-Xylene	20.0	2.0 U	17.4	87	75-117	
Methyl tert-butyl ether	10.0	5.0 U	8.19	82	46-144	
Naphthalene	10.0	1.0 U	6.65	67	15-158	
n-Butylbenzene	10.0	1.0 U	8.41	84	56-127	
Methylene Chloride	10.0	1.0 U	8.00	80	63-128	
n-Propylbenzene	10.0	1.0 U	9.32	93	64-124	
o-Xylene	10.0	1.0 U	8.82	88	76-116	
p-Isopropyltoluene	10.0	1.0 U	9.60	96	64-122	
sec-Butylbenzene	10.0	1.0 U	9.33	93	60-119	
Styrene	10.0	1.0 U	9.05	91	71-117	
tert-Butylbenzene	10.0	1.0 U	9.27	93	61-119	
Tetrachloroethene	10.0	1.0 U	9.25	93	70-117	
Toluene	10.0	1.0 U	8.65	87	78-114	
trans-1,2-Dichloroethene	10.0	1.0 U	8.93	89	80-119	
trans-1,3-Dichloropropene	10.0	1.0 U	8.18	82	46-116	
Trichloroethene	10.0	1.0 U	9.30	93	66-120	
Trichlorofluoromethane	10.0	4.0	13.7	97	46-157	
tert-Butyl alcohol	200	50 U	158	79	70-130	
Vinyl acetate	10.0	2.0 U	8.66	87	43-157	
Vinyl chloride	10.0	1.0 U	8.47	85	49-130	
Dibromochloromethane	10.0	1.0 U	8.49	85	56-118	
Xylenes, Total	30.0	2.0 U	26.2	87	76-116	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ5772.D

Lab ID: 240-13078-D-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	7.33	73	19	30	64-118	
1,1,1-Trichloroethane	10.0	7.13	71	17	30	68-121	
1,1,2,2-Tetrachloroethane	10.0	7.07	71	17	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	8.04	80	34	30	70-152	F
1,1-Dichloroethane	10.0	7.67	77	17	30	79-116	F
1,1-Dichloroethene	10.0	36.7	84	9	30	74-135	
1,1-Dichloropropene	10.0	7.26	73	19	30	80-114	F
1,2,3-Trichlorobenzene	10.0	7.02	70	6	30	45-129	
1,2,3-Trichloropropane	10.0	7.56	76	17	30	67-132	
1,2,3-Trimethylbenzene	10.0	7.62	76	13	30	70-130	
1,2,4-Trichlorobenzene	10.0	7.20	72	9	30	38-138	
1,2,4-Trimethylbenzene	10.0	8.26	83	14	30	67-124	
1,2-Dibromo-3-Chloropropane	10.0	6.65	67	8	30	32-139	
1,2-Dichlorobenzene	10.0	7.16	72	15	30	75-111	F
1,2-Dichloroethane	10.0	7.12	71	16	30	68-129	
1,2-Dichloropropane	10.0	7.42	74	15	30	78-115	F
1,3-Dichlorobenzene	10.0	7.46	75	14	30	73-110	
1,3-Dichloropropane	10.0	7.27	73	16	30	74-118	F
1,4-Dichlorobenzene	10.0	7.28	73	14	30	75-110	F
2,2-Dichloropropane	10.0	6.73	67	18	30	38-127	
2-Chloroethyl vinyl ether	10.0	10 U	0	NC	30	10-150	F
2-Chlorotoluene	10.0	7.97	80	11	30	69-117	
2-Hexanone	20.0	13.7	69	14	30	47-139	
4-Chlorotoluene	10.0	8.27	83	14	30	71-116	
Acetone	20.0	13.5	68	9	30	33-145	
Benzene	10.0	7.49	75	16	30	72-121	
Bromobenzene	10.0	8.06	81	14	30	71-116	
Bromochloromethane	10.0	7.38	74	17	30	73-121	
Bromoform	10.0	8.02	80	17	30	32-128	
Bromomethane	10.0	9.16	92	14	30	10-186	
Carbon disulfide	10.0	7.01	70	19	30	57-147	
Carbon tetrachloride	10.0	7.32	73	18	30	59-129	
Chlorobenzene	10.0	7.46	75	15	30	80-110	F
Chloroethane	10.0	7.26	73	21	30	21-165	
Chloroform	10.0	7.14	71	16	30	76-118	F
Chloromethane	10.0	6.20	62	19	30	33-132	
cis-1,2-Dichloroethene	10.0	7.41	74	19	30	70-120	
Bromodichloromethane	10.0	7.32	73	15	30	67-120	
cis-1,3-Dichloropropene	10.0	6.93	69	17	30	51-110	
1,2-Dibromoethane	10.0	7.25	73	16	30	74-113	F
Dibromomethane	10.0	7.54	75	16	30	77-121	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXJ5772.D

Lab ID: 240-13078-D-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dichlorodifluoromethane	10.0	4.98	50	36	30	17-128	F
Diisopropyl ether	10.0	7.21 J	72	17	30	73-118	F
Ethylbenzene	10.0	7.35	74	15	30	75-116	F
Hexachlorobutadiene	10.0	7.51	75	8	30	27-132	
Isopropylbenzene	10.0	7.57	76	18	30	68-116	
2-Butanone	20.0	13.3	67	14	30	54-129	
4-Methyl-2-pentanone	20.0	14.0	70	13	30	56-131	
m-Xylene & p-Xylene	20.0	14.9	75	15	30	75-117	
Methyl tert-butyl ether	10.0	7.11	71	14	30	46-144	
Naphthalene	10.0	6.07	61	9	30	15-158	
n-Butylbenzene	10.0	7.13	71	16	30	56-127	
Methylene Chloride	10.0	6.52	65	20	30	63-128	
n-Propylbenzene	10.0	7.80	78	18	30	64-124	
o-Xylene	10.0	7.63	76	14	30	76-116	
p-Isopropyltoluene	10.0	8.27	83	15	30	64-122	
sec-Butylbenzene	10.0	8.07	81	14	30	60-119	
Styrene	10.0	7.63	76	17	30	71-117	
tert-Butylbenzene	10.0	7.96	80	15	30	61-119	
Tetrachloroethene	10.0	7.45	75	22	30	70-117	
Toluene	10.0	7.23	72	18	30	78-114	F
trans-1,2-Dichloroethene	10.0	7.54	75	17	30	80-119	F
trans-1,3-Dichloropropene	10.0	6.88	69	17	30	46-116	
Trichloroethene	10.0	7.70	77	19	30	66-120	
Trichlorofluoromethane	10.0	11.3	73	19	30	46-157	
tert-Butyl alcohol	200	146	73	8	30	70-130	
Vinyl acetate	10.0	7.43	74	15	30	43-157	
Vinyl chloride	10.0	6.79	68	22	30	49-130	
Dibromochloromethane	10.0	7.20	72	16	30	56-118	
Xylenes, Total	30.0	22.5	75	15	30	76-116	F

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low Lab File ID: UX125001.D

Lab ID: 240-13101-D-3-A MS Client ID:

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
1,1-Dichloroethene	1.00	0.025 U	0.870	87	67-139	
1,2-Dichloroethane	1.00	0.025 U	0.880	88	80-115	
Benzene	1.00	0.025 U	0.880	88	85-119	
Carbon tetrachloride	1.00	0.025 U	0.910	91	60-110	
Chlorobenzene	1.00	0.025 U	0.900	90	85-113	
Chloroform	1.00	0.025 U	0.885	89	86-124	
2-Butanone (MEK)	2.00	0.25 U	1.82	91	49-117	
Tetrachloroethene	1.00	0.025 U	0.975	98	74-138	
Trichloroethene	1.00	0.025 U	0.980	98	75-134	
Vinyl chloride	1.00	0.025 U	0.765	77	51-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low Lab File ID: UX125002.D

Lab ID: 240-13101-D-3-A MSD Client ID:

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1-Dichloroethene	1.00	0.905	91	4	30	67-139	
1,2-Dichloroethane	1.00	0.865	87	2	30	80-115	
Benzene	1.00	0.870	87	1	30	85-119	
Carbon tetrachloride	1.00	0.955	96	5	30	60-110	
Chlorobenzene	1.00	0.910	91	1	30	85-113	
Chloroform	1.00	0.865	87	2	30	86-124	
2-Butanone (MEK)	2.00	1.75	87	4	30	49-117	
Tetrachloroethene	1.00	0.975	98	0	30	74-138	
Trichloroethene	1.00	0.980	98	0	30	75-134	
Vinyl chloride	1.00	0.760	76	1	30	51-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146724.D

Lab ID: 240-13217-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	55.8	5.6 U	58.4	105	34-135	
1,1,1-Trichloroethane	55.8	5.6 U	52.9	95	51-128	
1,1,2,2-Tetrachloroethane	55.8	5.6 U	75.7	136	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	55.8	5.6 U	58.3	105	50-147	
1,1-Dichloroethane	55.8	5.6 U	60.7	109	54-122	
1,1-Dichloroethene	55.8	5.6 U	61.5	110	49-157	
1,1-Dichloropropene	55.8	5.6 U	61.0	109	50-122	
1,2,3-Trichlorobenzene	55.8	5.6 U	21.5	39	10-110	
1,2,3-Trichloropropane	55.8	5.6 U	72.2	129	32-174	
1,2,3-Trimethylbenzene	55.8	5.6 U	63.1	113	70-130	
1,2,4-Trichlorobenzene	55.8	5.6 U	25.0	45	10-111	
1,2,4-Trimethylbenzene	55.8	5.6 U	66.7	120	10-173	
1,2-Dibromo-3-Chloropropane	55.8	11 U	54.8	98	10-153	
1,2-Dichlorobenzene	55.8	5.6 U	49.3	88	17-122	
1,2-Dichloroethane	55.8	5.6 U	65.6	118	49-123	
1,2-Dichloropropane	55.8	5.6 U	63.7	114	61-117	
1,3-Dichlorobenzene	55.8	5.6 U	54.4	98	16-126	
1,3-Dichloropropane	55.8	5.6 U	69.3	124	54-128	
1,4-Dichlorobenzene	55.8	5.6 U	52.4	94	15-121	
2,2-Dichloropropane	55.8	5.6 U	44.8	80	49-132	
2-Chloroethyl vinyl ether	55.8	56 U	49.9 J	89	10-162	
2-Chlorotoluene	55.8	5.6 U	66.5	119	11-162	
2-Hexanone	112	22 U	153	138	37-147	
4-Chlorotoluene	55.8	5.6 U	65.4	117	15-149	
Acetone	112	22 U	125	112	24-140	
Benzene	55.8	5.6 U	59.7	107	53-118	
Bromobenzene	55.8	5.6 U	68.3	122	24-144	
Bromochloromethane	55.8	5.6 U	52.0	93	53-116	
Bromoform	55.8	5.6 U	53.6	96	18-129	
Bromomethane	55.8	5.6 U	52.3	94	33-130	
Carbon disulfide	55.8	5.6 U	44.7	80	20-151	
Carbon tetrachloride	55.8	5.6 U	53.9	97	32-137	
Chlorobenzene	55.8	5.6 U	59.7	107	37-116	
Chloroethane	55.8	5.6 U	49.9	89	45-118	
Chloroform	55.8	5.6 U	59.0	106	53-119	
Chloromethane	55.8	5.6 U	51.6	93	34-117	
cis-1,2-Dichloroethene	55.8	5.6 U	55.7	100	50-119	
Bromodichloromethane	55.8	5.6 U	56.7	102	35-132	
cis-1,3-Dichloropropene	55.8	5.6 U	55.4	99	27-133	
1,2-Dibromoethane	55.8	5.6 U	60.3	108	45-127	
Dibromomethane	55.8	5.6 U	64.8	116	52-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146724.D

Lab ID: 240-13217-A-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	55.8	5.6 U	46.3	83	17-115	
Diisopropyl ether	55.8	11 U	57.0	102	62-128	
Ethylbenzene	55.8	5.6 U	58.4	105	30-131	
Hexachlorobutadiene	55.8	5.6 U	30.4	55	10-131	
Isopropylbenzene	55.8	5.6 U	56.4	101	21-134	
2-Butanone	112	22 U	129	115	30-143	
4-Methyl-2-pentanone	112	22 U	153	138	43-147	
m-Xylene & p-Xylene	112	11 U	115	104	29-131	
Methyl tert-butyl ether	55.8	22 U	60.7	109	51-157	
Naphthalene	55.8	0.29 J	27.7	49	10-124	
n-Butylbenzene	55.8	0.42 J	50.0	89	10-148	
Methylene Chloride	55.8	5.6 U	49.0	88	54-115	
n-Propylbenzene	55.8	5.6 U	74.5	134	10-178	
o-Xylene	55.8	5.6 U	55.0	99	29-134	
p-Isopropyltoluene	55.8	5.6 U	55.4	99	10-165	
sec-Butylbenzene	55.8	5.6 U	53.4	96	10-172	
Styrene	55.8	5.6 U	56.0	100	27-127	
tert-Butylbenzene	55.8	5.6 U	56.5	101	10-163	
Tetrachloroethene	55.8	5.6 U	62.0	111	31-135	
Toluene	55.8	5.6 U	61.0	109	39-129	
trans-1,2-Dichloroethene	55.8	5.6 U	56.5	101	50-123	
trans-1,3-Dichloropropene	55.8	5.6 U	64.6	116	28-137	
Trichloroethene	55.8	5.6 U	55.8	100	10-177	
Trichlorofluoromethane	55.8	5.6 U	55.4	99	36-142	
tert-Butyl alcohol	1120	220 U	1220	109	60-125	
Vinyl acetate	55.8	11 U	16.2	29	70-130	F
Vinyl chloride	55.8	5.6 U	54.3	97	42-117	
Dibromochloromethane	55.8	5.6 U	56.8	102	29-135	
Xylenes, Total	167	11 U	170	102	30-131	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146725.D

Lab ID: 240-13217-A-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	55.8	55.9	100	4	30	34-135	
1,1,1-Trichloroethane	55.8	52.4	94	1	30	51-128	
1,1,2,2-Tetrachloroethane	55.8	76.2	137	1	30	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	55.8	59.1	106	1	30	50-147	
1,1-Dichloroethane	55.8	60.1	108	1	30	54-122	
1,1-Dichloroethene	55.8	61.1	110	1	30	49-157	
1,1-Dichloropropene	55.8	59.0	106	3	30	50-122	
1,2,3-Trichlorobenzene	55.8	19.9	36	8	30	10-110	
1,2,3-Trichloropropane	55.8	73.5	132	2	30	32-174	
1,2,3-Trimethylbenzene	55.8	61.7	111	2	30	70-130	
1,2,4-Trichlorobenzene	55.8	23.1	41	8	30	10-111	
1,2,4-Trimethylbenzene	55.8	64.6	116	3	30	10-173	
1,2-Dibromo-3-Chloropropane	55.8	57.6	103	5	30	10-153	
1,2-Dichlorobenzene	55.8	46.7	84	5	30	17-122	
1,2-Dichloroethane	55.8	64.0	115	2	30	49-123	
1,2-Dichloropropane	55.8	63.1	113	1	30	61-117	
1,3-Dichlorobenzene	55.8	51.8	93	5	30	16-126	
1,3-Dichloropropane	55.8	67.4	121	3	30	54-128	
1,4-Dichlorobenzene	55.8	49.2	88	6	30	15-121	
2,2-Dichloropropane	55.8	45.3	81	1	30	49-132	
2-Chloroethyl vinyl ether	55.8	47.3 J	85	5	30	10-162	
2-Chlorotoluene	55.8	66.3	119	0	30	11-162	
2-Hexanone	112	145	130	6	30	37-147	
4-Chlorotoluene	55.8	62.8	113	4	30	15-149	
Acetone	112	118	106	6	30	24-140	
Benzene	55.8	58.7	105	2	30	53-118	
Bromobenzene	55.8	68.3	122	0	30	24-144	
Bromochloromethane	55.8	52.4	94	1	30	53-116	
Bromoform	55.8	51.9	93	3	30	18-129	
Bromomethane	55.8	52.3	94	0	30	33-130	
Carbon disulfide	55.8	44.3	79	1	30	20-151	
Carbon tetrachloride	55.8	54.5	98	1	30	32-137	
Chlorobenzene	55.8	56.9	102	5	30	37-116	
Chloroethane	55.8	50.7	91	2	30	45-118	
Chloroform	55.8	58.0	104	2	30	53-119	
Chloromethane	55.8	52.5	94	2	30	34-117	
cis-1,2-Dichloroethene	55.8	55.9	100	0	30	50-119	
Bromodichloromethane	55.8	56.0	100	1	30	35-132	
cis-1,3-Dichloropropene	55.8	52.6	94	5	30	27-133	
1,2-Dibromoethane	55.8	60.9	109	1	30	45-127	
Dibromomethane	55.8	62.5	112	4	30	52-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146725.D

Lab ID: 240-13217-A-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dichlorodifluoromethane	55.8	46.2	83	0	30	17-115	
Diisopropyl ether	55.8	55.7	100	2	30	62-128	
Ethylbenzene	55.8	56.3	101	4	30	30-131	
Hexachlorobutadiene	55.8	31.0	56	2	30	10-131	
Isopropylbenzene	55.8	53.2	95	6	30	21-134	
2-Butanone	112	126	113	2	30	30-143	
4-Methyl-2-pentanone	112	147	132	4	30	43-147	
m-Xylene & p-Xylene	112	111	99	4	30	29-131	
Methyl tert-butyl ether	55.8	59.1	106	3	30	51-157	
Naphthalene	55.8	24.9	44	11	30	10-124	
n-Butylbenzene	55.8	47.2	84	6	30	10-148	
Methylene Chloride	55.8	48.1	86	2	30	54-115	
n-Propylbenzene	55.8	72.3	130	3	30	10-178	
o-Xylene	55.8	53.8	96	2	30	29-134	
p-Isopropyltoluene	55.8	53.5	96	3	30	10-165	
sec-Butylbenzene	55.8	52.4	94	2	30	10-172	
Styrene	55.8	53.4	96	5	30	27-127	
tert-Butylbenzene	55.8	57.3	103	1	30	10-163	
Tetrachloroethene	55.8	60.8	109	2	30	31-135	
Toluene	55.8	59.8	107	2	30	39-129	
trans-1,2-Dichloroethene	55.8	56.4	101	0	30	50-123	
trans-1,3-Dichloropropene	55.8	62.5	112	3	30	28-137	
Trichloroethene	55.8	55.2	99	1	30	10-177	
Trichlorofluoromethane	55.8	54.5	98	2	30	36-142	
tert-Butyl alcohol	1120	1120	100	8	30	60-125	
Vinyl acetate	55.8	10.4 J	19	43	30	70-130	F
Vinyl chloride	55.8	53.5	96	1	30	42-117	
Dibromochloromethane	55.8	55.0	99	3	30	29-135	
Xylenes, Total	167	165	99	3	30	30-131	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146775.D

Lab ID: 240-13194-A-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	53.5	5.3 U	49.5	93	34-135	
1,1,1-Trichloroethane	53.5	5.3 U	48.5	91	51-128	
1,1,2,2-Tetrachloroethane	53.5	5.3 U	55.1	103	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	53.5	5.3 U	54.8	102	50-147	
1,1-Dichloroethane	53.5	5.3 U	56.8	106	54-122	
1,1-Dichloroethene	53.5	5.3 U	59.9	112	49-157	
1,1-Dichloropropene	53.5	5.3 U	51.6	96	50-122	
1,2,3-Trichlorobenzene	53.5	5.3 U	18.4	34	10-110	
1,2,3-Trichloropropane	53.5	5.3 U	53.7	100	32-174	
1,2,3-Trimethylbenzene	53.5	5.3 U	45.7	85	70-130	
1,2,4-Trichlorobenzene	53.5	5.3 U	20.6	39	10-111	
1,2,4-Trimethylbenzene	53.5	5.3 U	47.3	88	10-173	
1,2-Dibromo-3-Chloropropane	53.5	11 U	42.8	80	10-153	
1,2-Dichlorobenzene	53.5	5.3 U	37.3	70	17-122	
1,2-Dichloroethane	53.5	5.3 U	57.9	108	49-123	
1,2-Dichloropropane	53.5	5.3 U	55.2	103	61-117	
1,3-Dichlorobenzene	53.5	5.3 U	38.2	71	16-126	
1,3-Dichloropropane	53.5	5.3 U	57.5	108	54-128	
1,4-Dichlorobenzene	53.5	5.3 U	37.0	69	15-121	
2,2-Dichloropropane	53.5	5.3 U	42.1	79	49-132	
2-Chloroethyl vinyl ether	53.5	53 U	46.3 J	87	10-162	
2-Chlorotoluene	53.5	5.3 U	48.3	90	11-162	
2-Hexanone	107	21 U	126	118	37-147	
4-Chlorotoluene	53.5	5.3 U	44.5	83	15-149	
Acetone	107	21 U	115	108	24-140	
Benzene	53.5	5.3 U	53.1	99	53-118	
Bromobenzene	53.5	5.3 U	48.7	91	24-144	
Bromochloromethane	53.5	5.3 U	47.5	89	53-116	
Bromoform	53.5	5.3 U	43.2	81	18-129	
Bromomethane	53.5	5.3 U	51.0	95	33-130	
Carbon disulfide	53.5	3.6 J	41.5	71	20-151	
Carbon tetrachloride	53.5	5.3 U	47.2	88	32-137	
Chlorobenzene	53.5	5.3 U	47.8	89	37-116	
Chloroethane	53.5	5.3 U	49.2	92	45-118	
Chloroform	53.5	41	88.5	88	53-119	
Chloromethane	53.5	5.3 U	53.1	99	34-117	
cis-1,2-Dichloroethene	53.5	5.3 U	51.8	97	50-119	
Bromodichloromethane	53.5	5.3 U	47.7	89	35-132	
cis-1,3-Dichloropropene	53.5	5.3 U	44.2	83	27-133	
1,2-Dibromoethane	53.5	5.3 U	52.2	98	45-127	
Dibromomethane	53.5	5.3 U	55.4	104	52-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146775.D

Lab ID: 240-13194-A-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Dichlorodifluoromethane	53.5	5.3 U	43.0	80	17-115	
Diisopropyl ether	53.5	11 U	50.4	94	62-128	
Ethylbenzene	53.5	5.3 U	46.2	86	30-131	
Hexachlorobutadiene	53.5	5.3 U	20.6	39	10-131	
Isopropylbenzene	53.5	5.3 U	44.4	83	21-134	
2-Butanone	107	21 U	111	104	30-143	
4-Methyl-2-pentanone	107	21 U	130	122	43-147	
m-Xylene & p-Xylene	107	11 U	89.4	84	29-131	
Methyl tert-butyl ether	53.5	21 U	55.9	105	51-157	
Naphthalene	53.5	5.3 U	24.5	46	10-124	
n-Butylbenzene	53.5	5.3 U	33.4	62	10-148	
Methylene Chloride	53.5	5.3 U	48.1	90	54-115	
n-Propylbenzene	53.5	5.3 U	51.7	97	10-178	
o-Xylene	53.5	5.3 U	44.9	84	29-134	
p-Isopropyltoluene	53.5	5.3 U	37.1	69	10-165	
sec-Butylbenzene	53.5	5.3 U	37.2	70	10-172	
Styrene	53.5	5.3 U	44.2	83	27-127	
tert-Butylbenzene	53.5	5.3 U	40.6	76	10-163	
Tetrachloroethene	53.5	11	62.4	96	31-135	
Toluene	53.5	0.52 J	51.4	95	39-129	
trans-1,2-Dichloroethene	53.5	5.3 U	53.1	99	50-123	
trans-1,3-Dichloropropene	53.5	5.3 U	52.2	98	28-137	
Trichloroethene	53.5	19	67.2	90	10-177	
Trichlorofluoromethane	53.5	5.3 U	49.0	92	36-142	
tert-Butyl alcohol	1070	210 U	1040	98	60-125	
Vinyl acetate	53.5	11 U	19.3	36	70-130	F
Vinyl chloride	53.5	5.3 U	53.5	100	42-117	
Dibromochloromethane	53.5	5.3 U	46.8	88	29-135	
Xylenes, Total	160	11 U	134	84	30-131	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146776.D

Lab ID: 240-13194-A-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	53.5	49.2	92	1	30	34-135	
1,1,1-Trichloroethane	53.5	45.6	85	6	30	51-128	
1,1,2,2-Tetrachloroethane	53.5	52.0	97	6	30	16-179	
1,1,2-Trichloro-1,2,2-trichfluoroethane	53.5	52.5	98	4	30	50-147	
1,1-Dichloroethane	53.5	55.0	103	3	30	54-122	
1,1-Dichloroethene	53.5	56.9	106	5	30	49-157	
1,1-Dichloropropene	53.5	49.7	93	4	30	50-122	
1,2,3-Trichlorobenzene	53.5	17.8	33	4	30	10-110	
1,2,3-Trichloropropane	53.5	53.1	99	1	30	32-174	
1,2,3-Trimethylbenzene	53.5	43.5	81	5	30	70-130	
1,2,4-Trichlorobenzene	53.5	19.5	36	6	30	10-111	
1,2,4-Trimethylbenzene	53.5	43.9	82	8	30	10-173	
1,2-Dibromo-3-Chloropropane	53.5	44.1	82	3	30	10-153	
1,2-Dichlorobenzene	53.5	35.2	66	6	30	17-122	
1,2-Dichloroethane	53.5	56.5	106	2	30	49-123	
1,2-Dichloropropane	53.5	54.0	101	2	30	61-117	
1,3-Dichlorobenzene	53.5	36.9	69	3	30	16-126	
1,3-Dichloropropane	53.5	58.1	109	1	30	54-128	
1,4-Dichlorobenzene	53.5	34.9	65	6	30	15-121	
2,2-Dichloropropane	53.5	40.9	76	3	30	49-132	
2-Chloroethyl vinyl ether	53.5	44.8 J	84	3	30	10-162	
2-Chlorotoluene	53.5	45.1	84	7	30	11-162	
2-Hexanone	107	125	117	1	30	37-147	
4-Chlorotoluene	53.5	41.8	78	6	30	15-149	
Acetone	107	113	106	2	30	24-140	
Benzene	53.5	50.8	95	4	30	53-118	
Bromobenzene	53.5	46.8	88	4	30	24-144	
Bromochloromethane	53.5	47.4	89	0	30	53-116	
Bromoform	53.5	40.8	76	6	30	18-129	
Bromomethane	53.5	47.5	89	7	30	33-130	
Carbon disulfide	53.5	39.9	68	4	30	20-151	
Carbon tetrachloride	53.5	45.0	84	5	30	32-137	
Chlorobenzene	53.5	44.8	84	6	30	37-116	
Chloroethane	53.5	48.3	90	2	30	45-118	
Chloroform	53.5	91.2	94	3	30	53-119	
Chloromethane	53.5	50.6	95	5	30	34-117	
cis-1,2-Dichloroethene	53.5	49.9	93	4	30	50-119	
Bromodichloromethane	53.5	46.3	87	3	30	35-132	
cis-1,3-Dichloropropene	53.5	42.9	80	3	30	27-133	
1,2-Dibromoethane	53.5	49.8	93	5	30	45-127	
Dibromomethane	53.5	53.7	100	3	30	52-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 146776.D

Lab ID: 240-13194-A-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dichlorodifluoromethane	53.5	41.1	77	5	30	17-115	
Diisopropyl ether	53.5	50.2	94	0	30	62-128	
Ethylbenzene	53.5	44.1	82	5	30	30-131	
Hexachlorobutadiene	53.5	20.5	38	1	30	10-131	
Isopropylbenzene	53.5	41.0	77	8	30	21-134	
2-Butanone	107	117	109	5	30	30-143	
4-Methyl-2-pentanone	107	131	123	1	30	43-147	
m-Xylene & p-Xylene	107	84.9	79	5	30	29-131	
Methyl tert-butyl ether	53.5	54.7	102	2	30	51-157	
Naphthalene	53.5	23.9	45	3	30	10-124	
n-Butylbenzene	53.5	31.2	58	7	30	10-148	
Methylene Chloride	53.5	47.8	89	1	30	54-115	
n-Propylbenzene	53.5	47.4	89	9	30	10-178	
o-Xylene	53.5	42.5	79	6	30	29-134	
p-Isopropyltoluene	53.5	34.8	65	7	30	10-165	
sec-Butylbenzene	53.5	34.8	65	7	30	10-172	
Styrene	53.5	41.7	78	6	30	27-127	
tert-Butylbenzene	53.5	38.3	72	6	30	10-163	
Tetrachloroethene	53.5	61.0	93	2	30	31-135	
Toluene	53.5	49.9	92	3	30	39-129	
trans-1,2-Dichloroethene	53.5	51.0	95	4	30	50-123	
trans-1,3-Dichloropropene	53.5	51.7	97	1	30	28-137	
Trichloroethene	53.5	67.3	91	0	30	10-177	
Trichlorofluoromethane	53.5	47.6	89	3	30	36-142	
tert-Butyl alcohol	1070	1030	96	1	30	60-125	
Vinyl acetate	53.5	20.9	39	8	30	70-130	F
Vinyl chloride	53.5	52.2	98	2	30	42-117	
Dibromochloromethane	53.5	47.4	89	1	30	29-135	
Xylenes, Total	160	127	79	5	30	30-131	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: STD8260 240-47806/6 Date Analyzed: 06/19/2012 14:41

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ5154.D Heated Purge: (Y/N) N

Calibration ID: 9354

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1726050	5.12	1252017	7.79	392921	10.03
UPPER LIMIT		3452100	5.62	2504034	8.29	785842	10.53
LOWER LIMIT		863025	4.62	626009	7.29	196461	9.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-47806/22		1708401	5.12	1248350	7.79	395805	10.03
CCVIS 240-50744/2		1334961	5.12	979882	7.79	338552	10.03

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCVIS 240-50744/2 Date Analyzed: 07/13/2012 11:51

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXJ5765.D Heated Purge: (Y/N) N

Calibration ID: 9358

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1334961	5.12	979882	7.79	338552	10.03
UPPER LIMIT		2669922	5.62	1959764	8.29	677104	10.53
LOWER LIMIT		667481	4.62	489941	7.29	169276	9.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-50744/3		1296684	5.12	971824	7.79	322289	10.03
LCS 240-50744/4		1256344	5.12	951293	7.79	310332	10.03
MB 240-50744/5		1256499	5.12	937992	7.79	300201	10.03
240-13078-A-2 MS		1237944	5.12	925331	7.79	305506	10.03
240-13078-D-2 MSD		1231372	5.12	923171	7.79	303684	10.03
240-13070-1	TB-071012	1225217	5.12	916863	7.79	296697	10.03

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: STD8260 240-33074/7 Date Analyzed: 02/07/2012 21:34

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX122180.D Heated Purge: (Y/N) N

Calibration ID: 6865

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1426498	5.32	1110703	8.00	481844	10.23
UPPER LIMIT		2852996	5.82	2221406	8.50	963688	10.73
LOWER LIMIT		713249	4.82	555352	7.50	240922	9.73
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-33074/15		1466585	5.32	1106284	8.00	510620	10.23
CCVIS 240-50783/2		1455484	5.32	1107532	8.00	542595	10.23

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCVIS 240-50783/2 Date Analyzed: 07/13/2012 15:11

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX124979.D Heated Purge: (Y/N) N

Calibration ID: 6868

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1455484	5.32	1107532	8.00	542595	10.23
UPPER LIMIT		2910968	5.82	2215064	8.50	1085190	10.73
LOWER LIMIT		727742	4.82	553766	7.50	271298	9.73
LAB SAMPLE ID	CLIENT SAMPLE ID						
LB 240-50667/1-A MB		1412327	5.32	1085951	8.00	515802	10.23
LCS 240-50783/18		1418217	5.32	1072667	8.00	526905	10.23
240-13070-4	MT-TCLP-8-10	1395210	5.32	1070246	8.00	515630	10.23
240-13101-D-3-A MS		1413211	5.32	1065338	8.00	538796	10.23
240-13101-D-3-A MSD		1408704	5.32	1053357	8.00	514448	10.23

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: ICIS 240-49285/5 Date Analyzed: 06/28/2012 15:06

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 146445.D Heated Purge: (Y/N) Y

Calibration ID: 9778

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1679602	6.89	1060993	9.59	545568	11.57
UPPER LIMIT		3359204	7.39	2121986	10.09	1091136	12.07
LOWER LIMIT		839801	6.39	530497	9.09	272784	11.07
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-49285/21		1671105	6.89	1082957	9.59	539318	11.57
CCVIS 240-50749/3		1909407	6.89	1190411	9.59	590557	11.57
CCVIS 240-50900/3		1935745	6.89	1182405	9.60	585431	11.57
CCVIS 240-51061/3		1681393	6.89	1026028	9.60	488552	11.57

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCVIS 240-50749/3 Date Analyzed: 07/13/2012 12:50

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 146686.D Heated Purge: (Y/N) Y

Calibration ID: 9780

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1909407	6.89	1190411	9.59	590557	11.57
UPPER LIMIT		3818814	7.39	2380822	10.09	1181114	12.07
LOWER LIMIT		954704	6.39	595206	9.09	295279	11.07
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-50749/4		1943611	6.89	1182436	9.59	569066	11.57
LCS 240-50627/2-A		1910692	6.89	1185593	9.59	601252	11.57
MB 240-50627/1-A		1864895	6.89	1105060	9.60	546821	11.57

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCVIS 240-50900/3 Date Analyzed: 07/16/2012 11:51

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 146719.D Heated Purge: (Y/N) Y

Calibration ID: 9780

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1935745	6.89	1182405	9.60	585431	11.57
UPPER LIMIT		3871490	7.39	2364810	10.10	1170862	12.07
LOWER LIMIT		967873	6.39	591203	9.10	292716	11.07
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-50900/4		1900920	6.89	1107657	9.59	524254	11.57
LCS 240-50900/5		1998078	6.89	1216305	9.59	566396	11.57
MB 240-50900/6		1863573	6.89	1211765	9.59	582901	11.57
240-13217-A-1 MS		1888082	6.89	1112065	9.59	430145	11.57
240-13217-A-1 MSD		1823920	6.89	1057367	9.59	389994	11.57
240-13070-5	MT-SB17-0-2	1762983	6.89	1128107	9.59	569463	11.57
240-13070-6	MT-SB17-8-10	1614569	6.89	1006077	9.59	489904	11.57

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCVIS 240-51061/3 Date Analyzed: 07/17/2012 12:38

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 146752.D Heated Purge: (Y/N) Y

Calibration ID: 9780

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1681393	6.89	1026028	9.60	488552	11.57
UPPER LIMIT		3362786	7.39	2052056	10.10	977104	12.07
LOWER LIMIT		840697	6.39	513014	9.10	244276	11.07
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-51061/4		1639056	6.89	1031085	9.59	509637	11.57
LCS 240-51061/5		1645757	6.89	1039875	9.59	487561	11.57
MB 240-51061/6		1616716	6.89	993930	9.59	474370	11.57
240-13070-2	MT-SS18-0-2	1574745	6.89	996416	9.59	473806	11.57
240-13070-3	MT-SS18-8-10	1596172	6.88	931785	9.59	436528	11.57
240-13194-A-2 MS		1563344	6.89	878722	9.59	369621	11.57
240-13194-A-2 MSD		1591162	6.89	874459	9.59	366735	11.57

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 0704001.D DFTPP Injection Date: 07/04/2012

Instrument ID: A4AG2 DFTPP Injection Time: 07:55

Analysis Batch No.: 49822

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	45.9	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	41.7	
70	Less than 2.0% of mass 69	0.0	(0.0)1
127	25.0 - 75.0% of mass 198	53.7	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	26.2	
365	Greater than 0.75% of mass 198	3.6	
441	Present, but less than mass 443	11.8	
442	40.0 - 110.0% of mass 198	80.1	
443	15.0 - 24.0% of mass 442	15.4	(19.2)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD9 240-49822/2	0704002.D	07/04/2012	08:12
	STD8 240-49822/3	0704003.D	07/04/2012	08:29
	STD7 240-49822/4	0704004.D	07/04/2012	08:46
	STD6 240-49822/5	0704005.D	07/04/2012	09:03
	STD5 240-49822/6	0704006.D	07/04/2012	09:20
	STD4 240-49822/7	0704007.D	07/04/2012	09:37
	STD3 240-49822/8	0704008.D	07/04/2012	09:54
	STD2 240-49822/9	0704009.D	07/04/2012	10:10
	STD1 240-49822/10	0704010.D	07/04/2012	10:27
	ICV 240-49822/11	0704011.D	07/04/2012	10:44

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49822

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/04/2012 08:12 Calibration End Date: 07/04/2012 10:27 Calibration ID: 9863

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-49822/10	0704010.D
Level 2	STD2 240-49822/9	0704009.D
Level 3	STD3 240-49822/8	0704008.D
Level 4	STD4 240-49822/7	0704007.D
Level 5	STD5 240-49822/6	0704006.D
Level 6	STD6 240-49822/5	0704005.D
Level 7	STD7 240-49822/4	0704004.D
Level 8	STD8 240-49822/3	0704003.D
Level 9	STD9 240-49822/2	0704002.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.4791	0.5309 0.4959	0.4591 0.4886	0.4897 0.5088	0.4755	Ave		0.4910				4.4		15.0			
N-Nitrosodimethylamine	0.8307	0.7514 0.8595	0.7987 0.8164	0.8148 0.8517	0.8113	Ave		0.8168				4.1		15.0			
Pyridine	1.4312	1.1703 1.4441	1.2245 1.4638	1.3158 1.4835	1.3528	Ave		1.3607				8.5		15.0			
Ethyl methacrylate	1.1705	1.0824 1.1807	1.1418 1.1560	1.1376 1.1950	1.1270	Ave		1.1489				3.1		15.0			
3-Chloropropionitrile	1.0347	0.9845 1.0528	0.9885 1.0068	0.9846 1.0338	1.0000	Ave		1.0107				2.6		15.0			
Malononitrile	1.7199	1.6584 1.6397	1.7281 1.4270	1.6727 1.2746	1.7204	Ave		1.6051				10.0		15.0			
Benzaldehyde	1.5923 1.1113	1.3584 0.8156	1.3318	1.3451	1.3261	Ave		1.2686				19.0		15.0			
Phenol	1.7740	1.6150 1.8226	1.6849 1.7872	1.6845 1.8125	1.7533	Ave		1.7417				4.2		15.0			
Aniline	2.2256	2.0119 2.3719	2.0019 2.3004	2.0705 2.2931	2.1680	Ave		2.1804				6.4		15.0			
Bis(2-chloroethyl)ether	1.5929	1.5250 1.5854	1.5294 1.5779	1.5768 1.6087	1.5313	Ave		1.5659				2.1		15.0			
2-Chlorophenol	1.4525	1.3607 1.4997	1.3591 1.4679	1.3848 1.4739	1.3924	Ave		1.4239				3.9		15.0			
1,3-Dichlorobenzene	1.7856	1.6348 1.8078	1.6587 1.7889	1.6719 1.7931	1.6999	Ave		1.7301				4.1		15.0			
1,4-Dichlorobenzene	1.6498	1.6262 1.6911	1.5965 1.6679	1.5806 1.6447	1.5917	Ave		1.6311				2.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49822

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/04/2012 08:12 Calibration End Date: 07/04/2012 10:27 Calibration ID: 9863

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Benzyl alcohol	0.9711	0.8990 1.0053	0.8811 0.9946	0.8977 0.9947	0.9393	Ave		0.9479				5.3		15.0			
1,2-Dichlorobenzene	1.7253	1.6014 1.7709	1.6245 1.7500	1.6157 1.7541	1.6610	Ave		1.6879				4.1		15.0			
2-Methylphenol	1.4132	1.3149 1.4560	1.2839 1.4348	1.3553 1.4282	1.3697	Ave		1.3820				4.4		15.0			
Benzoic acid	0.2295	+++++ 0.2479	0.0793 0.2513	0.1297 0.2585	0.1869	Qua	-0.448	0.2435	0.0005						1.0000		0.9900
bis (2-chloroisopropyl) ether	2.4349	2.4651 2.4704	2.3984 2.3741	2.4470 2.3985	2.4080	Ave		2.4246				1.4		15.0			
3 & 4 Methylphenol	1.4381	1.3493 1.4692	1.3642 1.4540	1.3800 1.4802	1.4089	Ave		1.4180				3.5		15.0			
N-Nitrosodi-n-propylamine	1.0849	0.9911 1.1086	1.0367 1.0959	1.0824 1.1103	1.0865	Ave		1.0746			0.0500	3.8		15.0			
Acetophenone	1.9933	1.9383 2.0233	1.8687 2.0186	1.8937 2.0459	1.9445	Ave		1.9658				3.3		15.0			
Hexachloroethane	0.6120	0.5914 0.6341	0.5751 0.6190	0.5794 0.6369	0.6025	Ave		0.6063				3.9		15.0			
Nitrobenzene	0.4397	0.4111 0.4477	0.4254 0.4440	0.4107 0.4572	0.4297	Ave		0.4332				3.9		15.0			
Isophorone	0.6910	0.6229 0.7052	0.6497 0.6959	0.6495 0.7179	0.6686	Ave		0.6751				4.8		15.0			
2,4-Dimethylphenol	0.3861	0.3454 0.3957	0.3544 0.3958	0.3645 0.4035	0.3699	Ave		0.3769				5.7		15.0			
2-Nitrophenol	0.2117	0.1748 0.2225	0.1731 0.2222	0.1796 0.2234	0.1963	Ave		0.2005				11.0		15.0			
1,3,5-Trichlorobenzene	0.3539	0.3312 0.3719	0.3297 0.3735	0.3218 0.3741	0.3368	Ave		0.3491				6.3		15.0			
Bis(2-chloroethoxy)methane	0.4502	0.4186 0.4735	0.4171 0.4606	0.4178 0.4734	0.4315	Ave		0.4428				5.6		15.0			
2,4-Dichlorophenol	0.2858	0.2331 0.2968	0.2574 0.2921	0.2547 0.3003	0.2738	Ave		0.2743				8.7		15.0			
1,2,4-Trichlorobenzene	0.3517	0.3190 0.3666	0.3301 0.3610	0.3267 0.3654	0.3371	Ave		0.3447				5.5		15.0			
Naphthalene	1.1326 1.0242	0.9920 1.0644	1.0052 1.0515	0.9603 1.0712	0.9943	Ave		1.0329				5.1		15.0			
4-Chloroaniline	0.4617	0.3761 0.4988	0.4108 0.4582	0.4103 0.4666	0.4367	Ave		0.4399				8.9		15.0			
Hexachlorobutadiene	0.1857	0.1698 0.1958	0.1665 0.1971	0.1658 0.1967	0.1754	Ave		0.1816				7.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49822

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/04/2012 08:12 Calibration End Date: 07/04/2012 10:27 Calibration ID: 9863

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	0.3285	0.3070 0.3407	0.3132 0.3408	0.3051 0.3468	0.3138	Ave		0.3245				5.2		15.0			
Caprolactam	0.1176	0.0876 0.1232	0.0964 0.1192	0.1041 0.1240	0.1173	Ave		0.1112				12.0		15.0			
4-Chloro-3-methylphenol	0.3184	0.2745 0.3283	0.2904 0.3279	0.2957 0.3415	0.3137	Ave		0.3113				7.3		15.0			
2-Methylnaphthalene	0.6819 0.7000	0.6680 0.7293	0.6524 0.7114	0.6435 0.7312	0.6778	Ave		0.6884				4.6		15.0			
2,4-Dinitrophenol	0.2017	+++++ 0.2297	0.0759 0.2347	0.1327 0.2509	0.1661	Qua	-0.304	0.1968	0.0012		0.0500				0.9990		0.9900
1-Methylnaphthalene	0.7030 0.6731	0.6224 0.6956	0.6359 0.6939	0.6196 0.7054	0.6375	Ave		0.6652				5.4		15.0			
4-Nitrophenol	0.1972	+++++ 0.2066	0.1439 0.2055	0.1756 0.2177	0.1927	Ave		0.1913			0.0500	13.0		15.0			
1,2,3,5-Tetrachlorobenzene	0.5894	0.5154 0.6224	0.5229 0.6372	0.5124 0.6486	0.5342	Ave		0.5728				10.0		15.0			
Hexachlorocyclopentadiene	0.4054	0.2348 0.4326	0.2249 0.4468	0.3029 0.4302	0.3505	Qua	-0.252	0.4407	0.0003		0.0500				0.9980		0.9900
2,4,6-Trichlorophenol	0.3481	0.2860 0.3656	0.3068 0.3657	0.3149 0.3766	0.3287	Ave		0.3365				9.7		15.0			
2,4,5-Trichlorophenol	0.3705	0.3242 0.3934	0.3301 0.3879	0.3447 0.4076	0.3525	Ave		0.3639				8.4		15.0			
1,2,3,4 -Tetrachlorobenzene	0.5688	0.4807 0.6044	0.5043 0.6147	0.4970 0.6260	0.5131	Ave		0.5511				11.0		15.0			
1,1'-Biphenyl	1.6052 1.5289	1.3690 1.5677	1.3880 1.5903	1.3711 1.6252	1.4119	Ave		1.4953				7.3		15.0			
2-Chloronaphthalene	1.3892 1.2823	1.1892 1.3119	1.1927 1.3368	1.1879 1.3640	1.1929	Ave		1.2719				6.5		15.0			
2-Nitroaniline	0.3805	0.3156 0.3890	0.3426 0.3808	0.3551 0.4016	0.3583	Ave		0.3654				7.7		15.0			
Dimethyl phthalate	1.2716	1.1629 1.3149	1.2085 1.2973	1.2115 1.3533	1.2151	Ave		1.2544				5.2		15.0			
2,6-Dinitrotoluene	0.3313	0.2595 0.3473	0.2913 0.3488	0.2948 0.3626	0.3139	Ave		0.3187				11.0		15.0			
1,2-Dinitrobenzene	0.1653	0.1106 0.1726	0.1434 0.1725	0.1448 0.1743	0.1556	Ave		0.1549				14.0		15.0			
Acenaphthylene	1.8888 1.8895	1.7546 1.9627	1.7689 1.9562	1.7624 2.0105	1.7912	Ave		1.8650				5.3		15.0			
3-Nitroaniline	0.3553	0.2817 0.3726	0.3226 0.3647	0.3239 0.3799	0.3395	Ave		0.3425				9.5		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49822

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/04/2012 08:12 Calibration End Date: 07/04/2012 10:27 Calibration ID: 9863

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Acenaphthene	1.2962 1.1980	1.0795 1.2189	1.1041 1.2310	1.0846 1.2692	1.1174	Ave		1.1777				7.0		15.0			
2,4-Dinitrotoluene	0.4418	0.3273 0.4629	0.3925 0.4647	0.4077 0.4786	0.4228	Ave		0.4248				12.0		15.0			
Dibenzofuran	1.6813 1.5749	1.4778 1.6262	1.5124 1.6369	1.4798 1.6920	1.4876	Ave		1.5743				5.6		15.0			
2,3,5,6-Tetrachlorophenol	0.2952	0.2159 0.3126	0.2468 0.3214	0.2631 0.3322	0.2786	Ave		0.2832				14.0		15.0			
Diethyl phthalate	1.2926	1.2175 1.3550	1.2564 1.3432	1.2565 1.4087	1.2664	Ave		1.2995				4.9		15.0			
4-Chlorophenyl phenyl ether	0.6767	0.6017 0.7239	0.6309 0.7351	0.6200 0.7563	0.6332	Ave		0.6722				8.8		15.0			
4-Nitroaniline	0.3787	0.2859 0.4136	0.3300 0.4159	0.3451 0.4363	0.3636	Ave		0.3711				14.0		15.0			
Fluorene	1.3488 1.3604	1.2211 1.4218	1.2757 1.4198	1.2436 1.4772	1.2810	Ave		1.3388				6.6		15.0			
4,6-Dinitro-2-methylphenol	0.1472	0.0496 0.1622	0.0922 0.1641	0.1111 0.1686	0.1330	Qua	-0.072	0.1494	0.0009						1.0000		0.9900
N-Nitrosodiphenylamine	0.6298	0.5581 0.6561	0.5754 0.6588	0.5729 0.6593	0.5827	Ave		0.6116				7.1		15.0			
1,2-Diphenylhydrazine	0.8862	0.8037 0.8975	0.8432 0.9079	0.8192 0.9230	0.8333	Ave		0.8642				5.2		15.0			
Azobenzene	0.8862	0.8037 0.8975	0.8432 0.9079	0.8192 0.9230	0.8333	Ave		0.8642				5.2		15.0			
4-Bromophenyl phenyl ether	0.2377	0.2034 0.2569	0.2085 0.2678	0.2102 0.2682	0.2177	Ave		0.2338				12.0		15.0			
Hexachlorobenzene	0.2052 0.2209	0.1988 0.2413	0.1908 0.2464	0.1942 0.2533	0.1991	Ave		0.2167				11.0		15.0			
Atrazine	0.1904	0.1732 0.2014	0.1822 0.1992	0.1802 0.1942	0.1836	Ave		0.1881				5.2		15.0			
Pentachlorophenol	0.1635	0.0739 0.1793	0.1122 0.1874	0.1292 0.1942	0.1401	Qua	-0.124	0.1553	0.0008						1.0000		0.9900
Phenanthrene	1.2654 1.1674	1.0940 1.2101	1.0932 1.2438	1.0879 1.2460	1.0906	Ave		1.1665				6.5		15.0			
Anthracene	1.2591 1.2079	1.0731 1.2671	1.1262 1.2981	1.1144 1.3105	1.1372	Ave		1.1993				7.4		15.0			
Carbazole	1.1307	1.0125 1.1848	1.0591 1.1951	1.0538 1.2133	1.0538	Ave		1.1129				7.0		15.0			
Di-n-butyl phthalate	1.4263	1.2690 1.4948	1.3043 1.5162	1.3110 1.5463	1.3359	Ave		1.4005				7.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49822

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/04/2012 08:12 Calibration End Date: 07/04/2012 10:27 Calibration ID: 9863

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Fluoranthene	1.2356 1.2232	1.0762 1.2754	1.0866 1.2818	1.1017 1.3180	1.1194	Ave		1.1909				8.0		15.0			
Benzidine	 0.8286	0.5833 0.8230	0.6409 0.7973	0.7404 0.8437	0.7602	Ave		0.7522				13.0		15.0			
Pyrene	1.6903 1.3989	1.3507 1.4508	1.3691 1.4423	1.3527 1.4662	1.3170	Ave		1.4264				7.8		15.0			
Butyl benzyl phthalate	 0.7057	0.6705 0.7227	0.6902 0.7217	0.6867 0.7384	0.6770	Ave		0.7016				3.5		15.0			
3,3'-Dimethoxybenzidine	 0.3890	0.2563 0.3977	0.2870 0.4104	0.3356 0.4023	0.3621	Qua	-0.129	0.4023	0.0003						1.0000		0.9900
Bis(2-ethylhexyl) phthalate	 1.0176	0.9271 1.0312	0.9728 1.0390	0.9636 1.0698	0.9779	Ave		0.9999				4.7		15.0			
4,4'-Methylene bis(2-chloroaniline)	 0.2795	0.2054 0.3025	0.2376 0.3050	0.2417 0.3117	0.2495	Ave		0.2666				15.0		15.0			
3,3'-Dichlorobenzidine	 0.5573	0.4361 0.5901	0.4702 0.5949	0.4813 0.6149	0.4972	Ave		0.5303				13.0		15.0			
Benzo[a]anthracene	1.5327 1.3104	1.2570 1.3505	1.2546 1.3573	1.2220 1.3807	1.2355	Ave		1.3223				7.4		15.0			
Chrysene	1.3472 1.2061	1.0860 1.2486	1.1321 1.2088	1.1480 1.2721	1.1386	Ave		1.1986				6.8		15.0			
Di-n-octyl phthalate	 2.1547	1.7757 2.2193	1.8995 2.2295	1.8978 2.3222	1.9567	Ave		2.0569				9.6		15.0			
Benzo[b]fluoranthene	1.6488 1.5446	1.4204 1.6370	1.4192 1.7858	1.4809 1.7633	1.4371	Ave		1.5708				9.2		15.0			
Benzo[k]fluoranthene	1.7182 1.7230	1.4558 1.7152	1.6113 1.6693	1.4325 1.7187	1.5193	Ave		1.6181				7.4		15.0			
Benzo[a]pyrene	1.5493 1.5094	1.2915 1.5543	1.3362 1.5785	1.3318 1.6193	1.3730	Ave		1.4604				8.6		15.0			
Indeno[1,2,3-cd]pyrene	1.4454 1.7101	1.4143 1.7457	1.4823 1.7878	1.4713 1.8533	1.5257	Ave		1.6040				11.0		15.0			
Dibenz(a,h)anthracene	1.2347 1.4448	1.1420 1.5226	1.2557 1.5404	1.2320 1.6111	1.3044	Ave		1.3653				12.0		15.0			
Benzo[g,h,i]perylene	1.2994 1.3984	1.1718 1.4127	1.2550 1.4289	1.2426 1.4926	1.2574	Ave		1.3288				8.1		15.0			
2-Fluorophenol (Surr)	 1.3305	1.1701 1.3530	1.1643 1.3076	1.2509 1.3439	1.2366	Ave		1.2696				6.0		15.0			
Phenol-d5 (Surr)	 1.6686	1.5122 1.7032	1.5579 1.6930	1.5673 1.7111	1.6264	Ave		1.6300				4.7		15.0			
Nitrobenzene-d5 (Surr)	0.4620 0.4405	0.4116 0.4447	0.4201 0.4426	0.3899 0.4541	0.4180	Ave		0.4315				5.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49822

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/04/2012 08:12 Calibration End Date: 07/04/2012 10:27 Calibration ID: 9863

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Fluorobiphenyl (Surr)	1.5882 1.4724	1.3849 1.5484	1.4135 1.5366	1.3913 1.5786	1.3873	Ave		1.4779				5.8		15.0			
2,4,6-Tribromophenol (Surr)	 0.1556	0.1061 0.1715	0.1256 0.1761	0.1305 0.1830	0.1454	Qua	-0.036	0.1489	0.0014						1.0000		0.9900
Terphenyl-d14 (Surr)	0.9966 0.8982	0.8357 0.9439	0.8497 0.9520	0.8429 0.9868	0.8303	Ave		0.9040				7.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49822/11 Calibration Date: 07/04/2012 10:44

Instrument ID: A4AG2 Calib Start Date: 07/04/2012 08:12

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/04/2012 10:27

Lab File ID: 0704011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4910	0.4505		9.18	10.0	-8.2	50.0
N-Nitrosodimethylamine	Ave	0.8168	0.8228		10.1	10.0	0.7	50.0
Pyridine	Ave	1.361	1.398		10.3	10.0	2.8	50.0
Ethyl methacrylate	Ave	1.149	1.126		9.80	10.0	-2.0	50.0
3-Chloropropionitrile	Ave	1.011	0.9906		9.80	10.0	-2.0	50.0
Malononitrile	Ave	1.605	1.717		10.7	10.0	7.0	50.0
Benzaldehyde	Ave	1.269	1.115		8.79	10.0	-12.1	50.0
Phenol	Ave	1.742	1.796		10.3	10.0	3.1	20.0
Aniline	Ave	2.180	2.216		10.2	10.0	1.6	50.0
Bis(2-chloroethyl)ether	Ave	1.566	1.585		10.1	10.0	1.2	50.0
2-Chlorophenol	Ave	1.424	1.445		10.1	10.0	1.5	50.0
1,3-Dichlorobenzene	Ave	1.730	1.740		10.1	10.0	0.6	50.0
1,4-Dichlorobenzene	Ave	1.631	1.631		10.0	10.0	0.0	20.0
Benzyl alcohol	Ave	0.9479	0.9782		10.3	10.0	3.2	50.0
1,2-Dichlorobenzene	Ave	1.688	1.731		10.3	10.0	2.6	50.0
2-Methylphenol	Ave	1.382	1.441		10.4	10.0	4.3	50.0
3 & 4 Methylphenol	Ave	1.418	1.460		10.3	10.0	2.9	50.0
N-Nitrosodi-n-propylamine	Ave	1.075	1.105	0.0500	10.3	10.0	2.8	50.0
Acetophenone	Ave	1.966	2.026		10.3	10.0	3.1	50.0
Hexachloroethane	Ave	0.6063	0.6139		10.1	10.0	1.2	50.0
Nitrobenzene	Ave	0.4332	0.4406		10.2	10.0	1.7	50.0
Isophorone	Ave	0.6751	0.6929		10.3	10.0	2.6	50.0
2,4-Dimethylphenol	Ave	0.3769	0.3912		10.4	10.0	3.8	50.0
2-Nitrophenol	Ave	0.2005	0.2112		10.5	10.0	5.3	20.0
1,3,5-Trichlorobenzene	Ave	0.3491	0.3553		10.2	10.0	1.8	50.0
Benzoic acid	Qua		0.2244		19.5	20.0	-2.5	50.0
Bis(2-chloroethoxy)methane	Ave	0.4428	0.4617		10.4	10.0	4.3	50.0
2,4-Dichlorophenol	Ave	0.2743	0.2834		10.3	10.0	3.3	20.0
1,2,4-Trichlorobenzene	Ave	0.3447	0.3496		10.1	10.0	1.4	50.0
Naphthalene	Ave	1.033	1.030		9.97	10.0	-0.3	50.0
4-Chloroaniline	Ave	0.4399	0.4596		10.4	10.0	4.5	50.0
Hexachlorobutadiene	Ave	0.1816	0.1818		10.0	10.0	0.0	20.0
1,2,3-Trichlorobenzene	Ave	0.3245	0.3253		10.0	10.0	0.3	50.0
Caprolactam	Ave	0.1112	0.1226		11.0	10.0	10.3	50.0
4-Chloro-3-methylphenol	Ave	0.3113	0.3286		10.6	10.0	5.6	20.0
2-Methylnaphthalene	Ave	0.6884	0.6960		10.1	10.0	1.1	50.0
1-Methylnaphthalene	Ave	0.6652	0.6744		10.1	10.0	1.4	50.0
Hexachlorocyclopentadiene	Qua		0.3833	0.0500	9.22	10.0	-7.8	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5728	0.5823		10.2	10.0	1.7	50.0
2,4,6-Trichlorophenol	Ave	0.3365	0.3505		10.4	10.0	4.2	20.0
2,4,5-Trichlorophenol	Ave	0.3639	0.3767		10.4	10.0	3.5	50.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49822/11 Calibration Date: 07/04/2012 10:44

Instrument ID: A4AG2 Calib Start Date: 07/04/2012 08:12

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/04/2012 10:27

Lab File ID: 0704011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.495	1.517		10.1	10.0	1.5	50.0
2-Chloronaphthalene	Ave	1.272	1.271		10.0	10.0	-0.0	50.0
2-Nitroaniline	Ave	0.3654	0.3800		10.4	10.0	4.0	50.0
Dimethyl phthalate	Ave	1.254	1.294		10.3	10.0	3.1	50.0
1,2-Dinitrobenzene	Ave	0.1549	0.1683		10.9	10.0	8.6	50.0
Acenaphthylene	Ave	1.865	1.927		10.3	10.0	3.3	50.0
3-Nitroaniline	Ave	0.3425	0.3636		10.6	10.0	6.1	50.0
2,4-Dinitrophenol	Qua		0.1912	0.0500	18.8	20.0	-6.0	50.0
Acenaphthene	Ave	1.178	1.189		10.1	10.0	0.9	20.0
4-Nitrophenol	Ave	0.1913	0.2016	0.0500	10.5	10.0	5.4	50.0
2,4-Dinitrotoluene	Ave	0.4248	0.4551		10.7	10.0	7.1	50.0
Dibenzofuran	Ave	1.574	1.595		10.1	10.0	1.3	50.0
2,3,5,6-Tetrachlorophenol	Ave	0.2832	0.2976		10.5	10.0	5.1	50.0
Diethyl phthalate	Ave	1.300	1.331		10.2	10.0	2.4	50.0
4-Chlorophenyl phenyl ether	Ave	0.6722	0.6891		10.3	10.0	2.5	50.0
4-Nitroaniline	Ave	0.3711	0.3917		10.6	10.0	5.5	50.0
Fluorene	Ave	1.339	1.358		10.1	10.0	1.4	50.0
4,6-Dinitro-2-methylphenol	Qua		0.1465		9.71	10.0	-2.9	50.0
N-Nitrosodiphenylamine	Ave	0.6116	0.6379		10.4	10.0	4.3	20.0
1,2-Diphenylhydrazine	Ave	0.8642	0.9199		10.6	10.0	6.4	50.0
4-Bromophenyl phenyl ether	Ave	0.2338	0.2394		10.2	10.0	2.4	50.0
Hexachlorobenzene	Ave	0.2167	0.2233		10.3	10.0	3.0	50.0
Atrazine	Ave	0.1881	0.1966		10.5	10.0	4.6	50.0
Pentachlorophenol	Qua		0.1630		19.7	20.0	-1.5	20.0
Phenanthrene	Ave	1.166	1.182		10.1	10.0	1.3	50.0
Anthracene	Ave	1.199	1.246		10.4	10.0	3.9	50.0
Carbazole	Ave	1.113	1.141		10.3	10.0	2.6	50.0
Di-n-butyl phthalate	Ave	1.400	1.471		10.5	10.0	5.0	50.0
Fluoranthene	Ave	1.191	1.233		10.4	10.0	3.5	20.0
Benzidine	Ave	0.7522	0.8008		10.6	10.0	6.5	50.0
Pyrene	Ave	1.426	1.414		9.91	10.0	-0.9	50.0
Butyl benzyl phthalate	Ave	0.7016	0.7308		10.4	10.0	4.2	50.0
3,3'-Dimethoxybenzidine	Qua		0.3837		9.78	10.0	-2.2	50.0
Bis(2-ethylhexyl) phthalate	Ave	1.000	1.038		10.4	10.0	3.8	50.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2666	0.2771		10.4	10.0	3.9	50.0
3,3'-Dichlorobenzidine	Ave	0.5303	0.5450		10.3	10.0	2.8	50.0
Benzo[a]anthracene	Ave	1.322	1.300		9.83	10.0	-1.7	50.0
Chrysene	Ave	1.199	1.208		10.1	10.0	0.8	50.0
Di-n-octyl phthalate	Ave	2.057	2.168		10.5	10.0	5.4	20.0
Benzo[b]fluoranthene	Ave	1.571	1.547		9.85	10.0	-1.5	50.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49822/11 Calibration Date: 07/04/2012 10:44

Instrument ID: A4AG2 Calib Start Date: 07/04/2012 08:12

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/04/2012 10:27

Lab File ID: 0704011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[k]fluoranthene	Ave	1.618	1.681		10.4	10.0	3.9	50.0
Benzo[a]pyrene	Ave	1.460	1.506		10.3	10.0	3.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.604	1.689		10.5	10.0	5.3	50.0
Dibenz(a,h)anthracene	Ave	1.365	1.441		10.6	10.0	5.6	50.0
Benzo[g,h,i]perylene	Ave	1.329	1.379		10.4	10.0	3.8	50.0
2-Fluorophenol (Surr)	Ave	1.270	1.271		10.0	10.0	0.1	50.0
Phenol-d5 (Surr)	Ave	1.630	1.669		10.2	10.0	2.4	50.0
Nitrobenzene-d5 (Surr)	Ave	0.4315	0.4266		9.89	10.0	-1.1	50.0
2-Fluorobiphenyl (Surr)	Ave	1.478	1.497		10.1	10.0	1.3	50.0
2,4,6-Tribromophenol (Surr)	Qua		0.1543		9.69	10.0	-3.1	50.0
Terphenyl-d14 (Surr)	Ave	0.9040	0.9153		10.1	10.0	1.2	50.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 0716001.D DFTPP Injection Date: 07/16/2012

Instrument ID: A4AG2 DFTPP Injection Time: 07:39

Analysis Batch No.: 50843

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	45.5	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	46.0	
70	Less than 2.0% of mass 69	0.3	(0.6)1
127	25.0 - 75.0% of mass 198	55.8	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.6	
275	10.0- 30.0% of mass 198	26.0	
365	Greater than 0.75% of mass 198	3.5	
441	Present, but less than mass 443	11.7	
442	40.0 - 110.0% of mass 198	77.3	
443	15.0 - 24.0% of mass 442	14.7	(19.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-50843/2	0716002.D	07/16/2012	07:55
	MB 240-50724/8-A	0716006.D	07/16/2012	09:02
	LCS 240-50724/9-A	0716007.D	07/16/2012	09:19
	240-13082-H-1-F MS	0716013.D	07/16/2012	11:00
MT-TCLP-8-10	240-13070-4	0716014.D	07/16/2012	11:16

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50843/2 Calibration Date: 07/16/2012 07:55

Instrument ID: A4AG2 Calib Start Date: 07/04/2012 08:12

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/04/2012 10:27

Lab File ID: 0716002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4910	0.4193		8.54	10.0	-14.6	50.0
N-Nitrosodimethylamine	Ave	0.8168	0.7583		9.28	10.0	-7.2	50.0
Pyridine	Ave	1.361	1.257		9.24	10.0	-7.6	50.0
Ethyl methacrylate	Ave	1.149	1.073		9.34	10.0	-6.6	50.0
3-Chloropropionitrile	Ave	1.011	0.9550		9.45	10.0	-5.5	50.0
Malononitrile	Ave	1.605	1.625		10.1	10.0	1.2	50.0
Benzaldehyde	Ave	1.269	1.118		8.82	10.0	-11.8	50.0
Phenol	Ave	1.742	1.772		10.2	10.0	1.8	20.0
Aniline	Ave	2.180	2.267		10.4	10.0	4.0	50.0
Bis(2-chloroethyl)ether	Ave	1.566	1.605		10.2	10.0	2.5	50.0
2-Chlorophenol	Ave	1.424	1.444		10.1	10.0	1.4	50.0
1,3-Dichlorobenzene	Ave	1.730	1.753		10.1	10.0	1.3	50.0
1,4-Dichlorobenzene	Ave	1.631	1.638		10.0	10.0	0.4	50.0
Benzyl alcohol	Ave	0.9479	0.8343		8.80	10.0	-12.0	50.0
1,2-Dichlorobenzene	Ave	1.688	1.732		10.3	10.0	2.6	50.0
2-Methylphenol	Ave	1.382	1.439		10.4	10.0	4.1	50.0
3 & 4 Methylphenol	Ave	1.418	1.430		10.1	10.0	0.9	50.0
N-Nitrosodi-n-propylamine	Ave	1.075	1.148	0.0500	10.7	10.0	6.9	50.0
Acetophenone	Ave	1.966	2.102		10.7	10.0	6.9	50.0
Hexachloroethane	Ave	0.6063	0.6408		10.6	10.0	5.7	50.0
Nitrobenzene	Ave	0.4332	0.4483		10.3	10.0	3.5	50.0
Isophorone	Ave	0.6751	0.7029		10.4	10.0	4.1	50.0
2,4-Dimethylphenol	Ave	0.3769	0.3987		10.6	10.0	5.8	50.0
2-Nitrophenol	Ave	0.2005	0.2110		10.5	10.0	5.2	20.0
1,3,5-Trichlorobenzene	Ave	0.3491	0.3538		10.1	10.0	1.3	50.0
Benzoic acid	Qua		0.2078		18.2	20.0	-9.0	50.0
Bis(2-chloroethoxy)methane	Ave	0.4428	0.4522		10.2	10.0	2.1	50.0
2,4-Dichlorophenol	Ave	0.2743	0.2710		9.88	10.0	-1.2	20.0
1,2,4-Trichlorobenzene	Ave	0.3447	0.3513		10.2	10.0	1.9	50.0
Naphthalene	Ave	1.033	1.033		10.0	10.0	-0.0	50.0
4-Chloroaniline	Ave	0.4399	0.4743		10.8	10.0	7.8	50.0
Hexachlorobutadiene	Ave	0.1816	0.1844		10.2	10.0	1.6	20.0
1,2,3-Trichlorobenzene	Ave	0.3245	0.3251		10.0	10.0	0.2	50.0
Caprolactam	Ave	0.1112	0.1201		10.8	10.0	8.0	50.0
4-Chloro-3-methylphenol	Ave	0.3113	0.3421		11.0	10.0	9.9	20.0
2-Methylnaphthalene	Ave	0.6884	0.7012		10.2	10.0	1.9	50.0
1-Methylnaphthalene	Ave	0.6652	0.6731		10.1	10.0	1.2	50.0
Hexachlorocyclopentadiene	Qua		0.2558	0.0500	6.35	10.0	-36.5	50.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5728	0.5627		9.82	10.0	-1.8	50.0
2,4,6-Trichlorophenol	Ave	0.3365	0.3284		9.76	10.0	-2.4	20.0
2,4,5-Trichlorophenol	Ave	0.3639	0.3692		10.1	10.0	1.5	50.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50843/2 Calibration Date: 07/16/2012 07:55

Instrument ID: A4AG2 Calib Start Date: 07/04/2012 08:12

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/04/2012 10:27

Lab File ID: 0716002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.495	1.514		10.1	10.0	1.3	50.0
2-Chloronaphthalene	Ave	1.272	1.285		10.1	10.0	1.0	50.0
2-Nitroaniline	Ave	0.3654	0.3871		10.6	10.0	5.9	50.0
Dimethyl phthalate	Ave	1.254	1.316		10.5	10.0	4.9	50.0
1,2-Dinitrobenzene	Ave	0.1549	0.1674		10.8	10.0	8.1	50.0
Acenaphthylene	Ave	1.865	1.929		10.3	10.0	3.4	50.0
3-Nitroaniline	Ave	0.3425	0.3580		10.5	10.0	4.5	50.0
2,4-Dinitrophenol	Qua		0.1679	0.0500	16.9	20.0	-15.5	50.0
Acenaphthene	Ave	1.178	1.181		10.0	10.0	0.3	20.0
4-Nitrophenol	Ave	0.1913	0.2038	0.0500	10.7	10.0	6.6	50.0
2,4-Dinitrotoluene	Ave	0.4248	0.4735		11.1	10.0	11.5	50.0
Dibenzofuran	Ave	1.574	1.604		10.2	10.0	1.9	50.0
2,3,5,6-Tetrachlorophenol	Ave	0.2832	0.2764		9.76	10.0	-2.4	50.0
Diethyl phthalate	Ave	1.300	1.401		10.8	10.0	7.8	50.0
4-Chlorophenyl phenyl ether	Ave	0.6722	0.6856		10.2	10.0	2.0	50.0
4-Nitroaniline	Ave	0.3711	0.4017		10.8	10.0	8.2	50.0
Fluorene	Ave	1.339	1.393		10.4	10.0	4.0	50.0
4,6-Dinitro-2-methylphenol	Qua		0.1390		9.26	10.0	-7.4	50.0
N-Nitrosodiphenylamine	Ave	0.6116	0.6320		10.3	10.0	3.3	20.0
1,2-Diphenylhydrazine	Ave	0.8642	0.9031		10.4	10.0	4.5	50.0
4-Bromophenyl phenyl ether	Ave	0.2338	0.2394		10.2	10.0	2.4	50.0
Hexachlorobenzene	Ave	0.2167	0.2140		9.88	10.0	-1.2	50.0
Atrazine	Ave	0.1881	0.1939		10.3	10.0	3.1	50.0
Pentachlorophenol	Qua		0.1293		16.0	20.0	-20.0	20.0
Phenanthrene	Ave	1.166	1.182		10.1	10.0	1.3	50.0
Anthracene	Ave	1.199	1.229		10.2	10.0	2.5	50.0
Carbazole	Ave	1.113	1.144		10.3	10.0	2.8	50.0
Di-n-butyl phthalate	Ave	1.400	1.505		10.7	10.0	7.4	50.0
Fluoranthene	Ave	1.191	1.234		10.4	10.0	3.6	20.0
Benzidine	Ave	0.7522	0.8296		11.0	10.0	10.3	50.0
Pyrene	Ave	1.426	1.530		10.7	10.0	7.3	50.0
Butyl benzyl phthalate	Ave	0.7016	0.8093		11.5	10.0	15.3	50.0
3,3'-Dimethoxybenzidine	Qua		0.3350		8.58	10.0	-14.2	50.0
Bis(2-ethylhexyl) phthalate	Ave	1.000	1.122		11.2	10.0	12.2	50.0
3,3'-Dichlorobenzidine	Ave	0.5303	0.5312		10.0	10.0	0.2	50.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2666	0.2836		10.6	10.0	6.3	50.0
Benzo[a]anthracene	Ave	1.322	1.336		10.1	10.0	1.0	50.0
Chrysene	Ave	1.199	1.228		10.2	10.0	2.5	50.0
Di-n-octyl phthalate	Ave	2.057	2.461		12.0	10.0	19.6	20.0
Benzo[b]fluoranthene	Ave	1.571	1.560		9.93	10.0	-0.7	50.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50843/2 Calibration Date: 07/16/2012 07:55

Instrument ID: A4AG2 Calib Start Date: 07/04/2012 08:12

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/04/2012 10:27

Lab File ID: 0716002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[k]fluoranthene	Ave	1.618	1.729		10.7	10.0	6.8	50.0
Benzo[a]pyrene	Ave	1.460	1.532		10.5	10.0	4.9	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.604	1.714		10.7	10.0	6.9	50.0
Dibenz(a,h)anthracene	Ave	1.365	1.439		10.5	10.0	5.4	50.0
Benzo[g,h,i]perylene	Ave	1.329	1.398		10.5	10.0	5.2	50.0
2-Fluorophenol (Surr)	Ave	1.270	1.285		10.1	10.0	1.2	50.0
Phenol-d5 (Surr)	Ave	1.630	1.707		10.5	10.0	4.7	50.0
Nitrobenzene-d5 (Surr)	Ave	0.4315	0.4406		10.2	10.0	2.1	50.0
2-Fluorobiphenyl (Surr)	Ave	1.478	1.479		10.0	10.0	0.0	50.0
2,4,6-Tribromophenol (Surr)	Qua		0.1471		9.29	10.0	-7.1	50.0
Terphenyl-d14 (Surr)	Ave	0.9040	0.9698		10.7	10.0	7.3	50.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 0716006.D Lab Sample ID: MB 240-50724/8-A

Matrix: Water Date Extracted: 07/13/2012 09:58

Instrument ID: A4AG2 Date Analyzed: 07/16/2012 09:02

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-50724/9-A	0716007.D	07/16/2012 09:19
	240-13082-H-1-F MS	0716013.D	07/16/2012 11:00
MT-TCLP-8-10	240-13070-4	0716014.D	07/16/2012 11:16

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50724/8-A

Matrix: Solid | Lab File ID: 0716006.D

Analysis Method: 8270C | Date Collected:

Extract. Method: 3510C | Date Extracted: 07/13/2012 09:58

Sample wt/vol: 250(mL) | Date Analyzed: 07/16/2012 09:02

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 50843 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-46-7	1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034
95-95-4	2,4,5-Trichlorophenol	0.020	U	0.020	0.00030
88-06-2	2,4,6-Trichlorophenol	0.020	U	0.020	0.00080
121-14-2	2,4-Dinitrotoluene	0.020	U	0.020	0.00027
95-48-7	2-Methylphenol	0.0040	U	0.0040	0.00080
15831-10-4	3 & 4 Methylphenol	0.040	U	0.040	0.00075
118-74-1	Hexachlorobenzene	0.020	U	0.020	0.00010
87-68-3	Hexachlorobutadiene	0.020	U	0.020	0.00027
67-72-1	Hexachloroethane	0.020	U	0.020	0.00080
98-95-3	Nitrobenzene	0.0040	U	0.0040	0.000040
87-86-5	Pentachlorophenol	0.040	U	0.040	0.0024
110-86-1	Pyridine	0.020	U	0.020	0.00035

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	52		17-117
321-60-8	2-Fluorobiphenyl (Surr)	45		22-110
367-12-4	2-Fluorophenol (Surr)	48		10-110
4165-60-0	Nitrobenzene-d5 (Surr)	50		29-111
4165-62-2	Phenol-d5 (Surr)	42		10-110
1718-51-0	Terphenyl-d14 (Surr)	68		40-119

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MT-TCLP-8-10	240-13070-4	42	38	44	40	46	67
	MB 240-50724/8-A	48	42	50	45	52	68
	LCS 240-50724/9-A	51	44	52	47	61	77
	240-13082-H-1-F MS	50	42	51	46	58	69

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	10-110
NBZ = Nitrobenzene-d5 (Surr)	29-111
FBP = 2-Fluorobiphenyl (Surr)	22-110
TBP = 2,4,6-Tribromophenol (Surr)	17-117
TPH = Terphenyl-d14 (Surr)	40-119

Column to be used to flag recovery values

FORM II 8270C

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 0716007.D

Lab ID: LCS 240-50724/9-A Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	0.0800	0.0506	63	35-111	
2,4,6-Trichlorophenol	0.0800	0.0466	58	32-110	
2,4-Dinitrotoluene	0.0800	0.0532	67	45-126	
2-Methylphenol	0.0800	0.0528	66	24-110	
3 & 4 Methylphenol	0.160	0.0920	58	27-110	
Hexachlorobenzene	0.0800	0.0482	60	47-116	
Hexachlorobutadiene	0.0800	0.0362	45	10-110	
Hexachloroethane	0.0800	0.0402	50	10-110	
Nitrobenzene	0.0800	0.0418	52	35-117	
Pentachlorophenol	0.0800	0.0445	56	12-110	
Pyridine	0.0800	0.0422	53	10-110	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low Lab File ID: 0716013.D

Lab ID: 240-13082-H-1-F MS Client ID:

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	0.0800	0.020 U	0.0479	60	24-143	
2,4,6-Trichlorophenol	0.0800	0.020 U	0.0442	55	36-135	
2,4-Dinitrotoluene	0.0800	0.020 U	0.0494	62	31-131	
2-Methylphenol	0.0800	0.0040 U	0.0526	66	33-115	
3 & 4 Methylphenol	0.160	0.040 U	0.0856	54	46-110	
Hexachlorobenzene	0.0800	0.020 U	0.0447	56	36-132	
Hexachlorobutadiene	0.0800	0.020 U	0.0364	46	18-116	
Hexachloroethane	0.0800	0.020 U	0.0385	48	18-110	
Nitrobenzene	0.0800	0.0040 U	0.0422	53	19-199	
Pentachlorophenol	0.0800	0.040 U	0.0358 J	45	10-140	
Pyridine	0.0800	0.020 U	0.0397	50	10-148	

Column to be used to flag recovery and RPD values

FORM III 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: STD6 240-49822/5 Date Analyzed: 07/04/2012 09:03

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0704005.D Heated Purge: (Y/N) N

Calibration ID: 9863

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		123876	3.56	503502	4.45	284319	5.72
UPPER LIMIT		247752	4.06	1007004	4.95	568638	6.22
LOWER LIMIT		61938	3.06	251751	3.95	142160	5.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-49822/11		122178	3.56	501046	4.45	286063	5.72
CCV 240-50843/2 CCVIS		97330	3.58	410769	4.47	235862	5.75

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: STD6 240-49822/5 Date Analyzed: 07/04/2012 09:03

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0704005.D Heated Purge: (Y/N) N

Calibration ID: 9863

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		443192	6.80	396201	8.76	311774	10.19
UPPER LIMIT		886384	7.30	792402	9.26	623548	10.69
LOWER LIMIT		221596	6.30	198101	8.26	155887	9.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-49822/11		446815	6.80	402479	8.76	313917	10.18
CCV 240-50843/2 CCVIS		377468	6.84	308975	8.82	235109	10.31

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-50843/2 Date Analyzed: 07/16/2012 07:55

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0716002.D Heated Purge: (Y/N) N

Calibration ID: 9867

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		97330	3.58	410769	4.47	235862	5.75
UPPER LIMIT		194660	4.08	821538	4.97	471724	6.25
LOWER LIMIT		48665	3.08	205385	3.97	117931	5.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-50724/8-A		116950	3.58	495271	4.47	297583	5.75
LCS 240-50724/9-A		124672	3.58	528092	4.47	323985	5.75
240-13082-H-1-F MS		113491	3.58	472033	4.47	284525	5.75
240-13070-4	MT-TCLP-8-10	120193	3.58	507096	4.47	304347	5.75

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-50843/2 Date Analyzed: 07/16/2012 07:55

Instrument ID: A4AG2 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 0716002.D Heated Purge: (Y/N) N

Calibration ID: 9867

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		377468	6.84	308975	8.82	235109	10.31
UPPER LIMIT		754936	7.34	617950	9.32	470218	10.81
LOWER LIMIT		188734	6.34	154488	8.32	117555	9.81
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-50724/8-A		480204	6.84	391211	8.82	309826	10.31
LCS 240-50724/9-A		529212	6.84	433955	8.83	341058	10.31
240-13082-H-1-F MS		481527	6.84	396642	8.82	315093	10.31
240-13070-4	MT-TCLP-8-10	497286	6.84	402403	8.82	320895	10.30

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270C

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 20718001.D DFTPP Injection Date: 07/18/2012

Instrument ID: A4HP9 DFTPP Injection Time: 09:37

Analysis Batch No.: 51126

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	44.7	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	71.0	
70	Less than 2.0% of mass 69	0.3	(0.4)1
127	25.0 - 75.0% of mass 198	52.9	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.3	
275	10.0- 30.0% of mass 198	21.4	
365	Greater than 0.75% of mass 198	2.4	
441	Present, but less than mass 443	5.3	
442	40.0 - 110.0% of mass 198	46.2	
443	15.0 - 24.0% of mass 442	8.5	(18.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-51126/2	20718002.D	07/18/2012	09:54
	STD4 240-51126/3	20718003.D	07/18/2012	10:13
	STD3 240-51126/4	20718004.D	07/18/2012	10:33
	STD2 240-51126/5	20718005.D	07/18/2012	10:52
	STD1 240-51126/6	20718006.D	07/18/2012	11:11
	STD9 240-51126/7	20718007.D	07/18/2012	11:31
	STD8 240-51126/8	20718008.D	07/18/2012	11:50
	STD7 240-51126/9	20718009.D	07/18/2012	12:10
	STD6 240-51126/10	20718010.D	07/18/2012	12:29
	ICV 240-51126/11	20718011.D	07/18/2012	12:49

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-51126/6	20718006.D
Level 2	STD2 240-51126/5	20718005.D
Level 3	STD3 240-51126/4	20718004.D
Level 4	STD4 240-51126/3	20718003.D
Level 5	STD5 240-51126/2	20718002.D
Level 6	STD6 240-51126/10	20718010.D
Level 7	STD7 240-51126/9	20718009.D
Level 8	STD8 240-51126/8	20718008.D
Level 9	STD9 240-51126/7	20718007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.9578	1.0417 1.0077	0.9425 0.9511	0.9989 1.0726	0.9229	Ave		0.9869				5.3		20.0			
N-Nitrosodimethylamine	1.8506	1.8208 1.8573	1.7127 1.7135	1.6390 1.8577	1.6153	Ave		1.7584				5.7		20.0			
Pyridine	3.0052	2.9714 3.1111	2.7928 3.0630	2.6160 3.1378	2.6796	Ave		2.9221				6.9		20.0			
Ethyl methacrylate	2.4517	2.5971 2.5109	2.3602 2.3402	2.2925 2.6128	2.2933	Ave		2.4323				5.4		20.0			
Benzaldehyde	2.8218 2.2828	2.7601 +++++	2.7056 +++++	2.5546 +++++	2.4377	Ave		2.5938			0.0100	8.0		20.0			
3-Chloropropionitrile	1.2451	1.2031 1.2416	1.1629 1.1414	1.1674 1.2458	1.1316	Ave		1.1924				4.0		20.0			
Malononitrile	3.3344	3.0865 2.9911	3.1239 2.4553	3.1153 2.1764	3.1227	Ave		2.9257				14.0		20.0			
2,4-Toluene diamine	0.1520	0.3130 +++++	0.3197 +++++	0.2088 +++++	0.2283	Ave		0.2444				29.0	*	20.0			
Phenol	3.1350	2.7112 3.1422	2.8001 3.1323	2.7494 3.1820	2.7934	Ave		2.9557			0.8000	7.0		20.0			
Aniline	3.9529	3.6736 4.0746	3.6802 3.9465	3.6627 3.9369	3.5973	Ave		3.8156				4.7		20.0			
Bis(2-chloroethyl)ether	2.9125	2.8922 2.9061	2.6571 2.9529	2.5283 2.9413	2.6269	Ave		2.8022			0.7000	6.0		20.0			
2-Chlorophenol	1.5174	1.4858 1.5629	1.4855 1.5310	1.4797 1.5821	1.4406	Ave		1.5106			0.8000	3.1		20.0			
1,3-Dichlorobenzene	1.8151	1.8783 1.8375	1.6727 1.7425	1.6868 1.8282	1.7308	Ave		1.7740				4.3		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	1.6669	1.5982 1.6435	1.6209 1.5629	1.5961 1.6999	1.5868	Ave		1.6219				2.8		20.0			
Benzyl alcohol	1.3667	1.2855 1.4163	1.2368 1.4428	1.2335 1.3956	1.2776	Ave		1.3318				6.3		20.0			
1,2-Dichlorobenzene	1.7448	1.6837 1.7305	1.5869 1.6726	1.6090 1.7471	1.6042	Ave		1.6724				3.9		20.0			
2-Methylphenol	1.9268	1.9556 1.9200	1.7495 1.9684	1.6914 1.9027	1.7883	Ave		1.8628			0.7000	5.6		20.0			
Benzoic acid	0.2374	+++++ 0.2744	0.1167 0.2920	0.1769 0.2937	0.2294	Qua	-0.330	0.2488	0.0011						0.9990		0.9900
2,2'-oxybis[1-chloropropane]	2.2472	2.0765 2.2447	2.1068 2.2578	1.9893 2.1769	2.0167	Ave		2.1395				5.0		20.0			
3 & 4 Methylphenol	2.0493	1.8481 2.0795	1.9415 2.1104	1.8560 2.0153	1.8916	Ave		1.9740				5.2		20.0			
N-Nitrosodi-n-propylamine	2.3335	2.3680 2.3677	2.1513 2.4005	2.1089 2.2280	2.0072	Ave		2.2456			0.5000	6.4		20.0			
Acetophenone	3.0573	2.8247 3.0974	2.8921 3.2216	2.7210 3.0560	2.7414	Ave		2.9514			0.0100	6.2		20.0			
Hexachloroethane	0.8627	0.8513 0.8346	0.7797 0.8067	0.7455 0.8198	0.7878	Ave		0.8110			0.3000	4.8		20.0			
Nitrobenzene	0.8607	0.8536 0.8780	0.8285 0.8844	0.7858 0.8947	0.8008	Ave		0.8483			0.2000	4.7		20.0			
Isophorone	1.3425	1.1740 1.3949	1.2437 1.4592	1.2081 1.3968	1.2241	Ave		1.3054			0.4000	8.1		20.0			
2-Nitrophenol	0.2192	0.1932 0.2334	0.1915 0.2380	0.1967 0.2460	0.2178	Ave		0.2170			0.1000	9.8		20.0			
2,4-Dimethylphenol	0.5919	0.5474 0.6139	0.5521 0.6261	0.5407 0.6431	0.5489	Ave		0.5830			0.2000	7.0		20.0			
1,3,5-Trichlorobenzene	0.3814	0.3535 0.3917	0.3583 0.3939	0.3565 0.4203	0.3585	Ave		0.3768				6.4		20.0			
Bis(2-chloroethoxy)methane	0.7860	0.7293 0.8109	0.7436 0.8474	0.7241 0.8343	0.7332	Ave		0.7761			0.3000	6.5		20.0			
2,4-Dichlorophenol	0.2980	0.2634 0.3067	0.2850 0.3139	0.2697 0.3217	0.2866	Ave		0.2931			0.2000	7.1		20.0			
1,2,4-Trichlorobenzene	0.3799	0.3391 0.3889	0.3506 0.3923	0.3522 0.4055	0.3563	Ave		0.3706				6.5		20.0			
Naphthalene	1.1528 1.0844	0.9813 1.1138	1.0140 1.1388	0.9848 1.1766	1.0005	Ave		1.0719			0.7000	7.2		20.0			
4-Chloroaniline	0.4929	0.4558 0.5012	0.4900 0.5294	0.4721 0.5281	0.4654	Ave		0.4919			0.0100	5.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.2111	0.2059 0.2158	0.1963 0.2123	0.1981 0.2227	0.2029	Ave		0.2081			0.0100	4.3		20.0			
1,2,3-Trichlorobenzene	0.3486	0.3246 0.3577	0.3370 0.3625	0.3234 0.3709	0.3343	Ave		0.3449				5.2		20.0			
Caprolactam	0.1634	0.1449 0.1660	0.1527 0.1763	0.1464 0.1684	0.1490	Ave		0.1584			0.0100	7.4		20.0			
4-Chloro-3-methylphenol	0.4996	0.4538 0.5179	0.4541 0.5535	0.4591 0.5363	0.4639	Ave		0.4923			0.2000	8.1		20.0			
2-Methylnaphthalene	0.7308 0.7339	0.6640 0.7703	0.6570 0.7954	0.6363 0.8117	0.6895	Ave		0.7210			0.4000	8.8		20.0			
2,4-Dinitrophenol	0.2286	+++++ 0.2419	0.1374 0.2606	0.1737 0.2787	0.2215	Qua	-0.077	0.1987	0.0016		0.0100				1.0000		0.9900
1-Methylnaphthalene	0.7516 0.7123	0.6456 0.7257	0.6356 0.7630	0.6108 0.7740	0.6537	Ave		0.6969				8.8		20.0			
1,2,3,5-Tetrachlorobenzene	0.6445	0.5436 0.6564	0.5983 0.6472	0.5591 0.7008	0.6054	Ave		0.6194				8.5		20.0			
Hexachlorocyclopentadiene	0.4353	0.3520 0.4402	0.3714 0.4375	0.3509 0.4663	0.4247	Ave		0.4098			0.0500	11.0		20.0			
2,4,6-Trichlorophenol	0.3820	0.3055 0.3894	0.3615 0.3938	0.3557 0.4027	0.3658	Ave		0.3696			0.2000	8.3		20.0			
2,4,5-Trichlorophenol	0.3995	0.3413 0.4088	0.3843 0.4194	0.3639 0.4281	0.3913	Ave		0.3921			0.2000	7.3		20.0			
1,1'-Biphenyl	1.6350 1.5747	1.3678 1.6468	1.4203 1.6420	1.3621 1.7608	1.4379	Ave		1.5386			0.0100	9.4		20.0			
1,2,3,4 -Tetrachlorobenzene	0.6134	0.5486 0.6363	0.5597 0.6365	0.5492 0.6746	0.5814	Ave		0.6000				7.9		20.0			
2-Chloronaphthalene	1.4704 1.3088	1.2261 1.3166	1.2212 1.3331	1.1487 1.4103	1.2537	Ave		1.2988			0.8000	7.7		20.0			
4,6-Dinitro-2-methylphenol	0.1573	+++++ 0.1616	0.1185 0.1653	0.1396 0.1720	0.1603	Ave		0.1535			0.0100	12.0		20.0			
2-Nitroaniline	0.7102	0.6307 0.7157	0.6594 0.7170	0.6235 0.7317	0.6590	Ave		0.6809			0.0100	6.3		20.0			
Dimethyl phthalate	1.3680	1.1815 1.3896	1.2333 1.4323	1.2393 1.4155	1.2789	Ave		1.3173			0.0100	7.2		20.0			
2,6-Dinitrotoluene	0.3678	0.2956 0.3750	0.3354 0.3781	0.3148 0.3812	0.3523	Ave		0.3500				9.1		20.0			
1,2-Dinitrobenzene	0.1776	0.1468 0.1801	0.1642 0.1824	0.1529 0.1827	0.1704	Ave		0.1696				8.2		20.0			
Acenaphthylene	2.0400 1.9412	1.6679 2.0173	1.7609 1.9891	1.7197 2.0922	1.8225	Ave		1.8945			0.9000	8.2		20.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
3-Nitroaniline	0.3580	0.3380 0.3632	0.3231 0.3627	0.3274 0.3692	0.3434	Ave		0.3481			0.0100	5.1		20.0			
Acenaphthene	1.3717 1.2703	1.1108 1.3010	1.1589 1.3466	1.0808 1.4114	1.1577	Ave		1.2455			0.9000	9.7		20.0			
4-Nitrophenol	0.3305	0.2480 0.3444	0.2708 0.3518	0.3175 0.3588	0.3050	Ave		0.3159				13.0		20.0			
2,4-Dinitrotoluene	0.5101	0.4106 0.5063	0.4340 0.5117	0.4551 0.5143	0.4715	Ave		0.4767			0.2000	8.4		20.0			
Dibenzofuran	1.6133 1.6627	1.4149 1.6813	1.5306 1.7309	1.4895 1.7971	1.5275	Ave		1.6053			0.8000	7.7		20.0			
2,3,5,6-Tetrachlorophenol	0.3318	0.2706 0.3423	0.3176 0.3422	0.2976 0.3538	0.3173	Ave		0.3217				8.5		20.0			
Diethyl phthalate	1.4230	1.3016 1.4671	1.3264 1.5019	1.3077 1.5150	1.3247	Ave		1.3959			0.0100	6.5		20.0			
4-Chlorophenyl phenyl ether	0.7634	0.6873 0.7798	0.7140 0.8090	0.6895 0.8352	0.7099	Ave		0.7485			0.4000	7.5		20.0			
4-Nitroaniline	0.3917	0.3377 0.4134	0.3313 0.4143	0.3404 0.4320	0.3721	Ave		0.3791			0.0100	10.0		20.0			
Fluorene	1.4529 1.4429	1.2748 1.4651	1.2557 1.5126	1.2591 1.5535	1.2956	Ave		1.3903			0.9000	8.5		20.0			
N-Nitrosodiphenylamine	0.6148	0.5705 0.6337	0.5904 0.6271	0.5590 0.6490	0.5858	Ave		0.6038			0.0100	5.3		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.5936	1.4783 1.5826	1.5053 1.6071	1.4489 1.6526	1.4422	Ave		1.5402				5.1		20.0			
Azobenzene	1.5946	1.4783 1.5831	1.5112 1.6071	1.4504 1.6526	1.4445	Ave		1.5402				5.1		20.0			
4-Bromophenyl phenyl ether	0.2292	0.2092 0.2290	0.2137 0.2357	0.2242 0.2439	0.2213	Ave		0.2258			0.1000	5.0		20.0			
Hexachlorobenzene	0.2044 0.1881	0.1781 0.1943	0.1983 0.1947	0.1723 0.2014	0.1809	Ave		0.1903			0.1000	5.8		20.0			
Atrazine	0.2023	0.1940 0.2022	0.2015 0.1984	0.2020 0.1822	0.1957	Ave		0.1973			0.0100	3.5		20.0			
Pentachlorophenol	0.1318	0.0818 0.1426	0.1047 0.1535	0.1208 0.1549	0.1369	Ave		0.1284			0.0500	20.0		20.0			
Phenanthrene	1.2633 1.1893	1.0616 1.2033	1.0896 1.2502	1.0787 1.2845	1.1072	Ave		1.1698			0.7000	7.4		20.0			
Anthracene	1.2644 1.2365	1.0849 1.2653	1.1102 1.2942	1.1293 1.3357	1.1661	Ave		1.2096			0.7000	7.4		20.0			
Carbazole	1.1321	1.0163 1.1698	1.0622 1.1854	1.0347 1.2202	1.0695	Ave		1.1113			0.0100	6.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Di-n-butyl phthalate	1.5042	1.3243 1.5493	1.3784 1.5776	1.3597 1.6372	1.3971	Ave		1.4660			0.0100	7.9		20.0			
Fluoranthene	1.2988 1.3616	1.1705 1.3873	1.2218 1.4265	1.1901 1.4618	1.2336	Ave		1.3058			0.6000	8.2		20.0			
Benzidine	0.8547	0.6766 0.8348	0.7293 0.8121	0.6994 0.7926	0.7834	Ave		0.7729				8.3		20.0			
Pyrene	1.5064 1.5142	1.3954 1.5594	1.4240 1.5521	1.3627 1.6063	1.4080	Ave		1.4809			0.6000	5.8		20.0			
Butyl benzyl phthalate	0.7678	0.7009 0.7755	0.6804 0.7672	0.6584 0.7929	0.7178	Ave		0.7326			0.0100	6.8		20.0			
3,3'-Dimethoxybenzidine	0.3840	0.2632 0.3903	0.3112 0.3851	0.3169 0.4047	0.3561	Ave		0.3514				14.0		20.0			
Bis(2-ethylhexyl) phthalate	1.1000	0.9763 1.1412	0.9914 1.1597	0.9615 1.1703	1.0027	Ave		1.0629			0.0100	8.3		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.2905	0.2158 0.3015	0.2494 0.2965	0.2578 0.3056	0.2704	Ave		0.2734				11.0		20.0			
3,3'-Dichlorobenzidine	0.5050	0.4299 0.5217	0.4451 0.5160	0.4581 0.5363	0.4782	Ave		0.4863			0.0100	8.1		20.0			
Benzo[a]anthracene	1.5473 1.3698	1.3099 1.3901	1.3096 1.3701	1.2620 1.4335	1.2984	Ave		1.3656			0.8000	6.3		20.0			
Chrysene	1.3272 1.2366	1.1577 1.2666	1.1743 1.2444	1.1348 1.2925	1.1569	Ave		1.2212			0.7000	5.6		20.0			
Di-n-octyl phthalate	2.6027	2.0943 2.6600	2.2085 2.7206	2.2950 2.7706	2.4178	Ave		2.4712			0.0100	10.0		20.0			
Benzo[b]fluoranthene	1.6393 1.7471	1.4488 1.8173	1.5975 1.9395	1.5883 2.0434	1.6086	Ave		1.7144			0.7000	11.0		20.0			
Benzo[k]fluoranthene	1.8351 1.8718	1.5771 1.8389	1.6406 1.7697	1.6927 1.7939	1.8214	Ave		1.7601			0.7000	5.7		20.0			
Benzo[a]pyrene	1.5703 1.6723	1.4324 1.6655	1.5187 1.6693	1.5179 1.7368	1.5461	Ave		1.5921			0.7000	6.2		20.0			
Indeno[1,2,3-cd]pyrene	1.6770 1.7904	1.4554 1.8060	1.5488 1.8222	1.6029 1.8804	1.6514	Ave		1.6927			0.5000	8.4		20.0			
Dibenzo(a,h)anthracene	1.2068 1.4718	1.1140 1.5009	1.2375 1.5309	1.2778 1.5863	1.3735	Ave		1.3666			0.4000	12.0		20.0			
Benzo[g,h,i]perylene	1.4397 1.4221	1.2402 1.4240	1.2673 1.4426	1.3168 1.5187	1.3402	Ave		1.3791			0.5000	6.7		20.0			
2-Fluorophenol (Surr)	1.8389	1.6394 1.9144	1.7092 1.8652	1.6253 1.8632	1.6640	Ave		1.7650				6.6		20.0			
Phenol-d5 (Surr)	2.9128	2.6680 2.9215	2.5819 2.9653	2.4865 2.9119	2.5611	Ave		2.7511				7.1		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Nitrobenzene-d5 (Surr)	0.9663 0.8568	0.7949 0.8511	0.8384 0.8653	0.7716 0.8750	0.7763	Ave		0.8440				7.1		20.0			
2-Fluorobiphenyl (Surr)	1.6271 1.5709	1.4225 1.5669	1.4736 1.6287	1.4458 1.6800	1.4717	Ave		1.5430				6.0		20.0			
2,4,6-Tribromophenol (Surr)	 0.1197	0.0951 0.1265	0.1262 0.1268	0.0998 0.1292	0.1153	Ave		0.1173				11.0		20.0			
Terphenyl-d14 (Surr)	0.9684 0.8977	0.8018 0.9168	0.8051 0.9252	0.7871 0.9448	0.8261	Ave		0.8748				8.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-51126/11 Calibration Date: 07/18/2012 12:49

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20718011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9869	0.9789		9.92	10.0	-0.8	30.0
N-Nitrosodimethylamine	Ave	1.758	1.823		10.4	10.0	3.7	30.0
Pyridine	Ave	2.922	2.915		9.98	10.0	-0.2	30.0
Ethyl methacrylate	Ave	2.432	2.469		10.2	10.0	1.5	30.0
3-Chloropropionitrile	Ave	1.192	1.243		10.4	10.0	4.3	30.0
Malononitrile	Ave	2.926	3.287		11.2	10.0	12.4	30.0
Benzaldehyde	Ave	2.594	2.102	0.0100	8.10	10.0	-19.0	30.0
Phenol	Ave	2.956	2.986	0.8000	10.1	10.0	1.0	30.0
Aniline	Ave	3.816	3.742		9.81	10.0	-1.9	30.0
Bis(2-chloroethyl)ether	Ave	2.802	2.764	0.7000	9.86	10.0	-1.4	30.0
2-Chlorophenol	Ave	1.511	1.481	0.8000	9.80	10.0	-2.0	30.0
1,3-Dichlorobenzene	Ave	1.774	1.750		9.86	10.0	-1.4	30.0
1,4-Dichlorobenzene	Ave	1.622	1.631		10.1	10.0	0.5	30.0
Benzyl alcohol	Ave	1.332	1.322		9.93	10.0	-0.7	30.0
1,2-Dichlorobenzene	Ave	1.672	1.684		10.1	10.0	0.7	30.0
2-Methylphenol	Ave	1.863	1.797	0.7000	9.65	10.0	-3.5	30.0
2,2'-oxybis[1-chloropropane]	Ave	2.139	2.152		10.1	10.0	0.6	30.0
3 & 4 Methylphenol	Ave	1.974	1.908		9.66	10.0	-3.4	30.0
N-Nitrosodi-n-propylamine	Ave	2.246	2.199	0.5000	9.79	10.0	-2.1	30.0
Acetophenone	Ave	2.951	2.877	0.0100	9.75	10.0	-2.5	30.0
Hexachloroethane	Ave	0.8110	0.8215	0.3000	10.1	10.0	1.3	30.0
Nitrobenzene	Ave	0.8483	0.8647	0.2000	10.2	10.0	1.9	30.0
Isophorone	Ave	1.305	1.297	0.4000	9.93	10.0	-0.7	30.0
2,4-Dimethylphenol	Ave	0.5830	0.5735	0.2000	9.84	10.0	-1.6	30.0
2-Nitrophenol	Ave	0.2170	0.2090	0.1000	9.63	10.0	-3.7	30.0
1,3,5-Trichlorobenzene	Ave	0.3768	0.3676		9.76	10.0	-2.4	30.0
Bis(2-chloroethoxy)methane	Ave	0.7761	0.7731	0.3000	9.96	10.0	-0.4	30.0
Benzoic acid	Qua		0.2426		19.2	20.0	-4.0	30.0
2,4-Dichlorophenol	Ave	0.2931	0.2878	0.2000	9.82	10.0	-1.8	30.0
1,2,4-Trichlorobenzene	Ave	0.3706	0.3711		10.0	10.0	0.1	30.0
Naphthalene	Ave	1.072	1.043	0.7000	9.73	10.0	-2.7	30.0
4-Chloroaniline	Ave	0.4919	0.4785	0.0100	9.73	10.0	-2.7	30.0
Hexachlorobutadiene	Ave	0.2081	0.2062	0.0100	9.91	10.0	-0.9	30.0
1,2,3-Trichlorobenzene	Ave	0.3449	0.3369		9.77	10.0	-2.3	30.0
Caprolactam	Ave	0.1584	0.1522	0.0100	9.61	10.0	-3.9	30.0
4-Chloro-3-methylphenol	Ave	0.4923	0.4977	0.2000	10.1	10.0	1.1	30.0
2-Methylnaphthalene	Ave	0.7210	0.7088	0.4000	9.83	10.0	-1.7	30.0
1-Methylnaphthalene	Ave	0.6969	0.6868		9.85	10.0	-1.5	30.0
1,2,3,5-Tetrachlorobenzene	Ave	0.6194	0.6179		9.98	10.0	-0.2	30.0
Hexachlorocyclopentadiene	Ave	0.4098	0.4229	0.0500	10.3	10.0	3.2	30.0
2,4,6-Trichlorophenol	Ave	0.3696	0.3655	0.2000	9.89	10.0	-1.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-51126/11 Calibration Date: 07/18/2012 12:49

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20718011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3921	0.4027	0.2000	10.3	10.0	2.7	30.0
2,4-Toluene diamine	Ave	0.2444	0.1701		6.96	10.0	-30.4*	30.0
1,1'-Biphenyl	Ave	1.539	1.491	0.0100	9.69	10.0	-3.1	30.0
1,2,3,4 -Tetrachlorobenzene	Ave	0.6000	0.5984		9.97	10.0	-0.3	30.0
2-Chloronaphthalene	Ave	1.299	1.238	0.8000	9.53	10.0	-4.7	30.0
2-Nitroaniline	Ave	0.6809	0.6960	0.0100	10.2	10.0	2.2	30.0
Dimethyl phthalate	Ave	1.317	1.343	0.0100	10.2	10.0	1.9	30.0
2,6-Dinitrotoluene	Ave	0.3500	0.3591		10.3	10.0	2.6	30.0
1,2-Dinitrobenzene	Ave	0.1696	0.1692		9.97	10.0	-0.3	30.0
Acenaphthylene	Ave	1.895	1.877	0.9000	9.91	10.0	-0.9	30.0
3-Nitroaniline	Ave	0.3481	0.3458	0.0100	9.93	10.0	-0.7	30.0
2,4-Dinitrophenol	Qua		0.2131	0.0100	18.9	20.0	-5.5	30.0
Acenaphthene	Ave	1.245	1.220	0.9000	9.80	10.0	-2.0	30.0
4-Nitrophenol	Ave	0.3159	0.3261		10.3	10.0	3.3	30.0
2,4-Dinitrotoluene	Ave	0.4767	0.4757	0.2000	9.98	10.0	-0.2	30.0
Dibenzofuran	Ave	1.605	1.591	0.8000	9.91	10.0	-0.9	30.0
2,3,5,6-Tetrachlorophenol	Ave	0.3217	0.3115		9.68	10.0	-3.2	30.0
Diethyl phthalate	Ave	1.396	1.388	0.0100	9.94	10.0	-0.6	30.0
4-Chlorophenyl phenyl ether	Ave	0.7485	0.7297	0.4000	9.75	10.0	-2.5	30.0
4-Nitroaniline	Ave	0.3791	0.3846	0.0100	10.1	10.0	1.4	30.0
Fluorene	Ave	1.390	1.391	0.9000	10.0	10.0	0.0	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1535	0.1514	0.0100	9.86	10.0	-1.4	30.0
N-Nitrosodiphenylamine	Ave	0.6038	0.6028	0.0100	9.98	10.0	-0.2	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.540	1.593		10.3	10.0	3.4	30.0
Azobenzene	Ave	1.540	1.593		10.3	10.0	3.4	30.0
4-Bromophenyl phenyl ether	Ave	0.2258	0.2266	0.1000	10.0	10.0	0.4	30.0
Hexachlorobenzene	Ave	0.1903	0.1862	0.1000	9.79	10.0	-2.1	30.0
Atrazine	Ave	0.1973	0.2025	0.0100	10.3	10.0	2.7	30.0
Pentachlorophenol	Ave	0.1284	0.1355	0.0500	21.1	20.0	5.6	30.0
Phenanthrene	Ave	1.170	1.157	0.7000	9.89	10.0	-1.1	30.0
Anthracene	Ave	1.210	1.206	0.7000	9.97	10.0	-0.3	30.0
Carbazole	Ave	1.111	1.099	0.0100	9.89	10.0	-1.1	30.0
Di-n-butyl phthalate	Ave	1.466	1.475	0.0100	10.1	10.0	0.6	30.0
Fluoranthene	Ave	1.306	1.311	0.6000	10.0	10.0	0.4	30.0
Benzidine	Ave	0.7729	0.8265		10.7	10.0	6.9	30.0
Pyrene	Ave	1.481	1.524	0.6000	10.3	10.0	2.9	30.0
Butyl benzyl phthalate	Ave	0.7326	0.7565	0.0100	10.3	10.0	3.3	30.0
3,3'-Dimethoxybenzidine	Ave	0.3514	0.3850		11.0	10.0	9.5	30.0
Bis(2-ethylhexyl) phthalate	Ave	1.063	1.093	0.0100	10.3	10.0	2.9	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2734	0.2922		10.7	10.0	6.9	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-51126/11 Calibration Date: 07/18/2012 12:49

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20718011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3,3'-Dichlorobenzidine	Ave	0.4863	0.4993	0.0100	10.3	10.0	2.7	30.0
Benzo[a]anthracene	Ave	1.366	1.349	0.8000	9.88	10.0	-1.2	30.0
Chrysene	Ave	1.221	1.242	0.7000	10.2	10.0	1.7	30.0
Di-n-octyl phthalate	Ave	2.471	2.499	0.0100	10.1	10.0	1.1	30.0
Benzo[b]fluoranthene	Ave	1.714	1.704	0.7000	9.94	10.0	-0.6	30.0
Benzo[k]fluoranthene	Ave	1.760	1.776	0.7000	10.1	10.0	0.9	30.0
Benzo[a]pyrene	Ave	1.592	1.607	0.7000	10.1	10.0	0.9	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.693	1.696	0.5000	10.0	10.0	0.2	30.0
Dibenzo(a,h)anthracene	Ave	1.367	1.401	0.4000	10.3	10.0	2.5	30.0
Benzo[g,h,i]perylene	Ave	1.379	1.356	0.5000	9.84	10.0	-1.6	30.0
2-Fluorophenol (Surr)	Ave	1.765	1.783		10.1	10.0	1.0	30.0
Phenol-d5 (Surr)	Ave	2.751	2.750		10.0	10.0	-0.0	30.0
Nitrobenzene-d5 (Surr)	Ave	0.8440	0.8375		9.92	10.0	-0.8	30.0
2-Fluorobiphenyl (Surr)	Ave	1.543	1.513		9.81	10.0	-1.9	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1173	0.1192		10.2	10.0	1.6	30.0
Terphenyl-d14 (Surr)	Ave	0.8748	0.8816		10.1	10.0	0.8	30.0

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 20723001.D DFTPP Injection Date: 07/23/2012

Instrument ID: A4HP9 DFTPP Injection Time: 08:17

Analysis Batch No.: 51606

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	48.2	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	76.5	
70	Less than 2.0% of mass 69	0.3	(0.4)1
127	25.0 - 75.0% of mass 198	52.6	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	7.0	
275	10.0- 30.0% of mass 198	21.2	
365	Greater than 0.75% of mass 198	2.0	
441	Present, but less than mass 443	8.0	
442	40.0 - 110.0% of mass 198	43.2	
443	15.0 - 24.0% of mass 442	8.4	(19.5)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 240-51606/2	20723002.D	07/23/2012	08:38
	MB 240-51373/21-A	20723006.D	07/23/2012	09:56
	LCS 240-51373/22-A	20723007.D	07/23/2012	10:15
MT-SS18-0-2	240-13070-2	20723018.D	07/23/2012	13:44
MT-SS18-8-10	240-13070-3	20723019.D	07/23/2012	14:03
MT-SB17-8-10	240-13070-6	20723020.D	07/23/2012	14:22
MT-SB17-0-2	240-13070-5	20723021.D	07/23/2012	14:41
MT-SB17-0-2 MS	240-13070-5 MS	20723022.D	07/23/2012	15:00
MT-SB17-0-2 MSD	240-13070-5 MSD	20723023.D	07/23/2012	15:19

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51606/2 Calibration Date: 07/23/2012 08:38

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20723002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.9869	1.008		10.2	10.0	2.1	20.0
N-Nitrosodimethylamine	Ave	1.758	1.859		10.6	10.0	5.7	20.0
Pyridine	Ave	2.922	3.034		10.4	10.0	3.8	20.0
Ethyl methacrylate	Ave	2.432	2.482		10.2	10.0	2.0	20.0
3-Chloropropionitrile	Ave	1.192	1.217		10.2	10.0	2.1	20.0
Malononitrile	Ave	2.926	3.307		11.3	10.0	13.0	20.0
Benzaldehyde	Ave	2.594	2.176	0.0100	8.39	10.0	-16.1	20.0
Phenol	Ave	2.956	2.995	0.8000	10.1	10.0	1.3	20.0
Aniline	Ave	3.816	3.929		10.3	10.0	3.0	20.0
Bis(2-chloroethyl)ether	Ave	2.802	2.792	0.7000	9.96	10.0	-0.4	20.0
2-Chlorophenol	Ave	1.511	1.497	0.8000	9.91	10.0	-0.9	20.0
1,3-Dichlorobenzene	Ave	1.774	1.794		10.1	10.0	1.1	20.0
1,4-Dichlorobenzene	Ave	1.622	1.648		10.2	10.0	1.6	20.0
Benzyl alcohol	Ave	1.332	1.164		8.74	10.0	-12.6	20.0
1,2-Dichlorobenzene	Ave	1.672	1.711		10.2	10.0	2.3	20.0
2-Methylphenol	Ave	1.863	1.814	0.7000	9.74	10.0	-2.6	20.0
2,2'-oxybis[1-chloropropane]	Ave	2.139	2.140		10.0	10.0	0.0	20.0
3 & 4 Methylphenol	Ave	1.974	1.981		10.0	10.0	0.3	20.0
Acetophenone	Ave	2.951	3.005	0.0100	10.2	10.0	1.8	20.0
N-Nitrosodi-n-propylamine	Ave	2.246	2.225	0.5000	9.91	10.0	-0.9	20.0
Hexachloroethane	Ave	0.8110	0.7976	0.3000	9.83	10.0	-1.7	20.0
Nitrobenzene	Ave	0.8483	0.8824	0.2000	10.4	10.0	4.0	20.0
Isophorone	Ave	1.305	1.365	0.4000	10.5	10.0	4.6	20.0
2-Nitrophenol	Ave	0.2170	0.2184	0.1000	10.1	10.0	0.6	20.0
1,3,5-Trichlorobenzene	Ave	0.3768	0.3977		10.6	10.0	5.6	20.0
2,4-Dimethylphenol	Ave	0.5830	0.5987	0.2000	10.3	10.0	2.7	20.0
Bis(2-chloroethoxy)methane	Ave	0.7761	0.8099	0.3000	10.4	10.0	4.4	20.0
Benzoic acid	Qua		0.2394		19.0	20.0	-5.0	20.0
2,4-Dichlorophenol	Ave	0.2931	0.3077	0.2000	10.5	10.0	5.0	20.0
1,2,4-Trichlorobenzene	Ave	0.3706	0.3872		10.4	10.0	4.5	20.0
Naphthalene	Ave	1.072	1.111	0.7000	10.4	10.0	3.6	20.0
4-Chloroaniline	Ave	0.4919	0.4889	0.0100	9.94	10.0	-0.6	20.0
Hexachlorobutadiene	Ave	0.2081	0.2194	0.0100	10.5	10.0	5.4	20.0
1,2,3-Trichlorobenzene	Ave	0.3449	0.3549		10.3	10.0	2.9	20.0
Caprolactam	Ave	0.1584	0.1649	0.0100	10.4	10.0	4.1	20.0
4-Chloro-3-methylphenol	Ave	0.4923	0.5110	0.2000	10.4	10.0	3.8	20.0
2-Methylnaphthalene	Ave	0.7210	0.7480	0.4000	10.4	10.0	3.7	20.0
1-Methylnaphthalene	Ave	0.6969	0.7113		10.2	10.0	2.1	20.0
1,2,3,5-Tetrachlorobenzene	Ave	0.6194	0.6488		10.5	10.0	4.7	20.0
Hexachlorocyclopentadiene	Ave	0.4098	0.3970	0.0500	9.69	10.0	-3.1	20.0
2,4,6-Trichlorophenol	Ave	0.3696	0.3800	0.2000	10.3	10.0	2.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51606/2 Calibration Date: 07/23/2012 08:38

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20723002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3921	0.4073	0.2000	10.4	10.0	3.9	20.0
2,4-Toluene diamine	Ave	0.2444	0.1766		7.23	10.0	-27.7*	20.0
1,1'-Biphenyl	Ave	1.539	1.591	0.0100	10.3	10.0	3.4	20.0
1,2,3,4 -Tetrachlorobenzene	Ave	0.6000	0.6252		10.4	10.0	4.2	20.0
2-Chloronaphthalene	Ave	1.299	1.300	0.8000	10.0	10.0	0.1	20.0
2-Nitroaniline	Ave	0.6809	0.7060	0.0100	10.4	10.0	3.7	20.0
Dimethyl phthalate	Ave	1.317	1.386	0.0100	10.5	10.0	5.2	20.0
2,6-Dinitrotoluene	Ave	0.3500	0.3738		10.7	10.0	6.8	20.0
1,2-Dinitrobenzene	Ave	0.1696	0.1812		10.7	10.0	6.8	20.0
Acenaphthylene	Ave	1.895	1.945	0.9000	10.3	10.0	2.6	20.0
3-Nitroaniline	Ave	0.3481	0.3590	0.0100	10.3	10.0	3.1	20.0
2,4-Dinitrophenol	Qua		0.1921	0.0100	17.3	20.0	-13.5	20.0
Acenaphthene	Ave	1.245	1.261	0.9000	10.1	10.0	1.3	20.0
4-Nitrophenol	Ave	0.3159	0.3171		10.0	10.0	0.4	20.0
2,4-Dinitrotoluene	Ave	0.4767	0.5054	0.2000	10.6	10.0	6.0	20.0
Dibenzofuran	Ave	1.605	1.662	0.8000	10.4	10.0	3.5	20.0
2,3,5,6-Tetrachlorophenol	Ave	0.3217	0.3165		9.84	10.0	-1.6	20.0
Diethyl phthalate	Ave	1.396	1.440	0.0100	10.3	10.0	3.1	20.0
4-Chlorophenyl phenyl ether	Ave	0.7485	0.7798	0.4000	10.4	10.0	4.2	20.0
4-Nitroaniline	Ave	0.3791	0.4019	0.0100	10.6	10.0	6.0	20.0
Fluorene	Ave	1.390	1.418	0.9000	10.2	10.0	2.0	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1535	0.1451	0.0100	9.45	10.0	-5.5	20.0
N-Nitrosodiphenylamine	Ave	0.6038	0.6374	0.0100	10.6	10.0	5.6	20.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.540	1.576		10.2	10.0	2.3	20.0
Azobenzene	Ave	1.540	1.578		10.2	10.0	2.5	20.0
4-Bromophenyl phenyl ether	Ave	0.2258	0.2308	0.1000	10.2	10.0	2.2	20.0
Hexachlorobenzene	Ave	0.1903	0.2013	0.1000	10.6	10.0	5.8	20.0
Atrazine	Ave	0.1973	0.2078	0.0100	10.5	10.0	5.3	20.0
Pentachlorophenol	Ave	0.1284	0.1255	0.0500	19.6	20.0	-2.2	20.0
Phenanthrene	Ave	1.170	1.206	0.7000	10.3	10.0	3.1	20.0
Anthracene	Ave	1.210	1.245	0.7000	10.3	10.0	2.9	20.0
Carbazole	Ave	1.111	1.169	0.0100	10.5	10.0	5.2	20.0
Di-n-butyl phthalate	Ave	1.466	1.534	0.0100	10.5	10.0	4.7	20.0
Fluoranthene	Ave	1.306	1.383	0.6000	10.6	10.0	5.9	20.0
Benzidine	Ave	0.7729	0.7078		9.16	10.0	-8.4	20.0
Pyrene	Ave	1.481	1.529	0.6000	10.3	10.0	3.2	20.0
Butyl benzyl phthalate	Ave	0.7326	0.7446	0.0100	10.2	10.0	1.6	20.0
3,3'-Dimethoxybenzidine	Ave	0.3514	0.3203		9.12	10.0	-8.8	20.0
Bis(2-ethylhexyl) phthalate	Ave	1.063	1.091	0.0100	10.3	10.0	2.6	20.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2734	0.2937		10.7	10.0	7.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51606/2 Calibration Date: 07/23/2012 08:38

Instrument ID: A4HP9 Calib Start Date: 07/18/2012 09:54

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 07/18/2012 12:29

Lab File ID: 20723002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3,3'-Dichlorobenzidine	Ave	0.4863	0.4929	0.0100	10.1	10.0	1.4	20.0
Benzo[a]anthracene	Ave	1.366	1.379	0.8000	10.1	10.0	1.0	20.0
Chrysene	Ave	1.221	1.223	0.7000	10.0	10.0	0.1	20.0
Di-n-octyl phthalate	Ave	2.471	2.693	0.0100	10.9	10.0	9.0	20.0
Benzo[b]fluoranthene	Ave	1.714	1.910	0.7000	11.1	10.0	11.4	20.0
Benzo[k]fluoranthene	Ave	1.760	1.790	0.7000	10.2	10.0	1.7	20.0
Benzo[a]pyrene	Ave	1.592	1.689	0.7000	10.6	10.0	6.1	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.693	1.830	0.5000	10.8	10.0	8.1	20.0
Dibenzo(a,h)anthracene	Ave	1.367	1.507	0.4000	11.0	10.0	10.3	20.0
Benzo[g,h,i]perylene	Ave	1.379	1.458	0.5000	10.6	10.0	5.7	20.0
2-Fluorophenol (Surr)	Ave	1.765	1.816		10.3	10.0	2.9	20.0
Phenol-d5 (Surr)	Ave	2.751	2.787		10.1	10.0	1.3	20.0
Nitrobenzene-d5 (Surr)	Ave	0.8440	0.8683		10.3	10.0	2.9	20.0
2-Fluorobiphenyl (Surr)	Ave	1.543	1.583		10.3	10.0	2.6	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1173	0.1215		10.4	10.0	3.6	20.0
Terphenyl-d14 (Surr)	Ave	0.8748	0.8956		10.2	10.0	2.4	20.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 20723006.D Lab Sample ID: MB 240-51373/21-A

Matrix: Solid Date Extracted: 07/19/2012 12:29

Instrument ID: A4HP9 Date Analyzed: 07/23/2012 09:56

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-51373/22-A	20723007.D	07/23/2012 10:15
MT-SS18-0-2	240-13070-2	20723018.D	07/23/2012 13:44
MT-SS18-8-10	240-13070-3	20723019.D	07/23/2012 14:03
MT-SB17-8-10	240-13070-6	20723020.D	07/23/2012 14:22
MT-SB17-0-2	240-13070-5	20723021.D	07/23/2012 14:41
MT-SB17-0-2 MS	240-13070-5 MS	20723022.D	07/23/2012 15:00
MT-SB17-0-2 MSD	240-13070-5 MSD	20723023.D	07/23/2012 15:19

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51373/21-A

Matrix: Solid | Lab File ID: 20723006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.00(g) | Date Analyzed: 07/23/2012 09:56

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	50	U	50	27
123-91-1	1,4-Dioxane	100	U	100	22
88-06-2	2,4,6-Trichlorophenol	150	U	150	80
95-95-4	2,4,5-Trichlorophenol	150	U	150	25
120-83-2	2,4-Dichlorophenol	150	U	150	20
105-67-9	2,4-Dimethylphenol	150	U	150	20
51-28-5	2,4-Dinitrophenol	330	U	330	80
121-14-2	2,4-Dinitrotoluene	200	U	200	27
91-58-7	2-Chloronaphthalene	50	U	50	3.3
95-57-8	2-Chlorophenol	50	U	50	27
91-57-6	2-Methylnaphthalene	6.7	U	6.7	3.3
95-48-7	2-Methylphenol	200	U	200	80
88-74-4	2-Nitroaniline	200	U	200	9.1
88-75-5	2-Nitrophenol	50	U	50	27
15831-10-4	3 & 4 Methylphenol	400	U	400	20
91-94-1	3,3'-Dichlorobenzidine	100	U	100	18
99-09-2	3-Nitroaniline	200	U	200	16
534-52-1	4,6-Dinitro-2-methylphenol	150	U	150	80
101-55-3	4-Bromophenyl phenyl ether	50	U	50	13
59-50-7	4-Chloro-3-methylphenol	150	U	150	21
106-47-8	4-Chloroaniline	150	U	150	17
7005-72-3	4-Chlorophenyl phenyl ether	50	U	50	13
100-01-6	4-Nitroaniline	200	U	200	26
83-32-9	Acenaphthene	6.7	U	6.7	3.3
208-96-8	Acenaphthylene	6.7	U	6.7	3.3
98-86-2	Acetophenone	100	U	100	9.2
120-12-7	Anthracene	6.7	U	6.7	3.3
1912-24-9	Atrazine	200	U	200	9.1
100-52-7	Benzaldehyde	100	U	100	12
56-55-3	Benzo[a]anthracene	6.7	U	6.7	3.3
50-32-8	Benzo[a]pyrene	6.7	U	6.7	3.3
205-99-2	Benzo[b]fluoranthene	6.7	U	6.7	3.3
191-24-2	Benzo[g,h,i]perylene	6.7	U	6.7	3.3
207-08-9	Benzo[k]fluoranthene	6.7	U	6.7	3.3

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51373/21-A

Matrix: Solid | Lab File ID: 20723006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.00(g) | Date Analyzed: 07/23/2012 09:56

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	100	U	100	22
111-44-4	Bis(2-chloroethyl)ether	100	U	100	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	50	U	50	19
85-68-7	Butyl benzyl phthalate	50	U	50	10
105-60-2	Caprolactam	330	U	330	37
86-74-8	Carbazole	50	U	50	27
218-01-9	Chrysene	6.7	U	6.7	1.1
84-74-2	Di-n-butyl phthalate	50	U	50	15
117-84-0	Di-n-octyl phthalate	50	U	50	27
53-70-3	Dibenzo(a,h)anthracene	6.7	U	6.7	3.3
132-64-9	Dibenzofuran	50	U	50	3.3
84-66-2	Diethyl phthalate	50	U	50	16
131-11-3	Dimethyl phthalate	50	U	50	17
206-44-0	Fluoranthene	6.7	U	6.7	3.3
86-73-7	Fluorene	6.7	U	6.7	3.3
118-74-1	Hexachlorobenzene	6.7	U	6.7	2.1
87-68-3	Hexachlorobutadiene	50	U	50	27
77-47-4	Hexachlorocyclopentadiene	330	U	330	27
67-72-1	Hexachloroethane	50	U	50	9.0
193-39-5	Indeno[1,2,3-cd]pyrene	6.7	U	6.7	3.3
78-59-1	Isophorone	50	U	50	13
621-64-7	N-Nitrosodi-n-propylamine	50	U	50	27
62-75-9	N-Nitrosodimethylamine	100	U	100	16
86-30-6	N-Nitrosodiphenylamine	50	U	50	21
91-20-3	Naphthalene	6.7	U	6.7	3.3
98-95-3	Nitrobenzene	100	U	100	2.2
87-86-5	Pentachlorophenol	150	U	150	80
85-01-8	Phenanthrene	6.7	U	6.7	3.3
108-95-2	Phenol	50	U	50	27
129-00-0	Pyrene	6.7	U	6.7	3.3
108-60-1	2,2'-oxybis[1-chloropropane]	100	U	100	9.5
606-20-2	2,6-Dinitrotoluene	200	U	200	21
100-02-7	4-Nitrophenol	330	U	330	80

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51373/21-A

Matrix: Solid | Lab File ID: 20723006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 30.00(g) | Date Analyzed: 07/23/2012 09:56

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	88		41-119
4165-62-2	Phenol-d5 (Surr)	65		28-110
4165-60-0	Nitrobenzene-d5 (Surr)	55		24-112
367-12-4	2-Fluorophenol (Surr)	65		26-110
321-60-8	2-Fluorobiphenyl (Surr)	52		34-110
118-79-6	2,4,6-Tribromophenol (Surr)	62		10-118

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MT-SS18-0-2	240-13070-2	68	71	54	46	68	84
MT-SS18-8-10	240-13070-3	62	66	51	49	65	86
MT-SB17-0-2	240-13070-5	69	75	58	58	81	85
MT-SB17-8-10	240-13070-6	54	58	44	44	75	81
	MB 240-51373/21-A	65	65	55	52	62	88
	LCS 240-51373/22-A	61	63	51	49	67	84
MT-SB17-0-2 MS	240-13070-5 MS	61	65	46	48	77	78
MT-SB17-0-2 MSD	240-13070-5 MSD	56	63	50	53	76	80

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	26-110
PHL = Phenol-d5 (Surr)	28-110
NBZ = Nitrobenzene-d5 (Surr)	24-112
FBP = 2-Fluorobiphenyl (Surr)	34-110
TBP = 2,4,6-Tribromophenol (Surr)	10-118
TPH = Terphenyl-dl4 (Surr)	41-119

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20723007.D

Lab ID: LCS 240-51373/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	667	383	57	50-130	
1,4-Dioxane	667	158	24	10-110	
2,4,6-Trichlorophenol	667	415	62	37-110	
2,4,5-Trichlorophenol	667	441	66	42-110	
2,4-Dichlorophenol	667	418	63	40-110	
2,4-Dimethylphenol	667	340	51	28-110	
2,4-Dinitrophenol	667	354	53	10-110	
2,4-Dinitrotoluene	667	475	71	55-116	
2-Chloronaphthalene	667	345	52	46-110	
2-Chlorophenol	667	395	59	39-110	
2-Methylnaphthalene	667	385	58	46-110	
2-Methylphenol	667	425	64	36-110	
2-Nitroaniline	667	496	74	47-124	
2-Nitrophenol	667	365	55	35-110	
3 & 4 Methylphenol	1330	873	66	40-110	
3,3'-Dichlorobenzidine	667	325	49	31-110	
3-Nitroaniline	667	400	60	44-110	
4,6-Dinitro-2-methylphenol	667	429	64	21-110	
4-Bromophenyl phenyl ether	667	427	64	53-112	
4-Chloro-3-methylphenol	667	466	70	42-110	
4-Chloroaniline	667	305	46	25-110	
4-Chlorophenyl phenyl ether	667	399	60	53-110	
4-Nitroaniline	667	447	67	50-110	
Acenaphthene	667	394	59	46-110	
Acenaphthylene	667	412	62	47-110	
Acetophenone	667	406	61	50-130	
Anthracene	667	506	76	56-111	
Atrazine	667	700	105	50-130	
Benzaldehyde	667	333	50	10-130	
Benzo[a]anthracene	667	529	79	58-111	
Benzo[a]pyrene	667	480	72	44-115	
Benzo[b]fluoranthene	667	510	76	43-124	
Benzo[g,h,i]perylene	667	551	83	44-120	
Benzo[k]fluoranthene	667	550	82	38-122	
Bis(2-chloroethoxy)methane	667	348	52	42-110	
Bis(2-chloroethyl)ether	667	339	51	41-110	
Bis(2-ethylhexyl) phthalate	667	544	82	56-123	
Butyl benzyl phthalate	667	549	82	57-121	
Caprolactam	667	573	86	50-130	
Carbazole	667	535	80	56-115	
Chrysene	667	569	85	56-111	
Di-n-butyl phthalate	667	599	90	57-119	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20723007.D

Lab ID: LCS 240-51373/22-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	667	552	83	45-123	
Dibenzo(a,h)anthracene	667	564	85	45-122	
Dibenzofuran	667	444	67	50-110	
Diethyl phthalate	667	520	78	55-114	
Dimethyl phthalate	667	502	75	54-112	
Fluoranthene	667	563	84	55-118	
Fluorene	667	445	67	51-110	
Hexachlorobenzene	667	481	72	51-110	
Hexachlorobutadiene	667	339	51	39-110	
Hexachlorocyclopentadiene	667	235 J	35	10-110	
Hexachloroethane	667	333	50	38-110	
Indeno[1,2,3-cd]pyrene	667	545	82	45-121	
Isophorone	667	396	59	46-117	
N-Nitrosodi-n-propylamine	667	405	61	40-114	
N-Nitrosodimethylamine	667	359	54	10-130	
N-Nitrosodiphenylamine	667	489	73	54-112	
Naphthalene	667	381	57	42-110	
Nitrobenzene	667	337	51	40-110	
Pentachlorophenol	667	383	57	10-110	
Phenanthrene	667	515	77	54-110	
Phenol	667	454	68	39-110	
Pyrene	667	532	80	58-113	
2,2'-oxybis[1-chloropropane]	667	340	51	36-116	
2,6-Dinitrotoluene	667	454	68	54-115	
4-Nitrophenol	667	518	78	24-117	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20723022.D

Lab ID: 240-13070-5 MS Client ID: MT-SB17-0-2 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1'-Biphenyl	796	61 U	462	58	50-130	
1,4-Dioxane	796	120 U	150	19	10-110	
2,4,6-Trichlorophenol	796	180 U	535	67	22-110	
2,4,5-Trichlorophenol	796	180 U	592	74	32-112	
2,4-Dichlorophenol	796	180 U	526	66	33-110	
2,4-Dimethylphenol	796	25 J	492	59	19-114	
2,4-Dinitrophenol	796	400 U	319 J	40	10-110	
2,4-Dinitrotoluene	796	240 U	554	70	42-118	
2-Chloronaphthalene	796	61 U	416	52	40-110	
2-Chlorophenol	796	61 U	482	60	32-110	
2-Methylnaphthalene	796	18	471	57	10-200	
2-Methylphenol	796	240 U	670	84	19-124	
2-Nitroaniline	796	240 U	635	80	31-141	
2-Nitrophenol	796	61 U	387	49	17-110	
3 & 4 Methylphenol	1590	480 U	1130	71	27-116	
3,3'-Dichlorobenzidine	796	120 U	188	24	10-110	
3-Nitroaniline	796	240 U	416	52	24-110	
4,6-Dinitro-2-methylphenol	796	180 U	339	43	10-110	
4-Bromophenyl phenyl ether	796	61 U	487	61	44-120	
4-Chloro-3-methylphenol	796	180 U	634	80	32-117	
4-Chloroaniline	796	180 U	276	35	11-110	
4-Chlorophenyl phenyl ether	796	61 U	497	62	47-116	
4-Nitroaniline	796	240 U	464	58	23-124	
Acenaphthene	796	8.1 U	500	63	10-200	
Acenaphthylene	796	15	529	65	10-200	
Acetophenone	796	25 J	495	59	50-130	
Anthracene	796	25	591	71	10-200	
Atrazine	796	240 U	737	93	50-130	
Benzaldehyde	796	120 U	411	52	10-130	
Benzo[a]anthracene	796	110	690	72	10-200	
Benzo[a]pyrene	796	150	662	64	10-200	
Benzo[b]fluoranthene	796	190	720	67	10-200	
Benzo[g,h,i]perylene	796	130	681	69	10-200	
Benzo[k]fluoranthene	796	99	711	77	10-200	
Bis(2-chloroethoxy)methane	796	120 U	390	49	36-110	
Bis(2-chloroethyl)ether	796	120 U	419	53	32-118	
Bis(2-ethylhexyl) phthalate	796	38 J	641	76	10-200	
Butyl benzyl phthalate	796	61 U	664	83	43-138	
Caprolactam	796	400 U	722	91	50-130	
Carbazole	796	61 U	575	72	10-162	
Chrysene	796	160	760	76	10-200	
Di-n-butyl phthalate	796	35 J	635	75	31-145	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20723022.D

Lab ID: 240-13070-5 MS Client ID: MT-SB17-0-2 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	796	61 U	677	85	10-182	
Dibenzo(a,h)anthracene	796	28	664	80	10-200	
Dibenzofuran	796	61 U	560	70	10-200	
Diethyl phthalate	796	61 U	634	80	48-118	
Dimethyl phthalate	796	61 U	595	75	47-116	
Fluoranthene	796	190	751	70	10-200	
Fluorene	796	8.1 U	574	72	10-187	
Hexachlorobenzene	796	8.1 U	563	71	37-122	
Hexachlorobutadiene	796	61 U	352	44	30-110	
Hexachlorocyclopentadiene	796	400 U	390 U	0	10-110	F
Hexachloroethane	796	61 U	367	46	13-110	
Indeno[1,2,3-cd]pyrene	796	98	675	73	10-200	
Isophorone	796	61 U	452	57	32-129	
N-Nitrosodi-n-propylamine	796	61 U	486	61	30-121	
N-Nitrosodimethylamine	797	120 U	371	47	10-130	
N-Nitrosodiphenylamine	796	61 U	558	70	10-169	
Naphthalene	796	30	445	52	10-200	
Nitrobenzene	796	120 U	384	48	33-111	
Pentachlorophenol	796	180 U	455	57	10-182	
Phenanthrene	796	65	621	70	10-200	
Phenol	796	37 J	502	58	10-144	
Pyrene	796	210	749	67	10-200	
2,2'-oxybis[1-chloropropane]	796	120 U	392	49	25-124	
2,6-Dinitrotoluene	796	240 U	524	66	28-137	
4-Nitrophenol	796	400 U	720	90	10-125	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20723023.D

Lab ID: 240-13070-5 MSD Client ID: MT-SB17-0-2 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1'-Biphenyl	789	498	63	8	30	50-130	
1,4-Dioxane	789	148	19	2	30	10-110	
2,4,6-Trichlorophenol	789	537	68	0	30	22-110	
2,4,5-Trichlorophenol	789	646	82	9	30	32-112	
2,4-Dichlorophenol	789	548	69	4	30	33-110	
2,4-Dimethylphenol	789	555	67	12	30	19-114	
2,4-Dinitrophenol	789	328 J	42	3	30	10-110	
2,4-Dinitrotoluene	789	613	78	10	30	42-118	
2-Chloronaphthalene	789	444	56	7	30	40-110	
2-Chlorophenol	789	462	59	4	30	32-110	
2-Methylnaphthalene	789	504	62	7	30	10-200	
2-Methylphenol	789	605	77	10	30	19-124	
2-Nitroaniline	789	670	85	5	30	31-141	
2-Nitrophenol	789	414	52	7	30	17-110	
3 & 4 Methylphenol	1580	1100	70	2	30	27-116	
3,3'-Dichlorobenzidine	789	181	23	4	30	10-110	
3-Nitroaniline	789	426	54	2	30	24-110	
4,6-Dinitro-2-methylphenol	789	339	43	0	30	10-110	
4-Bromophenyl phenyl ether	789	508	64	4	30	44-120	
4-Chloro-3-methylphenol	789	675	86	6	30	32-117	
4-Chloroaniline	789	280	36	1	30	11-110	
4-Chlorophenyl phenyl ether	789	532	67	7	30	47-116	
4-Nitroaniline	789	492	62	6	30	23-124	
Acenaphthene	789	543	69	8	30	10-200	
Acenaphthylene	789	559	69	5	30	10-200	
Acetophenone	789	476	57	4	30	50-130	
Anthracene	789	642	78	8	30	10-200	
Atrazine	789	783	99	6	30	50-130	
Benzaldehyde	789	380	48	8	30	10-130	
Benzo[a]anthracene	789	747	80	8	30	10-200	
Benzo[a]pyrene	789	745	75	12	30	10-200	
Benzo[b]fluoranthene	789	860	85	18	30	10-200	
Benzo[g,h,i]perylene	789	770	81	12	30	10-200	
Benzo[k]fluoranthene	789	782	87	10	30	10-200	
Bis(2-chloroethoxy)methane	789	421	53	8	30	36-110	
Bis(2-chloroethyl)ether	789	406	51	3	30	32-118	
Bis(2-ethylhexyl) phthalate	789	699	84	9	30	10-200	
Butyl benzyl phthalate	789	675	86	2	30	43-138	
Caprolactam	789	759	96	5	30	50-130	
Carbazole	789	587	74	2	30	10-162	
Chrysene	789	829	85	9	30	10-200	
Di-n-butyl phthalate	789	686	82	8	30	31-145	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 20723023.D

Lab ID: 240-13070-5 MSD Client ID: MT-SB17-0-2 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Di-n-octyl phthalate	789	687	87	1	30	10-182	
Dibenzo(a,h)anthracene	789	704	86	6	30	10-200	
Dibenzofuran	789	598	76	7	30	10-200	
Diethyl phthalate	789	665	84	5	30	48-118	
Dimethyl phthalate	789	632	80	6	30	47-116	
Fluoranthene	789	892	89	17	30	10-200	
Fluorene	789	612	78	6	30	10-187	
Hexachlorobenzene	789	577	73	2	30	37-122	
Hexachlorobutadiene	789	369	47	5	30	30-110	
Hexachlorocyclopentadiene	789	390 U	0	NC	30	10-110	F
Hexachloroethane	789	347	44	6	30	13-110	
Indeno[1,2,3-cd]pyrene	789	757	84	11	30	10-200	
Isophorone	789	482	61	6	30	32-129	
N-Nitrosodi-n-propylamine	789	459	58	6	30	30-121	
N-Nitrosodimethylamine	790	313	40	17	30	10-130	
N-Nitrosodiphenylamine	789	594	75	6	30	10-169	
Naphthalene	789	466	55	5	30	10-200	
Nitrobenzene	789	404	51	5	30	33-111	
Pentachlorophenol	789	422	54	7	30	10-182	
Phenanthrene	789	690	79	11	30	10-200	
Phenol	789	493	58	2	30	10-144	
Pyrene	789	821	77	9	30	10-200	
2,2'-oxybis[1-chloropropane]	789	383	49	2	30	25-124	
2,6-Dinitrotoluene	789	575	73	9	30	28-137	
4-Nitrophenol	789	736	93	2	30	10-125	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: STD6 240-51126/10 Date Analyzed: 07/18/2012 12:29

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20718010.D Heated Purge: (Y/N) N

Calibration ID: 10168

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		125995	3.89	522239	4.85	307568	6.15
UPPER LIMIT		251990	4.39	1044478	5.35	615136	6.65
LOWER LIMIT		62998	3.39	261120	4.35	153784	5.65
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-51126/11		121149	3.90	485431	4.85	288798	6.15
CCV 240-51606/2 CCVIS		138824	3.68	539531	4.65	316845	5.94

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: STD6 240-51126/10 Date Analyzed: 07/18/2012 12:29

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20718010.D Heated Purge: (Y/N) N

Calibration ID: 10168

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		516084	7.24	470428	9.21	328489	10.62
UPPER LIMIT		1032168	7.74	940856	9.71	656978	11.12
LOWER LIMIT		258042	6.74	235214	8.71	164245	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-51126/11		477640	7.24	428408	9.20	309480	10.62
CCV 240-51606/2 CCVIS		527172	7.03	488380	8.98	340928	10.26

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-51606/2 Date Analyzed: 07/23/2012 08:38

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20723002.D Heated Purge: (Y/N) N

Calibration ID: 10172

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		138824	3.68	539531	4.65	316845	5.94
UPPER LIMIT		277648	4.18	1079062	5.15	633690	6.44
LOWER LIMIT		69412	3.18	269766	4.15	158423	5.44
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-51373/21-A		116559	3.68	489621	4.65	287780	5.94
LCS 240-51373/22-A		106617	3.69	450970	4.65	272015	5.94
240-13070-2	MT-SS18-0-2	90825	3.68	391554	4.65	263935	5.94
240-13070-3	MT-SS18-8-10	94637	3.68	409176	4.64	259981	5.94
240-13070-6	MT-SB17-8-10	93137	3.68	404810	4.65	262370	5.94
240-13070-5	MT-SB17-0-2	97976	3.68	421859	4.64	270081	5.94
240-13070-5 MS	MT-SB17-0-2 MS	84384	3.69	391920	4.65	252691	5.95
240-13070-5 MSD	MT-SB17-0-2 MSD	87943	3.68	370857	4.65	242886	5.94

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-51606/2 Date Analyzed: 07/23/2012 08:38

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20723002.D Heated Purge: (Y/N) N

Calibration ID: 10172

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		527172	7.03	488380	8.98	340928	10.26
UPPER LIMIT		1054344	7.53	976760	9.48	681856	10.76
LOWER LIMIT		263586	6.53	244190	8.48	170464	9.76
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-51373/21-A		488312	7.02	427663	8.96	298803	10.23
LCS 240-51373/22-A		443351	7.02	415436	8.96	299927	10.24
240-13070-2	MT-SS18-0-2	443156	7.02	413955	8.97	296554	10.25
240-13070-3	MT-SS18-8-10	457521	7.02	415615	8.96	297130	10.24
240-13070-6	MT-SB17-8-10	456082	7.02	418388	8.96	309829	10.25
240-13070-5	MT-SB17-0-2	463616	7.02	416782	8.97	294812	10.25
240-13070-5 MS	MT-SB17-0-2 MS	452786	7.02	415638	8.97	296183	10.25
240-13070-5 MSD	MT-SB17-0-2 MSD	432773	7.02	410815	8.97	290882	10.25

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: YPID Start Date: 06/29/2012 12:53

Analysis Batch Number: 49409 End Date: 06/29/2012 18:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/29/2012 12:53	1		RTX-VRX 0.45(mm)
STD1 240-49409/4 IC		06/29/2012 13:39	1	YF062904.D	RTX-VRX 0.45(mm)
STD2 240-49409/5 IC		06/29/2012 14:26	1	YF062905.D	RTX-VRX 0.45(mm)
STD3 240-49409/6 ICRT		06/29/2012 15:12	1	YF062906.D	RTX-VRX 0.45(mm)
STD4 240-49409/7 IC		06/29/2012 15:59	1	YF062907.D	RTX-VRX 0.45(mm)
STD5 240-49409/8 IC		06/29/2012 16:45	1	YF062908.D	RTX-VRX 0.45(mm)
STD6 240-49409/9 IC		06/29/2012 17:30	1	YF062909.D	RTX-VRX 0.45(mm)
ICV 240-49409/10		06/29/2012 18:14	1	YF062910.D	RTX-VRX 0.45(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: YPID Start Date: 07/18/2012 15:29

Analysis Batch Number: 51212 End Date: 07/19/2012 05:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-51212/5 CCVRT		07/18/2012 15:29	1	YF071805.D	RTX-VRX 0.45(mm)
MB 240-51212/6		07/18/2012 16:09	1	YF071806.D	RTX-VRX 0.45(mm)
LCS 240-51212/7		07/18/2012 16:49	1	YF071807.D	RTX-VRX 0.45(mm)
240-13070-2	MT-SS18-0-2	07/18/2012 20:06	2	YF071812.D	RTX-VRX 0.45(mm)
240-13070-3	MT-SS18-8-10	07/18/2012 20:45	1	YF071813.D	RTX-VRX 0.45(mm)
240-13070-5	MT-SB17-0-2	07/18/2012 21:23	1	YF071814.D	RTX-VRX 0.45(mm)
240-13070-6	MT-SB17-8-10	07/18/2012 22:01	1	YF071815.D	RTX-VRX 0.45(mm)
CCV 240-51212/16		07/18/2012 22:42	1	YF071816.D	RTX-VRX 0.45(mm)
ZZZZZ		07/19/2012 02:02	1		RTX-VRX 0.45(mm)
ZZZZZ		07/19/2012 02:41	1		RTX-VRX 0.45(mm)
ZZZZZ		07/19/2012 03:20	1		RTX-VRX 0.45(mm)
ZZZZZ		07/19/2012 04:00	1		RTX-VRX 0.45(mm)
ZZZZZ		07/19/2012 04:39	1		RTX-VRX 0.45(mm)
ZZZZZ		07/19/2012 05:18	1		RTX-VRX 0.45(mm)
CCV 240-51212/27		07/19/2012 05:57	1		RTX-VRX 0.45(mm)

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49409

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 13:39 Calibration End Date: 06/29/2012 17:30 Calibration ID: 9879

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-49409/4	YF062904.D
Level 2	STD2 240-49409/5	YF062905.D
Level 3	STD3 240-49409/6	YF062906.D
Level 4	STD4 240-49409/7	YF062907.D
Level 5	STD5 240-49409/8	YF062908.D
Level 6	STD6 240-49409/9	YF062909.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	396398 309079	363256 311555	337661	315467	Ave		338902.687				10.0		20.0			
C6-C12	482905 340285	415902 342255	378953	348850	Ave		384858.436				15.0		20.0			
Trifluorotoluene (Surr)	284961 354937	292193 411371	314695	335646	Ave		332300.483				14.0		20.0			

Note: The ml coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49409/10 Calibration Date: 06/29/2012 18:14

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF062910.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	338903	340389		804	800	0.4	20.0
C6-C12	Ave	384858	387501		806	800	0.7	20.0
Trifluorotoluene (Surr)	Ave	332300	330492		9.95	10.0	-0.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49409/10 Calibration Date: 06/29/2012 18:14

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF062910.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.79	4.77	18.80
C6-C12	13.38	4.87	21.89
Trifluorotoluene (Surr)	9.75	9.49	9.99

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51212/5 Calibration Date: 07/18/2012 15:29

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071805.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	338903	308811		729	800	-8.9	20.0
C6-C12	Ave	384858	343108		713	800	-10.8	20.0
Trifluorotoluene (Surr)	Ave	332300	353218		10.6	10.0	6.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51212/5 Calibration Date: 07/18/2012 15:29

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071805.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.79	4.79	18.79
C6-C12	13.46	4.89	22.02
Trifluorotoluene (Surr)	9.75	9.50	10.00

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51212/16 Calibration Date: 07/18/2012 22:42

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071816.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	338903	277442		655	800	-18.1	20.0
C6-C12	Ave	384858	308426		641	800	-19.9	20.0
Trifluorotoluene (Surr)	Ave	332300	315730		9.50	10.0	-5.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51212/16 Calibration Date: 07/18/2012 22:42

Instrument ID: YPID Calib Start Date: 06/29/2012 13:39

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 06/29/2012 17:30

Lab File ID: YF071816.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.79	4.79	18.79
C6-C12	13.46	4.89	22.02
Trifluorotoluene (Surr)	9.75	9.50	10.00

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: MB 240-51212/6

Matrix: Solid Date Extracted: 07/18/2012 16:09

Lab File ID:(1) YF071806.D Lab File ID:(2)

Date Analyzed:(1) 07/18/2012 16:09 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-51212/7	07/18/2012 16:49	
MT-SS18-0-2	240-13070-2	07/18/2012 20:06	
MT-SS18-8-10	240-13070-3	07/18/2012 20:45	
MT-SB17-0-2	240-13070-5	07/18/2012 21:23	
MT-SB17-8-10	240-13070-6	07/18/2012 22:01	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-51212/6

Matrix: Solid Lab File ID: YF071806.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/18/2012 16:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 51212 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	100	U	100	46

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	88		10-150

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT1 #
MT-SS18-0-2	240-13070-2	78
MT-SS18-8-10	240-13070-3	83
MT-SB17-0-2	240-13070-5	74
MT-SB17-8-10	240-13070-6	85
	MB 240-51212/6	88
	LCS 240-51212/7	99

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015C

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: YF071807.D

Lab ID: LCS 240-51212/7 Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	799	100	60-142	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-51212/5 Date Analyzed: 07/18/2012 15:29

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF071805.D Heated Purge: (Y/N) N

Calibration ID: 9879

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.75		
UPPER LIMIT				9.85		
LOWER LIMIT				9.65		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-51212/5 CCVRT		07/18/2012 15:29	YF071805.D	9.75		
MB 240-51212/6		07/18/2012 16:09	YF071806.D	9.75		
LCS 240-51212/7		07/18/2012 16:49	YF071807.D	9.76		
240-13070-2	MT-SS18-0-2	07/18/2012 20:06	YF071812.D	9.75		
240-13070-3	MT-SS18-8-10	07/18/2012 20:45	YF071813.D	9.75		
240-13070-5	MT-SB17-0-2	07/18/2012 21:23	YF071814.D	9.75		
240-13070-6	MT-SB17-8-10	07/18/2012 22:01	YF071815.D	9.75		
CCV 240-51212/16		07/18/2012 22:42	YF071816.D	9.75		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP5R Start Date: 06/12/2012 10:28

Analysis Batch Number: 47065 End Date: 06/12/2012 15:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-47065/4 IC		06/12/2012 10:28	1	P5B61204.D	
STD2 240-47065/5 IC		06/12/2012 10:58	1	P5B61205.D	
STD3 240-47065/6 ICRT		06/12/2012 11:30	1	P5B61206.D	
STD4 240-47065/7 IC		06/12/2012 12:01	1	P5B61207.D	
STD5 240-47065/8 IC		06/12/2012 12:32	1	P5B61208.D	
ICV 240-47065/9		06/12/2012 13:03	1	P5B61209.D	
STD1 240-47065/10 IC		06/12/2012 13:34	1		
STD2 240-47065/11 IC		06/12/2012 14:05	1		
STD3 240-47065/12 IC		06/12/2012 14:35	1		
STD4 240-47065/13 IC		06/12/2012 15:06	1		
STD5 240-47065/14 IC		06/12/2012 15:37	1		

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP5R Start Date: 07/25/2012 13:32

Analysis Batch Number: 51968 End Date: 07/25/2012 19:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-51968/4 CCVRT		07/25/2012 13:32	1	P5B72504.D	
CCV 240-51968/7		07/25/2012 15:03	1	P5B72507.D	
240-13070-2	MT-SS18-0-2	07/25/2012 15:34	1	P5B72508.D	
240-13070-2 MS	MT-SS18-0-2 MS	07/25/2012 16:04	1	P5B72509.D	
240-13070-2 MSD	MT-SS18-0-2 MSD	07/25/2012 16:35	1	P5B72510.D	
240-13070-3	MT-SS18-8-10	07/25/2012 17:05	1	P5B72511.D	
ZZZZZ		07/25/2012 17:36	10		
ZZZZZ		07/25/2012 18:07	5		
LCS 240-51519/8-A		07/25/2012 18:37	1	P5B72514.D	
MB 240-51519/7-A		07/25/2012 19:08	1	P5B72515.D	
CCV 240-51968/16		07/25/2012 19:38	1	P5B72516.D	

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP5R Start Date: 07/26/2012 15:38

Analysis Batch Number: 52120 End Date: 07/26/2012 17:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-52120/4 CCVRT		07/26/2012 15:38	1	P5B72604.D	
240-13070-5	MT-SB17-0-2	07/26/2012 16:09	1	P5B72605.D	
240-13070-6	MT-SB17-8-10	07/26/2012 16:40	1	P5B72606.D	
CCV 240-52120/7		07/26/2012 17:11	1	P5B72607.D	

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47065

SDG No.:

Instrument ID: A2HP5R GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 06/12/2012 10:28 Calibration End Date: 06/12/2012 12:32 Calibration ID: 9252

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-47065/4	P5B61204.D
Level 2	STD2 240-47065/5	P5B61205.D
Level 3	STD3 240-47065/6	P5B61206.D
Level 4	STD4 240-47065/7	P5B61207.D
Level 5	STD5 240-47065/8	P5B61208.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	165734 158267	149495	178830	126631	Ave		155791.354				13.0		20.0			
n-Nonane	196545 186321	175458	192406	151130	Ave		180372.163				10.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-47065/9 Calibration Date: 06/12/2012 13:03

Instrument ID: A2HP5R Calib Start Date: 06/12/2012 10:28

GC Column: ID: Calib End Date: 06/12/2012 12:32

Lab File ID: P5B61209.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	155791	145132		466	500	-6.8	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51968/4 Calibration Date: 07/25/2012 13:32

Instrument ID: A2HP5R Calib Start Date: 06/12/2012 10:28

GC Column: ID: Calib End Date: 06/12/2012 12:32

Lab File ID: P5B72504.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	155791	118823		381	500	-23.7*	20.0
n-Nonane	Ave	180372	159572		44.2	50.0	-11.5	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51968/7 Calibration Date: 07/25/2012 15:03

Instrument ID: A2HP5R Calib Start Date: 06/12/2012 10:28

GC Column: ID: Calib End Date: 06/12/2012 12:32

Lab File ID: P5B72507.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	155791	148651		477	500	-4.6	20.0
n-Nonane	Ave	180372	194707		54.0	50.0	7.9	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51968/16 Calibration Date: 07/25/2012 19:38

Instrument ID: A2HP5R Calib Start Date: 06/12/2012 10:28

GC Column: ID: Calib End Date: 06/12/2012 12:32

Lab File ID: P5B72516.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	155791	163062		523	500	4.7	20.0
n-Nonane	Ave	180372	207720		57.6	50.0	15.2	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-52120/4 Calibration Date: 07/26/2012 15:38

Instrument ID: A2HP5R Calib Start Date: 06/12/2012 10:28

GC Column: ID: Calib End Date: 06/12/2012 12:32

Lab File ID: P5B72604.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	155791	149375		479	500	-4.1	20.0
n-Nonane	Ave	180372	195336		54.1	50.0	8.3	20.0

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-52120/7 Calibration Date: 07/26/2012 17:11

Instrument ID: A2HP5R Calib Start Date: 06/12/2012 10:28

GC Column: ID: Calib End Date: 06/12/2012 12:32

Lab File ID: P5B72607.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	155791	141082		453	500	-9.4	20.0
n-Nonane	Ave	180372	193232		53.6	50.0	7.1	20.0

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: MB 240-51519/7-A

Matrix: Solid Date Extracted: 07/20/2012 11:12

Lab File ID:(1) P5B72515.D Lab File ID:(2)

Date Analyzed:(1) 07/25/2012 19:08 Date Analyzed:(2)

Instrument ID:(1) A2HP5R Instrument ID:(2)

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MT-SS18-0-2	240-13070-2	07/25/2012 15:34	
MT-SS18-0-2 MS	240-13070-2 MS	07/25/2012 16:04	
MT-SS18-0-2 MSD	240-13070-2 MSD	07/25/2012 16:35	
MT-SS18-8-10	240-13070-3	07/25/2012 17:05	
	LCS 240-51519/8-A	07/25/2012 18:37	
MT-SB17-0-2	240-13070-5	07/26/2012 16:09	
MT-SB17-8-10	240-13070-6	07/26/2012 16:40	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51519/7-A

Matrix: Solid | Lab File ID: P5B72515.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3540C | Date Extracted: 07/20/2012 11:12

Sample wt/vol: 30.00(g) | Date Analyzed: 07/25/2012 19:08

Con. Extract Vol.: 5.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51968 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	17	U	17	9.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	41		10-110

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ID:

Client Sample ID	Lab Sample ID	C91 #
MT-SS18-0-2	240-13070-2	36
MT-SS18-8-10	240-13070-3	32
MT-SB17-0-2	240-13070-5	35
MT-SB17-8-10	240-13070-6	38
	MB 240-51519/7-A	41
	LCS 240-51519/8-A	32
MT-SS18-0-2 MS	240-13070-2 MS	38
MT-SS18-0-2 MSD	240-13070-2 MSD	39

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015C

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5B72514.D

Lab ID: LCS 240-51519/8-A Client ID:

COMPOUND	SPIKE ADDED (mg/Kg)	LCS CONCENTRATION (mg/Kg)	LCS % REC	QC LIMITS REC	#
Diesel	83.3	52.1	63	47-138	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5B72509.D

Lab ID: 240-13070-2 MS Client ID: MT-SS18-0-2 MS

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC	QC LIMITS REC	#
Diesel	100	20 U	69.1	69	10-199	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5B72510.D

Lab ID: 240-13070-2 MSD Client ID: MT-SS18-0-2 MSD

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Diesel	98.5	71.1	72	3	30	10-199	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-51968/4 Date Analyzed: 07/25/2012 13:32

Instrument ID: A2HP5R GC Column: ID: ()

Lab File ID (Standard): P5B72504.D Heated Purge: (Y/N) N

Calibration ID: 9252

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				3.59		
UPPER LIMIT				3.69		
LOWER LIMIT				3.49		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-51968/4 CCVRT		07/25/2012 13:32	P5B72504.D	3.59		
CCV 240-51968/7		07/25/2012 15:03	P5B72507.D	3.60		
240-13070-2	MT-SS18-0-2	07/25/2012 15:34	P5B72508.D	3.58		
240-13070-2 MS	MT-SS18-0-2 MS	07/25/2012 16:04	P5B72509.D	3.58		
240-13070-2 MSD	MT-SS18-0-2 MSD	07/25/2012 16:35	P5B72510.D	3.59		
240-13070-3	MT-SS18-8-10	07/25/2012 17:05	P5B72511.D	3.58		
LCS 240-51519/8-A		07/25/2012 18:37	P5B72514.D	3.59		
MB 240-51519/7-A		07/25/2012 19:08	P5B72515.D	3.58		
CCV 240-51968/16		07/25/2012 19:38	P5B72516.D	3.60		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-52120/4 Date Analyzed: 07/26/2012 15:38

Instrument ID: A2HP5R GC Column: ID: ()

Lab File ID (Standard): P5B72604.D Heated Purge: (Y/N) N

Calibration ID: 9252

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				3.60		
UPPER LIMIT				3.70		
LOWER LIMIT				3.50		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-52120/4 CCVRT		07/26/2012 15:38	P5B72604.D	3.60		
240-13070-5	MT-SB17-0-2	07/26/2012 16:09	P5B72605.D	3.57		
240-13070-6	MT-SB17-8-10	07/26/2012 16:40	P5B72606.D	3.59		
CCV 240-52120/7		07/26/2012 17:11	P5B72607.D	3.60		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP9 Start Date: 07/07/2012 11:44

Analysis Batch Number: 50336 End Date: 07/09/2012 23:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD 240-50336/9 IC		07/07/2012 11:44	1	P9707009.D	CLP-1 0.53(mm)
STD 240-50336/9 IC		07/07/2012 11:44	1	P9707009.D	CLP-2 0.53(mm)
STD 240-50336/10 IC		07/07/2012 12:07	1	P9707010.D	CLP-1 0.53(mm)
STD 240-50336/10 IC		07/07/2012 12:07	1	P9707010.D	CLP-2 0.53(mm)
STD 240-50336/11 IC		07/07/2012 12:31	1	P9707011.D	CLP-1 0.53(mm)
STD 240-50336/11 IC		07/07/2012 12:31	1	P9707011.D	CLP-2 0.53(mm)
STD 240-50336/12 IC		07/07/2012 12:56	1	P9707012.D	CLP-1 0.53(mm)
STD 240-50336/12 IC		07/07/2012 12:56	1	P9707012.D	CLP-2 0.53(mm)
STD 240-50336/13 IC		07/07/2012 13:20	1	P9707013.D	CLP-1 0.53(mm)
STD 240-50336/13 IC		07/07/2012 13:20	1	P9707013.D	CLP-2 0.53(mm)
STD 240-50336/14 IC		07/07/2012 13:44	1	P9707014.D	CLP-1 0.53(mm)
STD 240-50336/14 IC		07/07/2012 13:44	1	P9707014.D	CLP-2 0.53(mm)
ICV 240-50336/15		07/07/2012 14:09	1		CLP-1 0.53(mm)
ICV 240-50336/15		07/07/2012 14:09	1		CLP-2 0.53(mm)
STD 240-50336/16 IC		07/07/2012 14:33	1		CLP-1 0.53(mm)
STD 240-50336/16 IC		07/07/2012 14:33	1		CLP-2 0.53(mm)
STD 240-50336/17 IC		07/07/2012 15:03	1		CLP-1 0.53(mm)
STD 240-50336/17 IC		07/07/2012 15:03	1		CLP-2 0.53(mm)
STD 240-50336/18 IC		07/07/2012 15:27	1		CLP-1 0.53(mm)
STD 240-50336/18 IC		07/07/2012 15:27	1		CLP-2 0.53(mm)
STD 240-50336/19 IC		07/07/2012 15:52	1		CLP-1 0.53(mm)
STD 240-50336/19 IC		07/07/2012 15:52	1		CLP-2 0.53(mm)
STD 240-50336/20 IC		07/07/2012 16:16	1		CLP-1 0.53(mm)
STD 240-50336/20 IC		07/07/2012 16:16	1		CLP-2 0.53(mm)
PEM 240-50336/21		07/08/2012 19:27	1	P9707021.D	CLP-1 0.53(mm)
PEM 240-50336/21		07/08/2012 19:27	1	P9707021.D	CLP-2 0.53(mm)
STD 240-50336/22 IC		07/08/2012 19:52	1	P9707022.D	CLP-1 0.53(mm)
STD 240-50336/22 IC		07/08/2012 19:52	1	P9707022.D	CLP-2 0.53(mm)
STD 240-50336/23 IC		07/08/2012 20:16	1	P9707023.D	CLP-1 0.53(mm)
STD 240-50336/23 IC		07/08/2012 20:16	1	P9707023.D	CLP-2 0.53(mm)
STD 240-50336/24 ICRT		07/08/2012 20:41	1	P9707024.D	CLP-1 0.53(mm)
STD 240-50336/24 ICRT		07/08/2012 20:41	1	P9707024.D	CLP-2 0.53(mm)
STD 240-50336/25 IC		07/08/2012 21:05	1	P9707025.D	CLP-1 0.53(mm)
STD 240-50336/25 IC		07/08/2012 21:05	1	P9707025.D	CLP-2 0.53(mm)
STD 240-50336/26 IC		07/08/2012 21:30	1	P9707026.D	CLP-1 0.53(mm)
STD 240-50336/26 IC		07/08/2012 21:30	1	P9707026.D	CLP-2 0.53(mm)
STD 240-50336/27 IC		07/08/2012 21:54	1	P9707027.D	CLP-1 0.53(mm)
STD 240-50336/27 IC		07/08/2012 21:54	1	P9707027.D	CLP-2 0.53(mm)
ICV 240-50336/28		07/08/2012 22:19	1	P9707028.D	CLP-1 0.53(mm)
ICV 240-50336/28		07/08/2012 22:19	1	P9707028.D	CLP-2 0.53(mm)
STD 240-50336/29 IC		07/08/2012 22:43	1	P9707029.D	CLP-1 0.53(mm)
STD 240-50336/29 IC		07/08/2012 22:43	1	P9707029.D	CLP-2 0.53(mm)
STD 240-50336/30 IC		07/08/2012 23:07	1	P9707030.D	CLP-1 0.53(mm)
STD 240-50336/30 IC		07/08/2012 23:07	1	P9707030.D	CLP-2 0.53(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP9 Start Date: 07/07/2012 11:44

Analysis Batch Number: 50336 End Date: 07/09/2012 23:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD 240-50336/31 IC		07/08/2012 23:32	1	P9707031.D	CLP-1 0.53(mm)
STD 240-50336/31 IC		07/08/2012 23:32	1	P9707031.D	CLP-2 0.53(mm)
STD 240-50336/32 IC		07/08/2012 23:56	1	P9707032.D	CLP-1 0.53(mm)
STD 240-50336/32 IC		07/08/2012 23:56	1	P9707032.D	CLP-2 0.53(mm)
STD 240-50336/33 IC		07/09/2012 00:21	1	P9707033.D	CLP-1 0.53(mm)
STD 240-50336/33 IC		07/09/2012 00:21	1	P9707033.D	CLP-2 0.53(mm)
ICV 240-50336/34		07/09/2012 00:45	1		CLP-1 0.53(mm)
ICV 240-50336/34		07/09/2012 00:45	1		CLP-2 0.53(mm)
STD 240-50336/35 IC		07/09/2012 01:10	1	P9707035.D	CLP-1 0.53(mm)
STD 240-50336/35 IC		07/09/2012 01:10	1	P9707035.D	CLP-2 0.53(mm)
STD 240-50336/36 IC		07/09/2012 01:34	1	P9707036.D	CLP-1 0.53(mm)
STD 240-50336/36 IC		07/09/2012 01:34	1	P9707036.D	CLP-2 0.53(mm)
STD 240-50336/37 IC		07/09/2012 01:59	1	P9707037.D	CLP-1 0.53(mm)
STD 240-50336/37 IC		07/09/2012 01:59	1	P9707037.D	CLP-2 0.53(mm)
STD 240-50336/38 IC		07/09/2012 02:23	1	P9707038.D	CLP-1 0.53(mm)
STD 240-50336/38 IC		07/09/2012 02:23	1	P9707038.D	CLP-2 0.53(mm)
STD 240-50336/39 IC		07/09/2012 02:47	1	P9707039.D	CLP-1 0.53(mm)
STD 240-50336/39 IC		07/09/2012 02:47	1	P9707039.D	CLP-2 0.53(mm)
ICV 240-50336/40		07/09/2012 03:12	1		CLP-1 0.53(mm)
ICV 240-50336/40		07/09/2012 03:12	1		CLP-2 0.53(mm)
PEM 240-50336/41		07/09/2012 03:36	1		CLP-1 0.53(mm)
PEM 240-50336/41		07/09/2012 03:36	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 04:00	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 04:00	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 04:25	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 04:25	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 04:49	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 04:49	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 05:13	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 05:13	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 05:38	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 05:38	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 06:02	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 06:02	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 06:27	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 06:27	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 06:51	100		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 06:51	100		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 08:03	20		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 08:03	20		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 08:27	10		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 08:27	10		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 08:50	50		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 08:50	50		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 09:15	50		CLP-1 0.53(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP9 Start Date: 07/07/2012 11:44

Analysis Batch Number: 50336 End Date: 07/09/2012 23:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/09/2012 09:15	50		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 09:38	50		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 09:38	50		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 10:02	100		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 10:02	100		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 10:26	100		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 10:26	100		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 10:49	100		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 10:49	100		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 11:12	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 11:12	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 11:36	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 11:36	1		CLP-2 0.53(mm)
CCV 240-50336/62		07/09/2012 12:00	1		CLP-1 0.53(mm)
CCV 240-50336/62		07/09/2012 12:00	1		CLP-2 0.53(mm)
CCV 240-50336/63		07/09/2012 12:24	1		CLP-1 0.53(mm)
CCV 240-50336/63		07/09/2012 12:24	1		CLP-2 0.53(mm)
PEM 240-50336/64		07/09/2012 12:47	1		CLP-1 0.53(mm)
PEM 240-50336/64		07/09/2012 12:47	1		CLP-2 0.53(mm)
CCV 240-50336/65		07/09/2012 13:11	1		CLP-1 0.53(mm)
CCV 240-50336/65		07/09/2012 13:11	1		CLP-2 0.53(mm)
CCV 240-50336/66		07/09/2012 13:35	1		CLP-1 0.53(mm)
CCV 240-50336/66		07/09/2012 13:35	1		CLP-2 0.53(mm)
CCV 240-50336/67		07/09/2012 13:58	1		CLP-1 0.53(mm)
CCV 240-50336/67		07/09/2012 13:58	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 14:28	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 14:28	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 14:57	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 14:57	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 15:27	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 15:27	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 15:56	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 15:56	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 16:25	2		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 16:25	2		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 16:55	5		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 16:55	5		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 17:24	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 17:24	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 17:54	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 17:54	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 18:18	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 18:18	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 18:42	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 18:42	1		CLP-2 0.53(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP9 Start Date: 07/07/2012 11:44

Analysis Batch Number: 50336 End Date: 07/09/2012 23:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		07/09/2012 19:06	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 19:06	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 19:31	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 19:31	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 19:55	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 19:55	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 20:20	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 20:20	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 20:43	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 20:43	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 21:07	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 21:07	1		CLP-2 0.53(mm)
ZZZZZ		07/09/2012 21:31	1		CLP-1 0.53(mm)
ZZZZZ		07/09/2012 21:31	1		CLP-2 0.53(mm)
CCV 240-50336/85		07/09/2012 21:54	1		CLP-1 0.53(mm)
CCV 240-50336/85		07/09/2012 21:54	1		CLP-2 0.53(mm)
CCV 240-50336/86		07/09/2012 22:19	1		CLP-1 0.53(mm)
CCV 240-50336/86		07/09/2012 22:19	1		CLP-2 0.53(mm)
CCV 240-50336/87		07/09/2012 22:43	1		CLP-1 0.53(mm)
CCV 240-50336/87		07/09/2012 22:43	1		CLP-2 0.53(mm)
CCV 240-50336/88		07/09/2012 23:08	1		CLP-1 0.53(mm)
CCV 240-50336/88		07/09/2012 23:08	1		CLP-2 0.53(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP9 Start Date: 07/16/2012 08:52

Analysis Batch Number: 50850 End Date: 07/17/2012 04:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 240-50850/4		07/16/2012 08:52	1		CLP-1 0.53(mm)
PEM 240-50850/4		07/16/2012 08:52	1		CLP-2 0.53(mm)
CCV 240-50850/6 CCVRT		07/16/2012 09:47	1	P9701605.D	CLP-1 0.53(mm)
CCV 240-50850/6 CCVRT		07/16/2012 09:47	1	P9701605.D	CLP-2 0.53(mm)
CCV 240-50850/7		07/16/2012 10:12	1		CLP-1 0.53(mm)
CCV 240-50850/7		07/16/2012 10:12	1		CLP-2 0.53(mm)
CCV 240-50850/8		07/16/2012 10:36	1		CLP-1 0.53(mm)
CCV 240-50850/8		07/16/2012 10:36	1		CLP-2 0.53(mm)
CCV 240-50850/9		07/16/2012 11:07	1		CLP-1 0.53(mm)
CCV 240-50850/9		07/16/2012 11:07	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 11:32	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 11:32	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 11:57	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 11:57	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 12:27	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 12:27	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 12:57	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 12:57	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 13:22	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 13:22	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 13:47	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 13:47	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 14:17	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 14:17	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 14:41	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 14:41	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 15:06	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 15:06	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 15:36	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 15:36	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 16:00	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 16:00	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 16:30	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 16:30	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 16:59	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 16:59	1		CLP-2 0.53(mm)
CCV 240-50850/23		07/16/2012 17:28	1	P9701622.D	CLP-1 0.53(mm)
CCV 240-50850/23		07/16/2012 17:28	1	P9701622.D	CLP-2 0.53(mm)
CCV 240-50850/24		07/16/2012 17:58	1	P9701623.D	CLP-1 0.53(mm)
CCV 240-50850/24		07/16/2012 17:58	1	P9701623.D	CLP-2 0.53(mm)
CCV 240-50850/25		07/16/2012 18:22	1	P9701624.D	CLP-1 0.53(mm)
CCV 240-50850/25		07/16/2012 18:22	1	P9701624.D	CLP-2 0.53(mm)
CCV 240-50850/26		07/16/2012 18:47	1	P9701625.D	CLP-1 0.53(mm)
CCV 240-50850/26		07/16/2012 18:47	1	P9701625.D	CLP-2 0.53(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP9 Start Date: 07/16/2012 08:52

Analysis Batch Number: 50850 End Date: 07/17/2012 04:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 240-50850/27		07/16/2012 19:11	1	P9701626.D	CLP-1 0.53(mm)
PEM 240-50850/27		07/16/2012 19:11	1	P9701626.D	CLP-2 0.53(mm)
240-13070-4	MT-TCLP-8-10	07/16/2012 19:35	1	P9701627.D	CLP-1 0.53(mm)
240-13070-4	MT-TCLP-8-10	07/16/2012 19:35	1	P9701627.D	CLP-2 0.53(mm)
240-13070-4 MS	MT-TCLP-8-10 MS	07/16/2012 19:59	5	P9701628.D	CLP-1 0.53(mm)
240-13070-4 MS	MT-TCLP-8-10 MS	07/16/2012 19:59	5	P9701628.D	CLP-2 0.53(mm)
MB 240-50725/3-A		07/16/2012 20:24	1	P9701629.D	CLP-1 0.53(mm)
MB 240-50725/3-A		07/16/2012 20:24	1	P9701629.D	CLP-2 0.53(mm)
LCS 240-50725/4-A		07/16/2012 20:48	5	P9701630.D	CLP-1 0.53(mm)
LCS 240-50725/4-A		07/16/2012 20:48	5	P9701630.D	CLP-2 0.53(mm)
ZZZZZ		07/16/2012 21:12	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 21:12	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 21:37	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 21:37	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 22:01	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 22:01	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 22:25	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 22:25	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 22:50	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 22:50	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 23:14	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 23:14	1		CLP-2 0.53(mm)
ZZZZZ		07/16/2012 23:38	1		CLP-1 0.53(mm)
ZZZZZ		07/16/2012 23:38	1		CLP-2 0.53(mm)
ZZZZZ		07/17/2012 00:03	1		CLP-1 0.53(mm)
ZZZZZ		07/17/2012 00:03	1		CLP-2 0.53(mm)
ZZZZZ		07/17/2012 00:27	1		CLP-1 0.53(mm)
ZZZZZ		07/17/2012 00:27	1		CLP-2 0.53(mm)
ZZZZZ		07/17/2012 00:51	1		CLP-1 0.53(mm)
ZZZZZ		07/17/2012 00:51	1		CLP-2 0.53(mm)
ZZZZZ		07/17/2012 01:16	1		CLP-1 0.53(mm)
ZZZZZ		07/17/2012 01:16	1		CLP-2 0.53(mm)
ZZZZZ		07/17/2012 01:40	1		CLP-1 0.53(mm)
ZZZZZ		07/17/2012 01:40	1		CLP-2 0.53(mm)
ZZZZZ		07/17/2012 02:04	1		CLP-1 0.53(mm)
ZZZZZ		07/17/2012 02:04	1		CLP-2 0.53(mm)
ZZZZZ		07/17/2012 02:29	1		CLP-1 0.53(mm)
ZZZZZ		07/17/2012 02:29	1		CLP-2 0.53(mm)
ZZZZZ		07/17/2012 02:53	1		CLP-1 0.53(mm)
ZZZZZ		07/17/2012 02:53	1		CLP-2 0.53(mm)
CCV 240-50850/47		07/17/2012 03:17	1	P9701646.D	CLP-1 0.53(mm)
CCV 240-50850/47		07/17/2012 03:17	1	P9701646.D	CLP-2 0.53(mm)
CCV 240-50850/48		07/17/2012 03:42	1	P9701647.D	CLP-1 0.53(mm)
CCV 240-50850/48		07/17/2012 03:42	1	P9701647.D	CLP-2 0.53(mm)
CCV 240-50850/49		07/17/2012 04:06	1	P9701648.D	CLP-1 0.53(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP9 Start Date: 07/16/2012 08:52

Analysis Batch Number: 50850 End Date: 07/17/2012 04:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-50850/49		07/17/2012 04:06	1	P9701648.D	CLP-2 0.53(mm)
CCV 240-50850/50		07/17/2012 04:30	1		CLP-1 0.53(mm)
CCV 240-50850/50		07/17/2012 04:30	1		CLP-2 0.53(mm)

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/07/2012 11:44 Calibration End Date: 07/07/2012 11:44 Calibration ID: 10048

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-50336/9	P9707009.D
Level 2	STD 240-50336/10	P9707010.D
Level 3	STD 240-50336/11	P9707011.D
Level 4	STD 240-50336/12	P9707012.D
Level 5	STD 240-50336/13	P9707013.D
Level 6	STD 240-50336/14	P9707014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Hexachlorobenzene	4914449700 3167596705	3656487500 3090115323	3475442825	3284805860	Ave		3598149652				19.0		20.0			
Isodrin	3673955600 2402151730	2737916800 2313506890	2600023050	2445001500	Ave		2695425928				19.0		20.0			
Kepone	479757638 410840695	260155350 466332436	359984700	323089964	Qua	-3275787.4	331622674	42737837.6						0.9990		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/07/2012 11:44 Calibration End Date: 07/07/2012 11:44 Calibration ID: 10049

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-50336/9	P9707009.D
Level 2	STD 240-50336/10	P9707010.D
Level 3	STD 240-50336/11	P9707011.D
Level 4	STD 240-50336/12	P9707012.D
Level 5	STD 240-50336/13	P9707013.D
Level 6	STD 240-50336/14	P9707014.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Hexachlorobenzene	1048221190 7533106066	7687986150 7834709255	7452083075	7368476730	Ave		8059762196				15.0		20.0			
Isodrin	7265957400 4739293930	5278128100 4684412340	5005894200	4724620100	Ave		5283051012				19.0		20.0			
Kepone	222078425 597534962	163859444 789706334	327964638	398803079	Qua	-36267539	398258238	126372115						0.9990		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2012 19:52 Calibration End Date: 07/08/2012 19:52 Calibration ID: 10060

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-50336/22	P9707022.D
Level 2	STD 240-50336/23	P9707023.D
Level 3	STD 240-50336/24	P9707024.D
Level 4	STD 240-50336/25	P9707025.D
Level 5	STD 240-50336/26	P9707026.D
Level 6	STD 240-50336/27	P9707027.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
alpha-BHC	3213403200 3308197020	3472600800 3112527720	3454826200	3355188640	Ave		3319457263				4.2		20.0			
gamma-BHC (Lindane)	2767992600 2804442420	2982373100 2631462890	2923759280	2812118400	Ave		2820358115				4.4		20.0			
beta-BHC	1239039600 1112397150	1262323000 1023675430	1172347640	1127557000	Ave		1156223303				7.6		20.0			
delta-BHC	2469199200 2829370380	2686253500 2636278530	2859793440	2753894760	Ave		2705798302				5.3		20.0			
Heptachlor	2191889000 1997347070	2041538000 1935815655	2224392920	2149421440	Ave		2090067348				5.5		20.0			
Aldrin	3046009800 2867641870	3182938200 2644215615	3026533120	2902330220	Ave		2944944804				6.3		20.0			
Heptachlor epoxide	2518969000 2313987310	2515008700 2080557410	2468101200	2319427220	Ave		2369341807				7.1		20.0			
gamma-Chlordane	2690842000 2586689840	2671337100 2371354270	2672876600	2534483900	Ave		2587930618				4.7		20.0			
alpha-Chlordane	2771009600 2581365050	2785397600 2357028685	2731936280	2580119560	Ave		2634476129				6.2		20.0			
Endosulfan I	2227652400 2094034070	2202952600 1894289005	2222729680	2100663320	Ave		2123720179				6.0		20.0			
4,4'-DDE	2760769000 2508915920	2569624200 2285916350	2692030560	2537351460	Ave		2559101248				6.4		20.0			
Dieldrin	2159102000 2164043290	2123276700 1951483215	2229824160	2141294160	Ave		2128170588				4.4		20.0			
Endrin	2072749200 1882603390	1899027300 1684445455	1928486160	1863046400	Ave		1888392984				6.6		20.0			
4,4'-DDD	1375179200 1497043680	1292398200 1369129090	1445795040	1353989160	Ave		1388922395				5.2		20.0			
Endosulfan II	2104148400 1956624820	1937011300 1741211140	2087359840	1834489280	Ave		1943474130				7.3		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2012 19:52 Calibration End Date: 07/08/2012 19:52 Calibration ID: 10060

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
4,4'-DDT	1323412600 1410966060	1175629000 1303894190	1365064400	1266854320	Ave		1307636762				6.2		20.0			
Endrin aldehyde	1360311800 1351533730	1251116800 1211800645	1366009960	1262393920	Ave		1300527809				5.1		20.0			
Methoxychlor	635082200 581246450	536196800 527928230	611566080	534574580	Ave		571099057				7.9		20.0			
Endosulfan sulfate	1780816800 1659814960	1542557400 1495953770	1743634160	1583359600	Ave		1634356115				6.9		20.0			
Endrin ketone	1827298200 1768054860	1604898000 1580110355	1813073960	1638825580	Ave		1705376826				6.5		20.0			
Tetrachloro-m-xylene	2229050000 2005739130	2316352000 1911242235	2186473400	2088459380	Ave		2122886024				7.1		20.0			
DCB Decachlorobiphenyl	1897127200 1672043880	1668924900 1512090220	1783395400	1614141760	Ave		1691287227				7.9		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2012 19:52 Calibration End Date: 07/08/2012 19:52 Calibration ID: 10061

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-50336/22	P9707022.D
Level 2	STD 240-50336/23	P9707023.D
Level 3	STD 240-50336/24	P9707024.D
Level 4	STD 240-50336/25	P9707025.D
Level 5	STD 240-50336/26	P9707026.D
Level 6	STD 240-50336/27	P9707027.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
alpha-BHC	7070552800 7583374500	7527211500 7379454425	7438755000	7415447440	Ave		7402465944				2.4		20.0			
gamma-BHC (Lindane)	6291085400 6278567740	6512248200 5955610710	6325238400	6132734420	Ave		6249247478				3.0		20.0			
beta-BHC	3030235400 2439309940	2917973000 2232287090	2692330360	2448862820	Ave		2626833102				12.0		20.0			
delta-BHC	5769112200 6160996310	5759880400 5885588175	5977738800	5810854620	Ave		5894028418				2.6		20.0			
Heptachlor	5512454400 4381249730	4873386700 4286788845	4963795480	4682916600	Ave		4783431959				9.3		20.0			
Aldrin	6441648400 5867411800	6552003400 5535614045	6073044120	5850163320	Ave		6053314181				6.4		20.0			
Heptachlor epoxide	5289412600 4877580510	5266067100 4410380125	5032128920	4717681260	Ave		4932208419				6.8		20.0			
gamma-Chlordane	5295446800 4836062100	5173113200 4515336050	5022876360	4741686460	Ave		4930753495				5.9		20.0			
alpha-Chlordane	5231791600 4647408420	5107422200 4339464735	4865144560	4593063400	Ave		4797382486				7.0		20.0			
Endosulfan I	4404094200 3910106320	4216531300 3562593975	4121413840	3849712920	Ave		4010742093				7.4		20.0			
4,4'-DDE	4440209600 4196164790	4205867500 3923150875	4391253880	4200017100	Ave		4226110624				4.3		20.0			
Dieldrin	4359688200 4074384030	4213033900 3803490770	4300411720	4110635920	Ave		4143607423				4.8		20.0			
Endrin	3771563200 3584838550	3501896300 3309344155	3659002520	3459985200	Ave		3547771654				4.6		20.0			
4,4'-DDD	2418803800 2740622010	2201331100 2667730645	2528612400	2445295780	Ave		2500399289				7.7		20.0			
Endosulfan II	3862759200 3397821590	3478772500 3012433925	3617448960	3362686300	Ave		3455320413				8.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2012 19:52 Calibration End Date: 07/08/2012 19:52 Calibration ID: 10061

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
4,4'-DDT	2332631000 2424941600	2054629500 2303219750	2300927280	2136279620	Ave		2258771458				6.1		20.0			
Endrin aldehyde	2501778800 2194311870	2171097000 2098265495	2360398200	2004747980	Ave		2221766558				8.1		20.0			
Endosulfan sulfate	2895967800 2849519410	2553750100 2673113955	2786487280	2631342540	Ave		2731696848				4.9		20.0			
Methoxychlor	1099216600 1051982400	955518800 974050160	1054166400	950284220	Ave		1014203097				6.1		20.0			
Endrin ketone	2931573600 2963471780	2587992400 2730067080	2877560360	2685737980	Ave		2796067200				5.4		20.0			
Tetrachloro-m-xylene	4713804200 4281349970	4806544600 4150055100	4484713800	4357600720	Ave		4465678065				5.7		20.0			
DCB Decachlorobiphenyl	2962026800 2500589820	2513908000 2328601940	2609739680	2397156380	Ave		2552003770				8.8		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2012 22:43 Calibration End Date: 07/08/2012 22:43 Calibration ID: 10066

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-50336/29	P9707029.D
Level 2	STD 240-50336/30	P9707030.D
Level 3	STD 240-50336/31	P9707031.D
Level 4	STD 240-50336/32	P9707032.D
Level 5	STD 240-50336/33	P9707033.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Toxaphene Peak 1	71023315 80495019	73005086	70207355	70654727	Ave		73077100.4				5.9		20.0			
Toxaphene Peak 2	91693815 87445040	95242012	93626688	75999417	Ave		88801394.5				8.7		20.0			
Toxaphene Peak 3	77429555 84547626	78299516	75011722	75154657	Ave		78088615.1				5.0		20.0			
Toxaphene Peak 4	72614090 85643103	74218858	73166040	74297670	Ave		75987952.2				7.2		20.0			
Toxaphene Peak 5	64981330 71475010	68877032	65418971	64664372	Ave		67083343.0				4.4		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/08/2012 22:43 Calibration End Date: 07/08/2012 22:43 Calibration ID: 10067

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-50336/29	P9707029.D
Level 2	STD 240-50336/30	P9707030.D
Level 3	STD 240-50336/31	P9707031.D
Level 4	STD 240-50336/32	P9707032.D
Level 5	STD 240-50336/33	P9707033.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Toxaphene Peak 1	146247835 156461381	145841188	138414217	135484291	Ave		144489782				5.6		20.0			
Toxaphene Peak 2	156584940 175884957	160542454	152637502	150156015	Ave		159161174				6.4		20.0			
Toxaphene Peak 3	130776895 141974919	130675012	122542856	120751300	Ave		129344196				6.5		20.0			
Toxaphene Peak 4	97367000 128630549	106415708	114103922	103839151	Lin1	-7890728.9	123801134							0.9920		0.9900
Toxaphene Peak 5	100245035 103561085	104484712	82706250	92483648	Ave		96696145.9				9.4		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2012 01:10 Calibration End Date: 07/09/2012 01:10 Calibration ID: 10072

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-50336/35	P9707035.D
Level 2	STD 240-50336/36	P9707036.D
Level 3	STD 240-50336/37	P9707037.D
Level 4	STD 240-50336/38	P9707038.D
Level 5	STD 240-50336/39	P9707039.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Chlordane (technical) Peak 1	124028000 121244636	123940560	126311680	112698525	Ave		121644680				4.4		20.0			
Chlordane (technical) Peak 2	119963100 116569922	122014880	113795350	108656790	Ave		116200008				4.5		20.0			
Chlordane (technical) Peak 3	347250150 386253100	367461900	342462260	341547090	Ave		356994900				5.4		20.0			
Chlordane (technical) Peak 4	550583750 606767084	595082360	550812140	540942690	Ave		568837605				5.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PESTICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 50336

SDG No.:

Instrument ID: A2HP9 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/09/2012 01:10 Calibration End Date: 07/09/2012 01:10 Calibration ID: 10073

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-50336/35	P9707035.D
Level 2	STD 240-50336/36	P9707036.D
Level 3	STD 240-50336/37	P9707037.D
Level 4	STD 240-50336/38	P9707038.D
Level 5	STD 240-50336/39	P9707039.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Chlordane (technical) Peak 1	299543550 260705702	289883720	266482050	253165125	Ave		273956029				7.2		20.0			
Chlordane (technical) Peak 2	289050450 220085524	275926180	236591400	217934665	Lin1	1856598.65	215612827							0.9980		0.9900
Chlordane (technical) Peak 3	609364250 662371592	612861060	623339020	578563710	Ave		617299926				4.9		20.0			
Chlordane (technical) Peak 4	608839600 591176420	618528680	581200000	537426515	Ave		587434243				5.4		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: PEM 240-50336/21 Calibration Date: 07/08/2012 19:27

Instrument ID: A2HP9 Calib Start Date: 06/27/2012 15:48

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 06/27/2012 17:59

Lab File ID: P9707021.D Conc. Units: ng/uL

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	9.07	99984521	4.21	15	
Endrin aldehyde	10.30	181302			
Endrin ketone	11.40	4213651			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	9.93	158239429	5.11	15	
4,4'-DDD	9.42	5529310			
4,4'-DDE	8.19	2999719			

FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: PEM 240-50336/21 Calibration Date: 07/08/2012 19:27

Instrument ID: A2HP9 Calib Start Date: 06/27/2012 15:48

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 06/27/2012 17:59

Lab File ID: P9707021.D Conc. Units: ng/uL

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	10.71	186941464	4.79	15	
Endrin aldehyde	11.63	1598126			
Endrin ketone	12.80	7804203			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	11.53	277360232	5.45	15	
4,4'-DDD	11.04	10326647			
4,4'-DDE	10.05	5646822			

FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: PEM 240-50850/27 Calibration Date: 07/16/2012 19:11

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9701626.D Conc. Units: ng/uL

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	9.07	126549723	4.87	15	
Endrin aldehyde	10.30	1839080			
Endrin ketone	11.40	4640556			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	9.92	174843513	6.93	15	
4,4'-DDD	9.42	11508805			
4,4'-DDE	8.17	1501946			

FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: PEM 240-50850/27 Calibration Date: 07/16/2012 19:11

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9701626.D Conc. Units: ng/uL

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	10.70	199826560	5.67	15	
Endrin aldehyde	11.62	814355			
Endrin ketone	12.78	11195177			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	11.52	268622292	7.08	15	
4,4'-DDD	11.03	17973578			
4,4'-DDE	10.04	2505078			

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-50336/28 Calibration Date: 07/08/2012 22:19

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9707028.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	3319457263	3678229760		0.0277	0.0250	10.8	20.0
gamma-BHC (Lindane)	Ave	2820358115	3127067280		0.0277	0.0250	10.9	20.0
beta-BHC	Ave	1156223303	1299898160		0.0281	0.0250	12.4	20.0
delta-BHC	Ave	2705798302	3061254320		0.0283	0.0250	13.1	20.0
Heptachlor	Ave	2090067348	2235577320		0.0267	0.0250	7.0	20.0
Aldrin	Ave	2944944804	3276140160		0.0278	0.0250	11.2	20.0
Heptachlor epoxide	Ave	2369341807	2746122360		0.0290	0.0250	15.9	20.0
gamma-Chlordane	Ave	2587930618	2902050120		0.0280	0.0250	12.1	20.0
alpha-Chlordane	Ave	2634476129	2863524000		0.0272	0.0250	8.7	20.0
Endosulfan I	Ave	2123720179	2427202120		0.0286	0.0250	14.3	20.0
4,4'-DDE	Ave	2559101248	2858225040		0.0279	0.0250	11.7	20.0
Dieldrin	Ave	2128170588	2479848320		0.0291	0.0250	16.5	20.0
Endrin	Ave	1888392984	2091300320		0.0277	0.0250	10.7	20.0
4,4'-DDD	Ave	1388922395	1553705520		0.0280	0.0250	11.9	20.0
Endosulfan II	Ave	1943474130	2222041400		0.0286	0.0250	14.3	20.0
4,4'-DDT	Ave	1307636762	1391791320		0.0266	0.0250	6.4	20.0
Endrin aldehyde	Ave	1300527809	1322491200		0.0254	0.0250	1.7	20.0
Methoxychlor	Ave	571099057	600079720		0.0263	0.0250	5.1	20.0
Endosulfan sulfate	Ave	1634356115	1760817160		0.0269	0.0250	7.7	20.0
Endrin ketone	Ave	1705376826	1787903000		0.0262	0.0250	4.8	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-50336/28 Calibration Date: 07/08/2012 22:19

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9707028.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	7402465944	7980167400		0.0270	0.0250	7.8	20.0
gamma-BHC (Lindane)	Ave	6249247478	6775370880		0.0271	0.0250	8.4	20.0
beta-BHC	Ave	2626833102	2887161200		0.0275	0.0250	9.9	20.0
delta-BHC	Ave	5894028418	6417975840		0.0272	0.0250	8.9	20.0
Heptachlor	Ave	4783431959	4947495400		0.0259	0.0250	3.4	20.0
Aldrin	Ave	6053314181	6565374320		0.0271	0.0250	8.5	20.0
Heptachlor epoxide	Ave	4932208419	5450411680		0.0276	0.0250	10.5	20.0
gamma-Chlordane	Ave	4930753495	5382550320		0.0273	0.0250	9.2	20.0
alpha-Chlordane	Ave	4797382486	5086603360		0.0265	0.0250	6.0	20.0
Endosulfan I	Ave	4010742093	4468851960		0.0279	0.0250	11.4	20.0
4,4'-DDE	Ave	4226110624	4805847920		0.0284	0.0250	13.7	20.0
Dieldrin	Ave	4143607423	4696813760		0.0283	0.0250	13.4	20.0
Endrin	Ave	3547771654	3867581280		0.0273	0.0250	9.0	20.0
4,4'-DDD	Ave	2500399289	2568829160		0.0257	0.0250	2.7	20.0
Endosulfan II	Ave	3455320413	3864400880		0.0280	0.0250	11.8	20.0
4,4'-DDT	Ave	2258771458	2365702200		0.0262	0.0250	4.7	20.0
Endrin aldehyde	Ave	2221766558	2254522400		0.0254	0.0250	1.5	20.0
Endosulfan sulfate	Ave	2731696848	2900385760		0.0265	0.0250	6.2	20.0
Methoxychlor	Ave	1014203097	1056096240		0.0260	0.0250	4.1	20.0
Endrin ketone	Ave	2796067200	2799029200		0.0250	0.0250	0.1	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/6 Calibration Date: 07/16/2012 09:47

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9701605.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	3319457263	3805280680		0.0287	0.0250	14.6	15.0
gamma-BHC (Lindane)	Ave	2820358115	3254629600		0.0288	0.0250	15.4*	15.0
beta-BHC	Ave	1156223303	1359525360		0.0294	0.0250	17.6*	15.0
delta-BHC	Ave	2705798302	3212760600		0.0297	0.0250	18.7*	15.0
Heptachlor	Ave	2090067348	2641710400		0.0316	0.0250	26.4*	15.0
Aldrin	Ave	2944944804	3265543360		0.0277	0.0250	10.9	15.0
Heptachlor epoxide	Ave	2369341807	2910543120		0.0307	0.0250	22.8*	15.0
gamma-Chlordane	Ave	2587930618	3018636720		0.0292	0.0250	16.6*	15.0
alpha-Chlordane	Ave	2634476129	3048915320		0.0289	0.0250	15.7*	15.0
Endosulfan I	Ave	2123720179	2636626080		0.0310	0.0250	24.2*	15.0
4,4'-DDE	Ave	2559101248	2887495680		0.0282	0.0250	12.8	15.0
Dieldrin	Ave	2128170588	2759032360		0.0324	0.0250	29.6*	15.0
Endrin	Ave	1888392984	2343255440		0.0310	0.0250	24.1*	15.0
4,4'-DDD	Ave	1388922395	1650831680		0.0297	0.0250	18.9*	15.0
Endosulfan II	Ave	1943474130	2371285440		0.0305	0.0250	22.0*	15.0
4,4'-DDT	Ave	1307636762	1323078360		0.0253	0.0250	1.2	15.0
Endrin aldehyde	Ave	1300527809	1524448120		0.0293	0.0250	17.2*	15.0
Methoxychlor	Ave	571099057	594883200		0.0260	0.0250	4.2	15.0
Endosulfan sulfate	Ave	1634356115	1836116040		0.0281	0.0250	12.3	15.0
Endrin ketone	Ave	1705376826	1946489840		0.0285	0.0250	14.1	15.0
Tetrachloro-m-xylene	Ave	2122886024	2325147600		0.0274	0.0250	9.5	15.0
DCB Decachlorobiphenyl	Ave	1691287227	1750457800		0.0259	0.0250	3.5	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/6 Calibration Date: 07/16/2012 09:47

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9701605.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	7402465944	7552845440		0.0255	0.0250	2.0	15.0
gamma-BHC (Lindane)	Ave	6249247478	6436308640		0.0257	0.0250	3.0	15.0
beta-BHC	Ave	2626833102	2736236200		0.0260	0.0250	4.2	15.0
delta-BHC	Ave	5894028418	6152890160		0.0261	0.0250	4.4	15.0
Heptachlor	Ave	4783431959	5217912000		0.0273	0.0250	9.1	15.0
Aldrin	Ave	6053314181	6172741320		0.0255	0.0250	2.0	15.0
Heptachlor epoxide	Ave	4932208419	5221874640		0.0265	0.0250	5.9	15.0
gamma-Chlordane	Ave	4930753495	5089712680		0.0258	0.0250	3.2	15.0
alpha-Chlordane	Ave	4797382486	4922729880		0.0257	0.0250	2.6	15.0
Endosulfan I	Ave	4010742093	4315624160		0.0269	0.0250	7.6	15.0
4,4'-DDE	Ave	4226110624	4213969560		0.0249	0.0250	-0.3	15.0
Dieldrin	Ave	4143607423	4419637760		0.0267	0.0250	6.7	15.0
Endrin	Ave	3547771654	3785168280		0.0267	0.0250	6.7	15.0
4,4'-DDD	Ave	2500399289	2270615920		0.0227	0.0250	-9.2	15.0
Endosulfan II	Ave	3455320413	3818447680		0.0276	0.0250	10.5	15.0
4,4'-DDT	Ave	2258771458	1952182360		0.0216	0.0250	-13.6	15.0
Endrin aldehyde	Ave	2221766558	2284755840		0.0257	0.0250	2.8	15.0
Endosulfan sulfate	Ave	2731696848	2709042520		0.0248	0.0250	-0.8	15.0
Methoxychlor	Ave	1014203097	887375840		0.0219	0.0250	-12.5	15.0
Endrin ketone	Ave	2796067200	2672065240		0.0239	0.0250	-4.4	15.0
Tetrachloro-m-xylene	Ave	4465678065	4336142400		0.0243	0.0250	-2.9	15.0
DCB Decachlorobiphenyl	Ave	2552003770	2386773120		0.0234	0.0250	-6.5	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/23 Calibration Date: 07/16/2012 17:28

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 22:43

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/08/2012 22:43

Lab File ID: P9701622.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	73077100	83058526		1.14	1.00	13.7	15.0
Toxaphene Peak 2	Ave	88801394	103337193		1.16	1.00	16.4*	15.0
Toxaphene Peak 3	Ave	78088615	82660293		1.06	1.00	5.9	15.0
Toxaphene Peak 4	Ave	75987952	82211464		1.08	1.00	8.2	15.0
Toxaphene Peak 5	Ave	67083343	63071260		0.940	1.00	-6.0	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/23 Calibration Date: 07/16/2012 17:28

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 22:43

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/08/2012 22:43

Lab File ID: P9701622.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	144489782	135854180		0.940	1.00	-6.0	15.0
Toxaphene Peak 2	Ave	159161174	147502731		0.927	1.00	-7.3	15.0
Toxaphene Peak 3	Ave	129344196	115797820		0.895	1.00	-10.5	15.0
Toxaphene Peak 4	Lin1		91048209		0.827	1.00	-17.3*	15.0
Toxaphene Peak 5	Ave	96696146	85188652		0.881	1.00	-11.9	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/24 Calibration Date: 07/16/2012 17:58

Instrument ID: A2HP9 Calib Start Date: 07/09/2012 01:10

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/09/2012 01:10

Lab File ID: P9701623.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlordane (technical) Peak 1	Ave	121644680	115294350		0.0948	0.100	-5.2	15.0
Chlordane (technical) Peak 2	Ave	116200008	118850350		0.102	0.100	2.3	15.0
Chlordane (technical) Peak 3	Ave	356994900	366992270		0.103	0.100	2.8	15.0
Chlordane (technical) Peak 4	Ave	568837605	591228710		0.104	0.100	3.9	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/24 Calibration Date: 07/16/2012 17:58

Instrument ID: A2HP9 Calib Start Date: 07/09/2012 01:10

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/09/2012 01:10

Lab File ID: P9701623.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlordane (technical) Peak 1	Ave	273956029	253252580		0.0924	0.100	-7.6	15.0
Chlordane (technical) Peak 2	Lin1		241587000		0.0974	0.100	-2.6	15.0
Chlordane (technical) Peak 3	Ave	617299926	628049870		0.102	0.100	1.7	15.0
Chlordane (technical) Peak 4	Ave	587434243	551934340		0.0940	0.100	-6.0	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/25 Calibration Date: 07/16/2012 18:22

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9701624.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	3319457263	3753957760		0.0283	0.0250	13.1	15.0
gamma-BHC (Lindane)	Ave	2820358115	3303904760		0.0293	0.0250	17.1*	15.0
beta-BHC	Ave	1156223303	1368383720		0.0296	0.0250	18.3*	15.0
delta-BHC	Ave	2705798302	3308551480		0.0306	0.0250	22.3*	15.0
Heptachlor	Ave	2090067348	2815524520		0.0337	0.0250	34.7*	15.0
Aldrin	Ave	2944944804	3158259320		0.0268	0.0250	7.2	15.0
Heptachlor epoxide	Ave	2369341807	2939425320		0.0310	0.0250	24.1*	15.0
gamma-Chlordane	Ave	2587930618	3015172800		0.0291	0.0250	16.5*	15.0
alpha-Chlordane	Ave	2634476129	3025966600		0.0287	0.0250	14.9	15.0
Endosulfan I	Ave	2123720179	2658389200		0.0313	0.0250	25.2*	15.0
4,4'-DDE	Ave	2559101248	2895132840		0.0283	0.0250	13.1	15.0
Dieldrin	Ave	2128170588	2811322120		0.0330	0.0250	32.1*	15.0
Endrin	Ave	1888392984	2489038760		0.0330	0.0250	31.8*	15.0
4,4'-DDD	Ave	1388922395	1972633320		0.0355	0.0250	42.0*	15.0
Endosulfan II	Ave	1943474130	2363500480		0.0304	0.0250	21.6*	15.0
4,4'-DDT	Ave	1307636762	1443121440		0.0276	0.0250	10.4	15.0
Endrin aldehyde	Ave	1300527809	1440841920		0.0277	0.0250	10.8	15.0
Methoxychlor	Ave	571099057	658872880		0.0288	0.0250	15.4*	15.0
Endosulfan sulfate	Ave	1634356115	1968964280		0.0301	0.0250	20.5*	15.0
Endrin ketone	Ave	1705376826	1987927640		0.0291	0.0250	16.6*	15.0
Tetrachloro-m-xylene	Ave	2122886024	2225223320		0.0262	0.0250	4.8	15.0
DCB Decachlorobiphenyl	Ave	1691287227	1682682360		0.0249	0.0250	-0.5	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/25 Calibration Date: 07/16/2012 18:22

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9701624.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	7402465944	7659606760		0.0259	0.0250	3.5	15.0
gamma-BHC (Lindane)	Ave	6249247478	6708015280		0.0268	0.0250	7.3	15.0
beta-BHC	Ave	2626833102	2820609760		0.0268	0.0250	7.4	15.0
delta-BHC	Ave	5894028418	6621596440		0.0281	0.0250	12.3	15.0
Heptachlor	Ave	4783431959	5649364840		0.0295	0.0250	18.1*	15.0
Aldrin	Ave	6053314181	6132957600		0.0253	0.0250	1.3	15.0
Heptachlor epoxide	Ave	4932208419	5254818440		0.0266	0.0250	6.5	15.0
gamma-Chlordane	Ave	4930753495	5031840240		0.0255	0.0250	2.1	15.0
alpha-Chlordane	Ave	4797382486	4909894920		0.0256	0.0250	2.3	15.0
Endosulfan I	Ave	4010742093	4287777240		0.0267	0.0250	6.9	15.0
4,4'-DDE	Ave	4226110624	4230430160		0.0250	0.0250	0.1	15.0
Dieldrin	Ave	4143607423	4403663880		0.0266	0.0250	6.3	15.0
Endrin	Ave	3547771654	3933689920		0.0277	0.0250	10.9	15.0
4,4'-DDD	Ave	2500399289	2914577200		0.0291	0.0250	16.6*	15.0
Endosulfan II	Ave	3455320413	3442690320		0.0249	0.0250	-0.4	15.0
4,4'-DDT	Ave	2258771458	2082263000		0.0230	0.0250	-7.8	15.0
Endrin aldehyde	Ave	2221766558	2077119920		0.0234	0.0250	-6.5	15.0
Endosulfan sulfate	Ave	2731696848	2908861840		0.0266	0.0250	6.5	15.0
Methoxychlor	Ave	1014203097	910828200		0.0225	0.0250	-10.2	15.0
Endrin ketone	Ave	2796067200	2703883000		0.0242	0.0250	-3.3	15.0
Tetrachloro-m-xylene	Ave	4465678065	4251425840		0.0238	0.0250	-4.8	15.0
DCB Decachlorobiphenyl	Ave	2552003770	2470086560		0.0242	0.0250	-3.2	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/26 Calibration Date: 07/16/2012 18:47

Instrument ID: A2HP9 Calib Start Date: 07/07/2012 11:44

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/07/2012 11:44

Lab File ID: P9701625.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Ave	3598149652	3698122775		0.0411	0.0400	2.8	15.0
Isodrin	Ave	2695425928	2896514300		0.0215	0.0200	7.5	15.0
Kepone	Qua		266085913		0.258	0.320	-19.3*	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/26 Calibration Date: 07/16/2012 18:47

Instrument ID: A2HP9 Calib Start Date: 07/07/2012 11:44

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/07/2012 11:44

Lab File ID: P9701625.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Ave	8059762196	7592337800		0.0377	0.0400	-5.8	15.0
Isodrin	Ave	5283051012	5328995350		0.0202	0.0200	0.9	15.0
Kepone	Qua		300800506		0.304	0.320	-5.2	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/47 Calibration Date: 07/17/2012 03:17

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 22:43

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/08/2012 22:43

Lab File ID: P9701646.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	73077100	77065423		1.05	1.00	5.5	15.0
Toxaphene Peak 2	Ave	88801394	97082129		1.09	1.00	9.3	15.0
Toxaphene Peak 3	Ave	78088615	77445952		0.990	1.00	-0.8	15.0
Toxaphene Peak 4	Ave	75987952	74463567		0.980	1.00	-2.0	15.0
Toxaphene Peak 5	Ave	67083343	59007994		0.880	1.00	-12.0	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/47 Calibration Date: 07/17/2012 03:17

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 22:43

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/08/2012 22:43

Lab File ID: P9701646.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Ave	144489782	132132251		0.915	1.00	-8.6	15.0
Toxaphene Peak 2	Ave	159161174	142939650		0.898	1.00	-10.2	15.0
Toxaphene Peak 3	Ave	129344196	111456012		0.862	1.00	-13.8	15.0
Toxaphene Peak 4	Lin1		90573368		0.823	1.00	-17.7*	15.0
Toxaphene Peak 5	Ave	96696146	78630158		0.813	1.00	-18.7*	15.0

13.8%

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/48 Calibration Date: 07/17/2012 03:42

Instrument ID: A2HP9 Calib Start Date: 07/09/2012 01:10

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/09/2012 01:10

Lab File ID: P9701647.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlordane (technical) Peak 1	Ave	121644680	113265100		0.0931	0.100	-6.9	15.0
Chlordane (technical) Peak 2	Ave	116200008	120102920		0.103	0.100	3.4	15.0
Chlordane (technical) Peak 3	Ave	356994900	380750530		0.107	0.100	6.7	15.0
Chlordane (technical) Peak 4	Ave	568837605	597465080		0.105	0.100	5.0	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/48 Calibration Date: 07/17/2012 03:42

Instrument ID: A2HP9 Calib Start Date: 07/09/2012 01:10

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/09/2012 01:10

Lab File ID: P9701647.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlordane (technical) Peak 1	Ave	273956029	246637630		0.0900	0.100	-10.0	15.0
Chlordane (technical) Peak 2	Lin1		243155420		0.0981	0.100	-1.9	15.0
Chlordane (technical) Peak 3	Ave	617299926	623119580		0.101	0.100	0.9	15.0
Chlordane (technical) Peak 4	Ave	587434243	542950840		0.0924	0.100	-7.6	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/49 Calibration Date: 07/17/2012 04:06

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9701648.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	3319457263	3834998320		0.0289	0.0250	15.5*	15.0
gamma-BHC (Lindane)	Ave	2820358115	3385571400		0.0300	0.0250	20.0*	15.0
beta-BHC	Ave	1156223303	1391026520		0.0301	0.0250	20.3*	15.0
delta-BHC	Ave	2705798302	3287444360		0.0304	0.0250	21.5*	15.0
Heptachlor	Ave	2090067348	3043472640		0.0364	0.0250	45.6*	15.0
Aldrin	Ave	2944944804	3237210840		0.0275	0.0250	9.9	15.0
Heptachlor epoxide	Ave	2369341807	3028594600		0.0320	0.0250	27.8*	15.0
gamma-Chlordane	Ave	2587930618	3089240600		0.0298	0.0250	19.4*	15.0
alpha-Chlordane	Ave	2634476129	3100293600		0.0294	0.0250	17.7*	15.0
Endosulfan I	Ave	2123720179	2784171480		0.0328	0.0250	31.1*	15.0
4,4'-DDE	Ave	2559101248	2966321920		0.0290	0.0250	15.9*	15.0
Dieldrin	Ave	2128170588	2935736720		0.0345	0.0250	37.9*	15.0
Endrin	Ave	1888392984	2664319600		0.0353	0.0250	41.1*	15.0
4,4'-DDD	Ave	1388922395	2126528400		0.0383	0.0250	53.1*	15.0
Endosulfan II	Ave	1943474130	2466072160		0.0317	0.0250	26.9*	15.0
4,4'-DDT	Ave	1307636762	1604860280		0.0307	0.0250	22.7*	15.0
Endrin aldehyde	Ave	1300527809	1682253720		0.0323	0.0250	29.4*	15.0
Methoxychlor	Ave	571099057	756953200		0.0331	0.0250	32.5*	15.0
Endosulfan sulfate	Ave	1634356115	2102504560		0.0322	0.0250	28.6*	15.0
Endrin ketone	Ave	1705376826	2239966680		0.0328	0.0250	31.3*	15.0
Tetrachloro-m-xylene	Ave	2122886024	2268981640		0.0267	0.0250	6.9	15.0
DCB Decachlorobiphenyl	Ave	1691287227	1811951800		0.0268	0.0250	7.1	15.0

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50850/49 Calibration Date: 07/17/2012 04:06

Instrument ID: A2HP9 Calib Start Date: 07/08/2012 19:52

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/08/2012 19:52

Lab File ID: P9701648.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
alpha-BHC	Ave	7402465944	7906330040		0.0267	0.0250	6.8	15.0
gamma-BHC (Lindane)	Ave	6249247478	6978224560		0.0279	0.0250	11.7	15.0
beta-BHC	Ave	2626833102	2924685120		0.0278	0.0250	11.3	15.0
delta-BHC	Ave	5894028418	6970506240		0.0296	0.0250	18.3*	15.0
Heptachlor	Ave	4783431959	6135999480		0.0321	0.0250	28.3*	15.0
Aldrin	Ave	6053314181	6312380040		0.0261	0.0250	4.3	15.0
Heptachlor epoxide	Ave	4932208419	5470566240		0.0277	0.0250	10.9	15.0
gamma-Chlordane	Ave	4930753495	5254399320		0.0266	0.0250	6.6	15.0
alpha-Chlordane	Ave	4797382486	5080793920		0.0265	0.0250	5.9	15.0
Endosulfan I	Ave	4010742093	4524121560		0.0282	0.0250	12.8	15.0
4,4'-DDE	Ave	4226110624	4427634120		0.0262	0.0250	4.8	15.0
Dieldrin	Ave	4143607423	4612896080		0.0278	0.0250	11.3	15.0
Endrin	Ave	3547771654	4201352880		0.0296	0.0250	18.4*	15.0
4,4'-DDD	Ave	2500399289	3082261600		0.0308	0.0250	23.3*	15.0
Endosulfan II	Ave	3455320413	3832344600		0.0277	0.0250	10.9	15.0
4,4'-DDT	Ave	2258771458	2327251800		0.0258	0.0250	3.0	15.0
Endrin aldehyde	Ave	2221766558	2494718080		0.0281	0.0250	12.3	15.0
Endosulfan sulfate	Ave	2731696848	3170416680		0.0290	0.0250	16.1*	15.0
Methoxychlor	Ave	1014203097	1059980320		0.0261	0.0250	4.5	15.0
Endrin ketone	Ave	2796067200	3109776040		0.0278	0.0250	11.2	15.0
Tetrachloro-m-xylene	Ave	4465678065	4384502640		0.0245	0.0250	-1.8	15.0
DCB Decachlorobiphenyl	Ave	2552003770	2761879280		0.0271	0.0250	8.2	15.0

FORM IV
PESTICIDES METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: MB 240-50725/3-A

Matrix: Water Date Extracted: 07/13/2012 10:01

Lab File ID:(1) P9701629.D Lab File ID:(2) P9701629.D

Date Analyzed:(1) 07/16/2012 20:24 Date Analyzed:(2) 07/16/2012 20:24

Instrument ID:(1) A2HP9 Instrument ID:(2) A2HP9

GC Column:(1) CLP-1 ID: 0.53(mm) GC Column:(2) CLP-2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MT-TCLP-8-10	240-13070-4	07/16/2012 19:35	07/16/2012 19:35
MT-TCLP-8-10 MS	240-13070-4 MS	07/16/2012 19:59	07/16/2012 19:59
	LCS 240-50725/4-A	07/16/2012 20:48	07/16/2012 20:48

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50725/3-A

Matrix: Solid | Lab File ID: P9701629.D

Analysis Method: 8081A | Date Collected:

Extraction Method: 3510C | Date Extracted: 07/13/2012 10:01

Sample wt/vol: 250(mL) | Date Analyzed: 07/16/2012 20:24

Con. Extract Vol.: 3(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 50850 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
57-74-9	Chlordane (technical)	0.012	U	0.012	0.000079
72-20-8	Endrin	0.0012	U	0.0012	0.000026
58-89-9	gamma-BHC (Lindane)	0.0012	U	0.0012	0.000015
76-44-8	Heptachlor	0.0012	U	0.0012	0.000019
1024-57-3	Heptachlor epoxide	0.0012	U	0.0012	0.000017
72-43-5	Methoxychlor	0.0024	U	0.0024	0.000077
8001-35-2	Toxaphene	0.048	U	0.048	0.00077

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	92		34-141
877-09-8	Tetrachloro-m-xylene	83		46-122

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50725/3-A

Matrix: Solid Lab File ID: P9701629.D

Analysis Method: 8081A Date Collected:

Extraction Method: 3510C Date Extracted: 07/13/2012 10:01

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2012 20:24

Con. Extract Vol.: 3(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: CLP-1 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 50850 Units: mg/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl	107		34-141
877-09-8	Tetrachloro-m-xylene	92		46-122

FORM II
PESTICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low

GC Column (1): CLP-1 ID: 0.53 (mm) GC Column (2): CLP-2 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCB1 #	DCB2 #
MT-TCLP-8-10	240-13070-4	91	81	103	88
	MB 240-50725/3-A	92	83	107	92
	LCS 240-50725/4-A	104	91	141	106
MT-TCLP-8-10 MS	240-13070-4 MS	97	87	101	93

	QC LIMITS
TCX = Tetrachloro-m-xylene	46-122
DCB = DCB Decachlorobiphenyl	34-141

Column to be used to flag recovery values

FORM II 8081A

FORM III
PESTICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P9701630.D

Lab ID: LCS 240-50725/4-A Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Endrin	0.00200	0.00223 J	111	59-136	
gamma-BHC (Lindane)	0.00200	0.00207 J	104	59-137	
Heptachlor	0.00200	0.00245 J	123	63-123	
Heptachlor epoxide	0.00200	0.00219 J	110	59-141	
Methoxychlor	0.00400	0.00425 J	106	42-141	

Column to be used to flag recovery and RPD values

FORM III 8081A

FORM III
PESTICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low Lab File ID: P9701628.D

Lab ID: 240-13070-4 MS Client ID: MT-TCLP-8-10 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Endrin	0.00200	0.0012 U	0.00223 J	111	50-150	
gamma-BHC (Lindane)	0.00200	0.0012 U	0.00196 J	98	50-150	
Heptachlor	0.00200	0.0012 U	0.00242 J	121	50-150	
Heptachlor epoxide	0.00200	0.0012 U	0.00215 J	108	50-150	
Methoxychlor	0.00400	0.0024 U	0.00409 J	102	50-150	

Column to be used to flag recovery and RPD values

FORM III 8081A

FORM VIII
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-50850/6 Date Analyzed: 07/16/2012 09:47

Instrument ID: A2HP9 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P9701605.D Heated Purge: (Y/N) N

Calibration ID: 10060

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				3.62	12.98	
UPPER LIMIT				3.65	13.01	
LOWER LIMIT				3.59	12.95	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-50850/6 CCVRT		07/16/2012 09:47	P9701605.D	3.62	12.98	
CCV 240-50850/25		07/16/2012 18:22	P9701624.D	3.62	12.98	
PEM 240-50850/27		07/16/2012 19:11	P9701626.D	3.61		
240-13070-4	MT-TCLP-8-10	07/16/2012 19:35	P9701627.D	3.62	12.98	
240-13070-4 MS	MT-TCLP-8-10 MS	07/16/2012 19:59	P9701628.D	3.62	12.98	
MB 240-50725/3-A		07/16/2012 20:24	P9701629.D	3.62	12.98	
LCS 240-50725/4-A		07/16/2012 20:48	P9701630.D	3.62	12.98	
CCV 240-50850/49		07/17/2012 04:06	P9701648.D	3.62	12.98	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.03 minutes of surrogate RT
DCB RT Limit = ± 0.03 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8081A

FORM VIII
PESTICIDES ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-50850/6 Date Analyzed: 07/16/2012 09:47

Instrument ID: A2HP9 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P9701605.D Heated Purge: (Y/N) N

Calibration ID: 10061

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				4.27	14.54	
UPPER LIMIT				4.30	14.57	
LOWER LIMIT				4.24	14.51	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-50850/6 CCVRT		07/16/2012 09:47	P9701605.D	4.27	14.54	
CCV 240-50850/25		07/16/2012 18:22	P9701624.D	4.27	14.54	
PEM 240-50850/27		07/16/2012 19:11	P9701626.D	4.27		
240-13070-4	MT-TCLP-8-10	07/16/2012 19:35	P9701627.D	4.27	14.54	
240-13070-4 MS	MT-TCLP-8-10 MS	07/16/2012 19:59	P9701628.D	4.27	14.54	
MB 240-50725/3-A		07/16/2012 20:24	P9701629.D	4.27	14.54	
LCS 240-50725/4-A		07/16/2012 20:48	P9701630.D	4.28	14.54	
CCV 240-50850/49		07/17/2012 04:06	P9701648.D	4.27	14.54	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.03 minutes of surrogate RT
DCB RT Limit = ± 0.03 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8081A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP11 Start Date: 07/01/2012 15:46

Analysis Batch Number: 49457 End Date: 07/03/2012 08:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD0025 240-49457/3 IC		07/01/2012 15:46	1		CLP-1 0.53(mm)
STD0025 240-49457/3 IC		07/01/2012 15:46	1	P1100003.D	CLP-2 0.53(mm)
STD005 240-49457/4 IC		07/01/2012 15:59	1		CLP-1 0.53(mm)
STD005 240-49457/4 IC		07/01/2012 15:59	1	P1100004.D	CLP-2 0.53(mm)
STD01 240-49457/5 IC		07/01/2012 16:13	1		CLP-1 0.53(mm)
STD01 240-49457/5 IC		07/01/2012 16:13	1	P1100005.D	CLP-2 0.53(mm)
STD02 240-49457/6 IC		07/01/2012 16:27	1		CLP-1 0.53(mm)
STD02 240-49457/6 IC		07/01/2012 16:27	1	P1100006.D	CLP-2 0.53(mm)
STD05 240-49457/7 IC		07/01/2012 16:40	1		CLP-1 0.53(mm)
STD05 240-49457/7 IC		07/01/2012 16:40	1	P1100007.D	CLP-2 0.53(mm)
STD1 240-49457/8 IC		07/01/2012 16:54	1		CLP-1 0.53(mm)
STD1 240-49457/8 IC		07/01/2012 16:54	1	P1100008.D	CLP-2 0.53(mm)
STD2 240-49457/9 IC		07/01/2012 17:08	1		CLP-1 0.53(mm)
STD2 240-49457/9 IC		07/01/2012 17:08	1	P1100009.D	CLP-2 0.53(mm)
STD0025 240-49457/10 IC		07/01/2012 17:22	1		CLP-1 0.53(mm)
STD0025 240-49457/10 IC		07/01/2012 17:22	1	P1100010.D	CLP-2 0.53(mm)
STD005 240-49457/11 IC		07/01/2012 17:35	1		CLP-1 0.53(mm)
STD005 240-49457/11 IC		07/01/2012 17:35	1	P1100011.D	CLP-2 0.53(mm)
STD01 240-49457/12 IC		07/01/2012 17:49	1		CLP-1 0.53(mm)
STD01 240-49457/12 IC		07/01/2012 17:49	1	P1100012.D	CLP-2 0.53(mm)
STD02 240-49457/13 IC		07/01/2012 18:03	1		CLP-1 0.53(mm)
STD02 240-49457/13 IC		07/01/2012 18:03	1	P1100013.D	CLP-2 0.53(mm)
STD05 240-49457/14 IC		07/01/2012 18:16	1		CLP-1 0.53(mm)
STD05 240-49457/14 IC		07/01/2012 18:16	1	P1100014.D	CLP-2 0.53(mm)
STD1 240-49457/15 IC		07/01/2012 18:30	1		CLP-1 0.53(mm)
STD1 240-49457/15 IC		07/01/2012 18:30	1	P1100015.D	CLP-2 0.53(mm)
STD2 240-49457/16 IC		07/01/2012 18:44	1		CLP-1 0.53(mm)
STD2 240-49457/16 IC		07/01/2012 18:44	1	P1100016.D	CLP-2 0.53(mm)
STD025 240-49457/17 IC		07/01/2012 18:57	1		CLP-1 0.53(mm)
STD025 240-49457/17 IC		07/01/2012 18:57	1	P1100017.D	CLP-2 0.53(mm)
STD005 240-49457/18 IC		07/01/2012 19:11	1		CLP-1 0.53(mm)
STD005 240-49457/18 IC		07/01/2012 19:11	1	P1100018.D	CLP-2 0.53(mm)
STD01 240-49457/19 IC		07/01/2012 19:25	1		CLP-1 0.53(mm)
STD01 240-49457/19 IC		07/01/2012 19:25	1	P1100019.D	CLP-2 0.53(mm)
STD02 240-49457/20 IC		07/01/2012 19:38	1		CLP-1 0.53(mm)
STD02 240-49457/20 IC		07/01/2012 19:38	1	P1100020.D	CLP-2 0.53(mm)

8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP11 Start Date: 07/01/2012 15:46

Analysis Batch Number: 49457 End Date: 07/03/2012 08:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD05 240-49457/21 IC		07/01/2012 19:52	1		CLP-1 0.53(mm)
STD05 240-49457/21 IC		07/01/2012 19:52	1	P1100021.D	CLP-2 0.53(mm)
STD1 240-49457/22 IC		07/01/2012 20:06	1		CLP-1 0.53(mm)
STD1 240-49457/22 IC		07/01/2012 20:06	1	P1100022.D	CLP-2 0.53(mm)
STD2 240-49457/23 IC		07/01/2012 20:19	1		CLP-1 0.53(mm)
STD2 240-49457/23 IC		07/01/2012 20:19	1	P1100023.D	CLP-2 0.53(mm)
STD0025 240-49457/24 IC		07/01/2012 20:33	1		CLP-1 0.53(mm)
STD0025 240-49457/24 IC		07/01/2012 20:33	1	P1100024.D	CLP-2 0.53(mm)
STD005 240-49457/25 IC		07/01/2012 20:46	1		CLP-1 0.53(mm)
STD005 240-49457/25 IC		07/01/2012 20:46	1	P1100025.D	CLP-2 0.53(mm)
STD01 240-49457/26 IC		07/01/2012 21:00	1		CLP-1 0.53(mm)
STD01 240-49457/26 IC		07/01/2012 21:00	1	P1100026.D	CLP-2 0.53(mm)
STD02 240-49457/27 IC		07/01/2012 21:14	1		CLP-1 0.53(mm)
STD02 240-49457/27 IC		07/01/2012 21:14	1	P1100027.D	CLP-2 0.53(mm)
STD05 240-49457/28 IC		07/01/2012 21:27	1		CLP-1 0.53(mm)
STD05 240-49457/28 IC		07/01/2012 21:27	1	P1100028.D	CLP-2 0.53(mm)
STD1 240-49457/29 IC		07/01/2012 21:41	1		CLP-1 0.53(mm)
STD1 240-49457/29 IC		07/01/2012 21:41	1	P1100029.D	CLP-2 0.53(mm)
STD2 240-49457/30 IC		07/01/2012 21:55	1		CLP-1 0.53(mm)
STD2 240-49457/30 IC		07/01/2012 21:55	1	P1100030.D	CLP-2 0.53(mm)
STD0025 240-49457/38 IC		07/02/2012 07:13	1		CLP-1 0.53(mm)
STD0025 240-49457/38 IC		07/02/2012 07:13	1		CLP-2 0.53(mm)
STD005 240-49457/39 IC		07/02/2012 07:26	1		CLP-1 0.53(mm)
STD005 240-49457/39 IC		07/02/2012 07:26	1		CLP-2 0.53(mm)
STD01 240-49457/40 IC		07/02/2012 07:40	1		CLP-1 0.53(mm)
STD01 240-49457/40 IC		07/02/2012 07:40	1		CLP-2 0.53(mm)
STD02 240-49457/41 IC		07/02/2012 07:54	1		CLP-1 0.53(mm)
STD02 240-49457/41 IC		07/02/2012 07:54	1		CLP-2 0.53(mm)
STD05 240-49457/42 IC		07/02/2012 08:07	1		CLP-1 0.53(mm)
STD05 240-49457/42 IC		07/02/2012 08:07	1		CLP-2 0.53(mm)
STD1 240-49457/43 IC		07/02/2012 08:21	1		CLP-1 0.53(mm)
STD1 240-49457/43 IC		07/02/2012 08:21	1		CLP-2 0.53(mm)
STD2 240-49457/44 IC		07/02/2012 08:35	1		CLP-1 0.53(mm)
STD2 240-49457/44 IC		07/02/2012 08:35	1		CLP-2 0.53(mm)
STD0025 240-49457/45 IC		07/02/2012 08:48	1		CLP-1 0.53(mm)

8082A

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP11 Start Date: 07/01/2012 15:46

Analysis Batch Number: 49457 End Date: 07/03/2012 08:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD0025 240-49457/45 IC		07/02/2012 08:48	1		CLP-2 0.53(mm)
STD005 240-49457/46 IC		07/02/2012 09:02	1		CLP-1 0.53(mm)
STD005 240-49457/46 IC		07/02/2012 09:02	1		CLP-2 0.53(mm)
STD01 240-49457/47 IC		07/02/2012 09:15	1		CLP-1 0.53(mm)
STD01 240-49457/47 IC		07/02/2012 09:15	1		CLP-2 0.53(mm)
STD02 240-49457/48 IC		07/02/2012 09:29	1		CLP-1 0.53(mm)
STD02 240-49457/48 IC		07/02/2012 09:29	1		CLP-2 0.53(mm)
STD05 240-49457/49 IC		07/02/2012 09:43	1		CLP-1 0.53(mm)
STD05 240-49457/49 IC		07/02/2012 09:43	1		CLP-2 0.53(mm)
STD1 240-49457/50 IC		07/02/2012 09:56	1		CLP-1 0.53(mm)
STD1 240-49457/50 IC		07/02/2012 09:56	1		CLP-2 0.53(mm)
STD2 240-49457/51 IC		07/02/2012 10:10	1		CLP-1 0.53(mm)
STD2 240-49457/51 IC		07/02/2012 10:10	1		CLP-2 0.53(mm)
STD0025 240-49457/54 IC		07/03/2012 06:54	1		CLP-1 0.53(mm)
STD0025 240-49457/54 IC		07/03/2012 06:54	1	P1100053.D	CLP-2 0.53(mm)
STD005 240-49457/55 IC		07/03/2012 07:08	1		CLP-1 0.53(mm)
STD005 240-49457/55 IC		07/03/2012 07:08	1	P1100054.D	CLP-2 0.53(mm)
STD01 240-49457/56 IC		07/03/2012 07:21	1		CLP-1 0.53(mm)
STD01 240-49457/56 IC		07/03/2012 07:21	1	P1100055.D	CLP-2 0.53(mm)
STD02 240-49457/57 IC		07/03/2012 07:35	1		CLP-1 0.53(mm)
STD02 240-49457/57 IC		07/03/2012 07:35	1	P1100056.D	CLP-2 0.53(mm)
STD05 240-49457/58 ICRT		07/03/2012 07:48	1		CLP-1 0.53(mm)
STD05 240-49457/58 ICRT		07/03/2012 07:48	1	P1100057.D	CLP-2 0.53(mm)
STD1 240-49457/59 IC		07/03/2012 08:02	1		CLP-1 0.53(mm)
STD1 240-49457/59 IC		07/03/2012 08:02	1	P1100058.D	CLP-2 0.53(mm)
STD2 240-49457/60 IC		07/03/2012 08:16	1		CLP-1 0.53(mm)
STD2 240-49457/60 IC		07/03/2012 08:16	1	P1100059.D	CLP-2 0.53(mm)
ICV 240-49457/61		07/03/2012 08:53	1		CLP-1 0.53(mm)
ICV 240-49457/61		07/03/2012 08:53	1	P1100060.D	CLP-2 0.53(mm)

GC SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP11 Start Date: 07/23/2012 13:40

Analysis Batch Number: 51690 End Date: 07/23/2012 19:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-51690/3 CCVRT		07/23/2012 13:40	1		CLP-1 0.53(mm)
CCV 240-51690/3 CCVRT		07/23/2012 13:40	1	P1100003.D	CLP-2 0.53(mm)
ZZZZZ		07/23/2012 13:54	1		CLP-1 0.53(mm)
240-13070-2	MT-SS18-0-2	07/23/2012 13:54	1	P1100004.D	CLP-2 0.53(mm)
ZZZZZ		07/23/2012 14:07	1		CLP-1 0.53(mm)
240-13070-3	MT-SS18-8-10	07/23/2012 14:07	1	P1100005.D	CLP-2 0.53(mm)
ZZZZZ		07/23/2012 14:21	1		CLP-1 0.53(mm)
240-13070-5	MT-SB17-0-2	07/23/2012 14:21	1	P1100006.D	CLP-2 0.53(mm)
ZZZZZ		07/23/2012 14:35	1		CLP-1 0.53(mm)
240-13070-6	MT-SB17-8-10	07/23/2012 14:35	1	P1100007.D	CLP-2 0.53(mm)
ZZZZZ		07/23/2012 16:38	1		CLP-1 0.53(mm)
MB 240-51346/23-A		07/23/2012 16:38	1	P1100016.D	CLP-2 0.53(mm)
CCV 240-51690/17		07/23/2012 16:51	1		CLP-1 0.53(mm)
CCV 240-51690/17		07/23/2012 16:51	1	P1100017.D	CLP-2 0.53(mm)
ZZZZZ		07/23/2012 19:21	1		CLP-1 0.53(mm)
LCS 240-51346/24-A		07/23/2012 19:21	1	P1100028.D	CLP-2 0.53(mm)
CCV 240-51690/29		07/23/2012 19:35	1		CLP-1 0.53(mm)
CCV 240-51690/29		07/23/2012 19:35	1	P1100029.D	CLP-2 0.53(mm)

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49457

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2012 15:46 Calibration End Date: 07/01/2012 17:08 Calibration ID: 9797

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-49457/3	P1100003.D
Level 2	STD005 240-49457/4	P1100004.D
Level 3	STD01 240-49457/5	P1100005.D
Level 4	STD02 240-49457/6	P1100006.D
Level 5	STD05 240-49457/7	P1100007.D
Level 6	STD1 240-49457/8	P1100008.D
Level 7	STD2 240-49457/9	P1100009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1232 Peak 1	27512760 24482178	26508000 23138768	24643590 21841984	22739490	Ave		24409538.6				8.4		20.0			
PCB-1232 Peak 2	25887600 20338714	22153900 18940628	20682280 17958006	20039225	Ave		20857193.2				12.0		20.0			
PCB-1232 Peak 3	46267200 42513178	47054620 39968034	44223570 39534192	41394760	Ave		42993650.6				6.9		20.0			
PCB-1232 Peak 4	22224480 18567764	20831960 16956273	22154450 17157435	18101110	Ave		19427638.9				12.0		20.0			
PCB-1232 Peak 5	15919600 14488644	15575840 13170654	15464840 13561156	13917865	Ave		14585514.1				7.4		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49457

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2012 17:22 Calibration End Date: 07/01/2012 18:44 Calibration ID: 9803

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-49457/10	P1100010.D
Level 2	STD005 240-49457/11	P1100011.D
Level 3	STD01 240-49457/12	P1100012.D
Level 4	STD02 240-49457/13	P1100013.D
Level 5	STD05 240-49457/14	P1100014.D
Level 6	STD1 240-49457/15	P1100015.D
Level 7	STD2 240-49457/16	P1100016.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1242 Peak 1	22197400 17857898	21984580 17085477	19807500 16518962	18012675	Ave		19066356.1				12.0		20.0			
PCB-1242 Peak 2	48703480 33567950	48037680 31724819	41736380 30219997	36212370	Ave		38600382.3				20.0		20.0			
PCB-1242 Peak 3	99096960 71633866	98317300 71110388	84145300 66617570	74988570	Ave		80844279.1				16.0		20.0			
PCB-1242 Peak 4	43505000 29411372	42770260 30701173	36545750 26985500	31288535	Ave		34458227.1				19.0		20.0			
PCB-1242 Peak 5	23119920 16773648	23112000 16398859	19597790 15106897	17900365	Ave		18858497.0				17.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49457

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2012 18:57 Calibration End Date: 07/01/2012 20:19 Calibration ID: 9809

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD025 240-49457/17	P1100017.D
Level 2	STD005 240-49457/18	P1100018.D
Level 3	STD01 240-49457/19	P1100019.D
Level 4	STD02 240-49457/20	P1100020.D
Level 5	STD05 240-49457/21	P1100021.D
Level 6	STD1 240-49457/22	P1100022.D
Level 7	STD2 240-49457/23	P1100023.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1248 Peak 1	55222560 46573152	54685680 44381447	52917700 44474613	48623645	Ave		49554113.9				9.5		20.0			
PCB-1248 Peak 2	45503040 37942130	44215840 36133994	43437550 35991882	39880765	Ave		40443600.1				9.8		20.0			
PCB-1248 Peak 3	60520520 52048020	61852100 49321717	59130620 50386289	53448880	Ave		55244020.8				9.3		20.0			
PCB-1248 Peak 4	73823640 62025754	73699140 58709010	71428320 61494202	63634605	Ave		66402095.8				9.6		20.0			
PCB-1248 Peak 5	33138800 27520388	31560460 25907483	29286150 26481174	28709580	Ave		28943433.6				9.1		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49457

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/01/2012 20:33 Calibration End Date: 07/01/2012 21:55 Calibration ID: 9815

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-49457/24	P1100024.D
Level 2	STD005 240-49457/25	P1100025.D
Level 3	STD01 240-49457/26	P1100026.D
Level 4	STD02 240-49457/27	P1100027.D
Level 5	STD05 240-49457/28	P1100028.D
Level 6	STD1 240-49457/29	P1100029.D
Level 7	STD2 240-49457/30	P1100030.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1221 Peak 1	14370280 12537432	13299940 11289924	13310670 10828683	13423890	Ave		12722974.1				9.9		20.0			
PCB-1221 Peak 2	10198400 8095238	9665040 7239833	8479320 6758886	8641945	Ave		8439808.79				15.0		20.0			
PCB-1221 Peak 3	34474520 31087900	32828060 27928080	32297880 26190353	32437380	Ave		31034881.9				9.5		20.0			
PCB-1254 Peak 1	56543840 46882660	49832720 42724844	51682820 41479544	48812750	Ave		48279882.5				11.0		20.0			
PCB-1254 Peak 2	61999400 52397554	55473080 47509966	57154840 46153953	54786210	Ave		53639286.1				10.0		20.0			
PCB-1254 Peak 3	100966320 86529768	90768520 79198748	94511010 77307084	89259805	Ave		88363036.4				9.4		20.0			
PCB-1254 Peak 4	71707240 58476662	63071120 55667641	66478310 55077201	59423810	Ave		61414569.1				9.9		20.0			
PCB-1254 Peak 5	93609560 82289700	84594960 74871500	89039660 73703545	83962515	Ave		83153062.9				8.6		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC SEMI VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49457

SDG No.:

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/03/2012 06:54 Calibration End Date: 07/03/2012 08:16 Calibration ID: 9853

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0025 240-49457/54	P1100053.D
Level 2	STD005 240-49457/55	P1100054.D
Level 3	STD01 240-49457/56	P1100055.D
Level 4	STD02 240-49457/57	P1100056.D
Level 5	STD05 240-49457/58	P1100057.D
Level 6	STD1 240-49457/59	P1100058.D
Level 7	STD2 240-49457/60	P1100059.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
PCB-1016 Peak 1	23046560 19738260	22835280 20574940	22561990 17687409	22631060	Ave		21296499.8				9.5		20.0			
PCB-1016 Peak 2	51685760 39807368	47994320 37615533	47618260 33377050	45496350	Ave		43370662.9				15.0		20.0			
PCB-1016 Peak 3	95776000 83293732	94890080 85350968	94402770 78592000	92896095	Ave		89314520.7				7.6		20.0			
PCB-1016 Peak 4	41442760 37009010	40014420 37466827	40973490 32141780	41889465	Ave		38705393.1				8.9		20.0			
PCB-1016 Peak 5	32162280 29200488	28341300 29516696	31216590 23231623	32698420	Ave		29481056.7				11.0		20.0			
PCB-1260 Peak 1	81620680 70576832	91434820 69742795	74821740 66292194	74531645	Ave		75574386.6				11.0		20.0			
PCB-1260 Peak 2	101845440 97888264	102341720 91684774	95056340 88169923	95725120	Ave		96101654.4				5.4		20.0			
PCB-1260 Peak 3	66537000 53144464	64669120 58281743	61670850 56036239	60659825	Ave		60142748.7				7.8		20.0			
PCB-1260 Peak 4	151539400 124673044	149175760 141171353	150705800 138039559	142960030	Ave		142609278				6.6		20.0			
PCB-1260 Peak 5	97911600 80411314	96735780 88399134	94482080 86975104	90170405	Ave		90726488.1				6.8		20.0			
Tetrachloro-m-xylene	1341397600 1182157640	1356570400 1321677180	1401964800 1146487850	1390614600	Ave		1305838581				7.7		20.0			
Decachlorobipheny1	1136629600 1079713720	1176089200 1166604820	1219685400 1032751080	1180219900	Ave		1141670531				5.7		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49457/61 Calibration Date: 07/03/2012 08:53

Instrument ID: A2HP11 Calib Start Date: 07/03/2012 06:54

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/03/2012 08:16

Lab File ID: P1100060.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21296500	21018322		0.987	1.00	-1.3	20.0
PCB-1016 Peak 2	Ave	43370663	38560753		0.889	1.00	-11.1	20.0
PCB-1016 Peak 3	Ave	89314521	86732335		0.971	1.00	-2.9	20.0
PCB-1016 Peak 4	Ave	38705393	38414907		0.990	1.00	-0.8	20.0
PCB-1016 Peak 5	Ave	29481057	30230060		1.03	1.00	2.5	20.0
PCB-1260 Peak 1	Ave	75574387	70397533		0.932	1.00	-6.9	20.0
PCB-1260 Peak 2	Ave	96101654	89531434		0.932	1.00	-6.8	20.0
PCB-1260 Peak 3	Ave	60142749	59238659		0.985	1.00	-1.5	20.0
PCB-1260 Peak 4	Ave	142609278	145668473		1.02	1.00	2.1	20.0
PCB-1260 Peak 5	Ave	90726488	89611659		0.988	1.00	-1.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51690/3 Calibration Date: 07/23/2012 13:40

Instrument ID: A2HP11 Calib Start Date: 07/03/2012 06:54

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/03/2012 08:16

Lab File ID: P1100003.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21296500	21607720		0.507	0.500	1.5	20.0
PCB-1016 Peak 2	Ave	43370663	39991888		0.461	0.500	-7.8	20.0
PCB-1016 Peak 3	Ave	89314521	88850968		0.497	0.500	-0.5	20.0
PCB-1016 Peak 4	Ave	38705393	38057658		0.492	0.500	-1.7	20.0
PCB-1016 Peak 5	Ave	29481057	29732768		0.504	0.500	0.9	20.0
PCB-1260 Peak 1	Ave	75574387	74485762		0.493	0.500	-1.4	20.0
PCB-1260 Peak 2	Ave	96101654	105659952		0.550	0.500	9.9	20.0
PCB-1260 Peak 3	Ave	60142749	57033252		0.474	0.500	-5.2	20.0
PCB-1260 Peak 4	Ave	142609278	136441904		0.478	0.500	-4.3	20.0
PCB-1260 Peak 5	Ave	90726488	89093212		0.491	0.500	-1.8	20.0
Tetrachloro-m-xylene	Ave	1305838581	1283113760		0.0246	0.0250	-1.7	20.0
Decachlorobiphenyl	Ave	1141670531	1178663920		0.0258	0.0250	3.2	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51690/17 Calibration Date: 07/23/2012 16:51

Instrument ID: A2HP11 Calib Start Date: 07/03/2012 06:54

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/03/2012 08:16

Lab File ID: P1100017.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21296500	22337402		0.524	0.500	4.9	20.0
PCB-1016 Peak 2	Ave	43370663	42049122		0.485	0.500	-3.0	20.0
PCB-1016 Peak 3	Ave	89314521	93470942		0.523	0.500	4.7	20.0
PCB-1016 Peak 4	Ave	38705393	39487788		0.510	0.500	2.0	20.0
PCB-1016 Peak 5	Ave	29481057	30958866		0.525	0.500	5.0	20.0
PCB-1260 Peak 1	Ave	75574387	75800688		0.502	0.500	0.3	20.0
PCB-1260 Peak 2	Ave	96101654	107142606		0.557	0.500	11.5	20.0
PCB-1260 Peak 3	Ave	60142749	56515612		0.470	0.500	-6.0	20.0
PCB-1260 Peak 4	Ave	142609278	133984706		0.470	0.500	-6.0	20.0
PCB-1260 Peak 5	Ave	90726488	86576378		0.477	0.500	-4.6	20.0
Tetrachloro-m-xylene	Ave	1305838581	1348685040		0.0258	0.0250	3.3	20.0
Decachlorobiphenyl	Ave	1141670531	1104419200		0.0242	0.0250	-3.3	20.0

FORM VII
GC SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51690/29 Calibration Date: 07/23/2012 19:35

Instrument ID: A2HP11 Calib Start Date: 07/03/2012 06:54

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/03/2012 08:16

Lab File ID: P1100029.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Ave	21296500	20975568		0.493	0.500	-1.5	20.0
PCB-1016 Peak 2	Ave	43370663	39536432		0.456	0.500	-8.8	20.0
PCB-1016 Peak 3	Ave	89314521	87064240		0.487	0.500	-2.5	20.0
PCB-1016 Peak 4	Ave	38705393	35423162		0.458	0.500	-8.5	20.0
PCB-1016 Peak 5	Ave	29481057	26038506		0.442	0.500	-11.7	20.0
PCB-1260 Peak 1	Ave	75574387	71456608		0.473	0.500	-5.4	20.0
PCB-1260 Peak 2	Ave	96101654	101176704		0.526	0.500	5.3	20.0
PCB-1260 Peak 3	Ave	60142749	53343430		0.444	0.500	-11.3	20.0
PCB-1260 Peak 4	Ave	142609278	128840580		0.452	0.500	-9.7	20.0
PCB-1260 Peak 5	Ave	90726488	83231728		0.459	0.500	-8.3	20.0
Tetrachloro-m-xylene	Ave	1305838581	1286410400		0.0246	0.0250	-1.5	20.0
Decachlorobiphenyl	Ave	1141670531	1089907720		0.0239	0.0250	-4.5	20.0

FORM IV
GC SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: MB 240-51346/23-A

Matrix: Solid Date Extracted: 07/19/2012 10:47

Lab File ID:(1) P1100016.D Lab File ID:(2)

Date Analyzed:(1) 07/23/2012 16:38 Date Analyzed:(2)

Instrument ID:(1) A2HP11 Instrument ID:(2)

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MT-SS18-0-2	240-13070-2	07/23/2012 13:54	
MT-SS18-8-10	240-13070-3	07/23/2012 14:07	
MT-SB17-0-2	240-13070-5	07/23/2012 14:21	
MT-SB17-8-10	240-13070-6	07/23/2012 14:35	
	LCS 240-51346/24-A	07/23/2012 19:21	

FORM I
GC SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-51346/23-A

Matrix: Solid | Lab File ID: P1100016.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3540C | Date Extracted: 07/19/2012 10:47

Sample wt/vol: 30.00(g) | Date Analyzed: 07/23/2012 16:38

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(mL) | GC Column: CLP-2 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51690 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
12674-11-2	Aroclor-1016	33	U	33	21
11104-28-2	Aroclor-1221	33	U	33	16
11141-16-5	Aroclor-1232	33	U	33	14
53469-21-9	Aroclor-1242	33	U	33	13
12672-29-6	Aroclor-1248	33	U	33	17
11097-69-1	Aroclor-1254	33	U	33	17
11096-82-5	Aroclor-1260	33	U	33	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene	74		29-151
2051-24-3	Decachlorobiphenyl	81		14-163

FORM II
GC SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	TCX1 #	DCB1 #
MT-SS18-0-2	240-13070-2	69	83
MT-SS18-8-10	240-13070-3	85	97
MT-SB17-0-2	240-13070-5	76	90
MT-SB17-8-10	240-13070-6	75	108
	MB 240-51346/23-A	74	81
	LCS 240-51346/24-A	55	86

	QC LIMITS
TCX = Tetrachloro-m-xylene	29-151
DCB = Decachlorobiphenyl	14-163

Column to be used to flag recovery values

FORM II 8082A

FORM III
GC SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P1100028.D

Lab ID: LCS 240-51346/24-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Aroclor-1016	333	228	68	62-120	
Aroclor-1260	333	278	83	56-122	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM VIII
GC SEMI VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: CCV 240-51690/3 Date Analyzed: 07/23/2012 13:40

Instrument ID: A2HP11 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1100003.D Heated Purge: (Y/N) N

Calibration ID: 9853

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TCX	DCB	
				RT #	RT #	
CONTINUING CALIBRATION SURROGATE				2.32	8.06	
UPPER LIMIT				2.42	8.16	
LOWER LIMIT				2.22	7.96	
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-51690/3 CCVRT		07/23/2012 13:40	P1100003.D	2.32	8.06	
240-13070-2	MT-SS18-0-2	07/23/2012 13:54	P1100004.D	2.32	8.06	
240-13070-3	MT-SS18-8-10	07/23/2012 14:07	P1100005.D	2.32	8.06	
240-13070-5	MT-SB17-0-2	07/23/2012 14:21	P1100006.D	2.32	8.06	
240-13070-6	MT-SB17-8-10	07/23/2012 14:35	P1100007.D	2.32	8.06	
MB 240-51346/23-A		07/23/2012 16:38	P1100016.D	2.32	8.06	
CCV 240-51690/17		07/23/2012 16:51	P1100017.D	2.32	8.06	
LCS 240-51346/24-A		07/23/2012 19:21	P1100028.D	2.31	8.06	
CCV 240-51690/29		07/23/2012 19:35	P1100029.D	2.31	8.06	

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0.1 minutes of surrogate RT
DCB RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8082A

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP1 Start Date: 07/23/2012 11:46

Analysis Batch Number: 51638 End Date: 07/23/2012 23:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD 240-51638/4 IC		07/23/2012 11:46	1	P1000004.D	CLP-1 0.53(mm)
STD 240-51638/4 IC		07/23/2012 11:46	1	P1000004.D	CLP-2 0.53(mm)
STD 240-51638/5 IC		07/23/2012 12:09	1	P1000005.D	CLP-1 0.53(mm)
STD 240-51638/5 IC		07/23/2012 12:09	1	P1000005.D	CLP-2 0.53(mm)
STD 240-51638/6 ICRT		07/23/2012 12:33	1	P1000006.D	CLP-1 0.53(mm)
STD 240-51638/6 ICRT		07/23/2012 12:33	1	P1000006.D	CLP-2 0.53(mm)
STD 240-51638/7 IC		07/23/2012 12:57	1	P1000007.D	CLP-1 0.53(mm)
STD 240-51638/7 IC		07/23/2012 12:57	1	P1000007.D	CLP-2 0.53(mm)
STD 240-51638/8 IC		07/23/2012 13:21	1	P1000008.D	CLP-1 0.53(mm)
STD 240-51638/8 IC		07/23/2012 13:21	1	P1000008.D	CLP-2 0.53(mm)
STD 240-51638/9 IC		07/23/2012 13:45	1	P1000009.D	CLP-1 0.53(mm)
STD 240-51638/9 IC		07/23/2012 13:45	1	P1000009.D	CLP-2 0.53(mm)
ICV 240-51638/10		07/23/2012 14:08	1	P1000010.D	CLP-1 0.53(mm)
ICV 240-51638/10		07/23/2012 14:08	1	P1000010.D	CLP-2 0.53(mm)
ZZZZZ		07/23/2012 15:42	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 15:42	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 16:05	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 16:05	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 16:29	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 16:29	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 16:53	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 16:53	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 17:17	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 17:17	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 17:40	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 17:40	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 18:04	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 18:04	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 18:28	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 18:28	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 18:51	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 18:51	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 19:15	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 19:15	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 19:39	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 19:39	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 20:02	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 20:02	1		CLP-2 0.53(mm)
240-13070-4	MT-TCLP-8-10	07/23/2012 20:26	1	P1000023.D	CLP-1 0.53(mm)
240-13070-4	MT-TCLP-8-10	07/23/2012 20:26	1	P1000023.D	CLP-2 0.53(mm)
240-13070-4 MS	MT-TCLP-8-10 MS	07/23/2012 20:50	1	P1000024.D	CLP-1 0.53(mm)
240-13070-4 MS	MT-TCLP-8-10 MS	07/23/2012 20:50	1	P1000024.D	CLP-2 0.53(mm)
MB 240-50727/3-A		07/23/2012 21:13	1	P1000025.D	CLP-1 0.53(mm)
MB 240-50727/3-A		07/23/2012 21:13	1	P1000025.D	CLP-2 0.53(mm)
LCS 240-50727/4-A		07/23/2012 21:37	1	P1000026.D	CLP-1 0.53(mm)

8151A

HERBICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Instrument ID: A2HP1 Start Date: 07/23/2012 11:46

Analysis Batch Number: 51638 End Date: 07/23/2012 23:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
LCS 240-50727/4-A		07/23/2012 21:37	1	P1000026.D	CLP-2 0.53(mm)
ZZZZZ		07/23/2012 22:01	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 22:01	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 22:24	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 22:24	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 22:48	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 22:48	1		CLP-2 0.53(mm)
ZZZZZ		07/23/2012 23:12	1		CLP-1 0.53(mm)
ZZZZZ		07/23/2012 23:12	1		CLP-2 0.53(mm)
CCV 240-51638/31		07/23/2012 23:36	1	P1000031.D	CLP-1 0.53(mm)
CCV 240-51638/31		07/23/2012 23:36	1	P1000031.D	CLP-2 0.53(mm)

FORM VI
HERBICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51638

SDG No.:

Instrument ID: A2HP1 GC Column: CLP-1 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/23/2012 11:46 Calibration End Date: 07/23/2012 13:45 Calibration ID: 10269

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-51638/4	P1000004.D
Level 2	STD 240-51638/5	P1000005.D
Level 3	STD 240-51638/6	P1000006.D
Level 4	STD 240-51638/7	P1000007.D
Level 5	STD 240-51638/8	P1000008.D
Level 6	STD 240-51638/9	P1000009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Dalapon	429653100 307195394	382440100 282066119	360115000	323090625		1858605.76	286441221							0.9970		0.9900
Dicamba	490473800 464953238	517477850 438463256	503520325	474386900	Ave		481545895				5.9		20.0			
MCPP	341021 362624	469013 327060	456409	405499	Ave		393604.276				15.0		20.0			
MCPA	507949 440565	671990 396802	596104	497282	Ave		518448.578				19.0		20.0			
Dichlorprop	80658550 82662081	96501525 78287245	91194650	85547338	Ave		85808564.8				8.0		20.0			
2,4-D	59481000 79230147	73311625 78862086	73354313	74249588		-382575.97	79358096.7							1.0000		0.9900
Silvex (2,4,5-TP)	415755600 477128538	434340700 474170706	452011800	450315600		-379446.15	475521644							1.0000		0.9900
2,4,5-T	219734200 289726188	223969100 313061406	241349600	246662700	Qua	-492679.57	262698962	337162969						1.0000		0.9900
2,4-DB	16167200 23260075	18088925 24058195	18977363	19827038	Qua	-224586.83	22265737.3	3425965.15						0.9990		0.9900
Dinoseb	263805333 251861313	253056500 244165031	253175000	235322750		52404.3248	244499265							0.9990		0.9900
2,4-Dichlorophenylacetic acid	121325100 101947769	121826350 94937444	117905450	105695206	Ave		110606220				10.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HERBICIDES INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51638

SDG No.:

Instrument ID: A2HP1 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/23/2012 11:46 Calibration End Date: 07/23/2012 13:45 Calibration ID: 10270

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD 240-51638/4	P1000004.D
Level 2	STD 240-51638/5	P1000005.D
Level 3	STD 240-51638/6	P1000006.D
Level 4	STD 240-51638/7	P1000007.D
Level 5	STD 240-51638/8	P1000008.D
Level 6	STD 240-51638/9	P1000009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Dalapon	177650200 141638606	165269100 136575963	157454500	147449525		524232.100	137138283							0.9990		0.9900
Dicamba	275854700 275188306	285712850 264715988	286822150	271753588	Ave		276674597				3.0		20.0			
MCPP	297204 215387	327722 193025	301173	244933	Ave		263240.797				20.0		20.0			
MCPA	439059 280734	433318 256840	391041	319893	Qua	567850.300	289034.633	-649.48307						0.9990		0.9900
Dichlorprop	46858550 50344381	50073250 48695717	50937113	48782675	Ave		49281947.7				3.0		20.0			
2,4-D	39911550 51374544	43257575 52688622	45819450	47010663		-345099.95	52338863.3							0.9990		0.9900
Silvex (2,4,5-TP)	246489600 290123963	252196200 291447369	266995250	268952550		-330097.83	291030159							0.9990		0.9900
2,4,5-T	150308800 199908675	151787200 212351719	164474350	168974700		-495988.02	207183454							0.9940		0.9900
2,4-DB	14695350 16990988	14295000 17988239	15081638	15151575	Ave		15700464.8				9.3		20.0			
Dinoseb	140917333 141977438	142157667 143561865	142284833	132580375	Ave		140579918				2.9		20.0			
2,4-Dichlorophenylacetic acid	71013450 63579959	71895725 61215541	69288200	64227050	Ave		66869987.5				6.6		20.0			

Note: The ml coefficient is the same as Ave CF for an Ave curve type.

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-51638/10 Calibration Date: 07/23/2012 14:08

Instrument ID: A2HP1 Calib Start Date: 07/23/2012 11:46

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/23/2012 13:45

Lab File ID: P1000010.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon			328693409		0.0393	0.0399	-1.5	20.0
Dicamba	Ave	481545895	481045075		0.0400	0.0400	-0.1	20.0
MCPP	Ave	393604	450271		9.15	8.00	14.4	20.0
MCPA	Ave	518449	584993		9.03	8.00	12.8	20.0
Dichlorprop	Ave	85808565	96648700		0.0901	0.0800	12.6	20.0
2,4-D			73615500		0.0790	0.0800	-1.3	20.0
Silvex (2,4,5-TP)			438621750		0.0192	0.0200	-4.0	20.0
2,4,5-T	Qua		243310450		0.0199	0.0200	-0.5	20.0
2,4-DB	Qua		18241688		0.0748	0.0800	-6.5	20.0
Dinoseb			294337167		0.0142	0.0120	18.3	20.0
2,4-Dichlorophenylacetic acid	Ave	110606220	111169800		0.0804	0.0800	0.5	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-51638/10 Calibration Date: 07/23/2012 14:08

Instrument ID: A2HP1 Calib Start Date: 07/23/2012 11:46

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/23/2012 13:45

Lab File ID: P1000010.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon			140921253		0.0372	0.0399	-6.8	20.0
Dicamba	Ave	276674597	270758475		0.0391	0.0400	-2.1	20.0
MCPP	Ave	263241	285163		8.67	8.00	8.3	20.0
MCPA	Qua		368461		8.39	8.00	4.9	20.0
Dichlorprop	Ave	49281948	53252250		0.0864	0.0800	8.1	20.0
2,4-D			45935325		0.0768	0.0800	-4.0	20.0
Silvex (2,4,5-TP)			257134000		0.0188	0.0200	-6.0	20.0
2,4,5-T			165680300		0.0184	0.0200	-8.0	20.0
2,4-DB	Ave	15700465	14123488		0.0720	0.0800	-10.0	20.0
Dinoseb	Ave	140579918	133328667		0.0114	0.0120	-5.2	20.0
2,4-Dichlorophenylacetic acid	Ave	66869988	64439550		0.0771	0.0800	-3.6	20.0

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51638/31 Calibration Date: 07/23/2012 23:36

Instrument ID: A2HP1 Calib Start Date: 07/23/2012 11:46

GC Column: CLP-1 ID: 0.53(mm) Calib End Date: 07/23/2012 13:45

Lab File ID: P1000031.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon			358179850		0.0435	0.0400	8.8	15.0
Dicamba	Ave	481545895	494240250		0.0411	0.0400	2.6	15.0
MCPP	Ave	393604	452354		9.19	8.00	14.9	15.0
MCPA	Ave	518449	559601		8.64	8.00	7.9	15.0
Dichlorprop	Ave	85808565	87957113		0.0820	0.0800	2.5	15.0
2,4-D			68111138		0.0735	0.0800	-8.1	15.0
Silvex (2,4,5-TP)			423774250		0.0186	0.0200	-7.0	15.0
2,4,5-T	Qua		208601750		0.0174	0.0200	-13.0	15.0
2,4-DB	Qua		15442613		0.0649	0.0800	-18.9*	15.0
Dinoseb			218696500		0.0105	0.0120	-12.5	15.0
2,4-Dichlorophenylacetic acid	Ave	110606220	117845888		0.0852	0.0800	6.5	15.0

FORM VII
HERBICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51638/31 Calibration Date: 07/23/2012 23:36

Instrument ID: A2HP1 Calib Start Date: 07/23/2012 11:46

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 07/23/2012 13:45

Lab File ID: P1000031.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dalapon			152857175		0.0408	0.0400	2.0	15.0
Dicamba	Ave	276674597	277714125		0.0402	0.0400	0.4	15.0
MCPP	Ave	263241	286858		8.72	8.00	9.0	15.0
MCPA	Qua		376697		8.63	8.00	7.9	15.0
Dichlorprop	Ave	49281948	46561325		0.0756	0.0800	-5.5	15.0
2,4-D			39979038		0.0677	0.0800	-15.4*	15.0
Silvex (2,4,5-TP)			237811200		0.0175	0.0200	-12.5	15.0
2,4,5-T			138313900		0.0157	0.0200	-21.5*	15.0
2,4-DB	Ave	15700465	11825225		0.0603	0.0800	-24.7*	15.0
Dinoseb	Ave	140579918	115522167		0.00986	0.0120	-17.8*	15.0
2,4-Dichlorophenylacetic acid	Ave	66869988	67766275		0.0811	0.0800	1.3	15.0

FORM IV
HERBICIDES METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: MB 240-50727/3-A

Matrix: Water Date Extracted: 07/13/2012 10:04

Lab File ID:(1) P1000025.D Lab File ID:(2) P1000025.D

Date Analyzed:(1) 07/23/2012 21:13 Date Analyzed:(2) 07/23/2012 21:13

Instrument ID:(1) A2HP1 Instrument ID:(2) A2HP1

GC Column:(1) CLP-1 ID: 0.53(mm) GC Column:(2) CLP-2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
MT-TCLP-8-10	240-13070-4	07/23/2012 20:26	07/23/2012 20:26
MT-TCLP-8-10 MS	240-13070-4 MS	07/23/2012 20:50	07/23/2012 20:50
	LCS 240-50727/4-A	07/23/2012 21:37	07/23/2012 21:37

FORM I
HERBICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50727/3-A

Matrix: Solid | Lab File ID: P1000025.D

Analysis Method: 8151A | Date Collected:

Extraction Method: 8151A | Date Extracted: 07/13/2012 10:04

Sample wt/vol: 100(mL) | Date Analyzed: 07/23/2012 21:13

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP-1 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51638 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
94-75-7	2,4-D	0.0020	U	0.0020	0.00021
93-72-1	Silvex (2,4,5-TP)	0.00050	U	0.00050	0.00010

CAS NO.	SURROGATE	%REC	Q	LIMITS
19719-28-9	2,4-Dichlorophenylacetic acid	56		37-116

FORM II
HERBICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low

GC Column (1): CLP-1 ID: 0.53 (mm) GC Column (2): CLP-2 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	DCPA1 #	DCPA2 #
MT-TCLP-8-10	240-13070-4	48	67
	MB 240-50727/3-A	56	74
	LCS 240-50727/4-A	61	80
MT-TCLP-8-10 MS	240-13070-4 MS	55	75

	QC LIMITS
DCPA = 2,4-Dichlorophenylacetic acid	37-116

Column to be used to flag recovery values

FORM II 8151A

FORM III
HERBICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P1000026.D

Lab ID: LCS 240-50727/4-A Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
2,4-D	0.0200	0.0159	79	35-136	
Silvex (2,4,5-TP)	0.00500	0.00390	78	46-112	

Column to be used to flag recovery and RPD values

FORM III 8151A

FORM III
HERBICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Matrix: Solid (TCLP) Level: Low Lab File ID: P1000024.D

Lab ID: 240-13070-4 MS Client ID: MT-TCLP-8-10 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
2,4-D	0.0200	0.0020 U	0.0153	76	54-114	
Silvex (2,4,5-TP)	0.00500	0.00050 U	0.00373	75	52-124	

Column to be used to flag recovery and RPD values

FORM III 8151A

FORM VIII
HERBICIDES ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: STD 240-51638/6 Date Analyzed: 07/23/2012 12:33

Instrument ID: A2HP1 GC Column: CLP-1 ID: 0.53(mm)

Lab File ID (Standard): P1000006.D Heated Purge: (Y/N) N

Calibration ID: 10269

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				DCPA RT #		
INITIAL CALIBRATION SURROGATE				6.96		
UPPER LIMIT				6.98		
LOWER LIMIT				6.94		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD 240-51638/6 ICRT		07/23/2012 12:33	P1000006.D	6.96		
240-13070-4	MT-TCLP-8-10	07/23/2012 20:26	P1000023.D	6.97		
240-13070-4 MS	MT-TCLP-8-10 MS	07/23/2012 20:50	P1000024.D	6.97		
MB 240-50727/3-A		07/23/2012 21:13	P1000025.D	6.97		
LCS 240-50727/4-A		07/23/2012 21:37	P1000026.D	6.97		
CCV 240-51638/31		07/23/2012 23:36	P1000031.D	6.96		

DCPA = 2,4-Dichlorophenylacetic acid

DCPA RT Limit = ± 0.02 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8151A

FORM VIII
HERBICIDES ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Sample No.: STD 240-51638/6 Date Analyzed: 07/23/2012 12:33

Instrument ID: A2HP1 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P1000006.D Heated Purge: (Y/N) N

Calibration ID: 10270

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				DCPA RT #		
INITIAL CALIBRATION SURROGATE				7.53		
UPPER LIMIT				7.55		
LOWER LIMIT				7.51		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD 240-51638/6 ICRT		07/23/2012 12:33	P1000006.D	7.53		
240-13070-4	MT-TCLP-8-10	07/23/2012 20:26	P1000023.D	7.54		
240-13070-4 MS	MT-TCLP-8-10 MS	07/23/2012 20:50	P1000024.D	7.54		
MB 240-50727/3-A		07/23/2012 21:13	P1000025.D	7.54		
LCS 240-50727/4-A		07/23/2012 21:37	P1000026.D	7.54		
CCV 240-51638/31		07/23/2012 23:36	P1000031.D	7.53		

DCPA = 2,4-Dichlorophenylacetic acid

DCPA RT Limit = ± 0.02 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8151A

TETRA TECH NUS, INC. **CALCULATION WORKSHEET** PAGE 1 OF 1

CLIENT	JOB NUMBER
Lockheed-MSA	SDG 240-13070-1
SUBJECT: Sample Calculations	
BASED ON	DRAWING NUMBER
BY: Cam Cognetta / CHECKED BY	APPROVED BY / DATE: Aug 20, 2012

I. VOC, Sample MT-SS18-8-10; chloroform

$$\frac{491622}{1596172} * \frac{50\ ug/L}{0.4764} * \frac{1}{0.859} * \frac{5}{5.823g} = 32.3\ ug/kg$$

II. SVOC, Sample MT-SB17-0-2; Cpyrene

$$\frac{409748}{416782} * \frac{4\ mg/uL}{1.4809} * \frac{1}{0.859} * \frac{2}{29.65} * 1000 = 208.5\ ug/kg$$

III GRO, Sample MT-SS18-0-2

$$\frac{53453394}{338902.687} * 2 * \frac{1}{0.839} = 376.0\ ug/kg$$

IV DRO, Sample MT-SB17-0-2

$$\frac{185485652}{155791.354} * \frac{5}{29.95} * \frac{1}{0.859} = 231.4\ mg/kg$$

Sample Calculation

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-8-10 Lab Sample ID: 240-13070-3

Matrix: Solid Lab File ID: 146770.D

Analysis Method: 8260B Date Collected: 07/10/2012 09:20

Sample wt/vol: 5.823(g) Date Analyzed: 07/17/2012 19:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 14.1 Level: (low/med) Low

Analysis Batch No.: 51061 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	78		5.0	0.37
108-90-7	Chlorobenzene	5.0	U	5.0	0.33
75-00-3	Chloroethane	5.0	U	5.0	0.86
67-66-3	Chloroform	32		5.0	0.29
74-87-3	Chloromethane	5.0	U	5.0	0.41
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.36
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.34
124-48-1	Dibromochloromethane	5.0	U	5.0	0.55
74-95-3	Dibromomethane	5.0	U	5.0	0.63
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.50
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	5.0	U	5.0	0.26
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.22
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.2
98-82-8	Isopropylbenzene	0.95	J	5.0	0.16
1634-04-4	Methyl tert-butyl ether	20	U	20	0.43
75-09-2	Methylene Chloride	0.71	J	5.0	0.67
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
91-20-3	Naphthalene	1.1	J	5.0	0.19
104-51-8	n-Butylbenzene	0.46	J	5.0	0.23
103-65-1	n-Propylbenzene	5.0	U	5.0	0.40
95-47-6	o-Xylene	2.5	J	5.0	0.35
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.21
135-98-8	sec-Butylbenzene	0.54	J	5.0	0.18
100-42-5	Styrene	5.0	U	5.0	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.37
75-65-0	tert-Butyl alcohol	200	U	200	7.6
98-06-6	tert-Butylbenzene	0.45	J	5.0	0.29
127-18-4	Tetrachloroethene	5.0	U	5.0	0.52
108-88-3	Toluene	0.48	J	5.0	0.27
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.41
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.54
79-01-6	Trichloroethene	5.0	U	5.0	0.42
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.34
108-05-4	Vinyl acetate	10	U	10	0.25
75-01-4	Vinyl chloride	5.0	U	5.0	0.39

Report Date: 18-Jul-2012 23:28:13 Chrom Revision: 2.0 08-Feb-2012 11:07:54

Sample Calculation

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\NCChrom\ChromData\A3UX14\20120717-11608.b\146770.D		
Lims ID:	240-13070-C-3-A	Client ID:	MT-SS18-8-10
Inject. Date:	17-Jul-2012 19:06:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-13070-c-3-a		
Misc. Info.:	240-0011608-022 =240-0011608-022		
Operator:	002808	Instrument ID:	A3UX14
Vol. Injected:	1.0000	ALS Bottle#:	20
Lims Batch ID:	51061	Lims Sample ID:	22
Detector:	MS SCAN		
Method:	\\NCChrom\ChromData\A3UX14\20120717-11608.b\8260_14.m		
Last Update:	18-Jul-2012 23:27:55	Calib Date:	28-Jun-2012 20:31:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\NCChrom\ChromData\A3UX14\20120628-11194.b\146460.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-18		
First Level Reviewer: latat		Date:	18-Jul-2012 20:54:38

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	6.884	6.885	-0.001	98	1596172	50.0	
* 2 Chlorobenzene-d5	117	9.594	9.594	0.0	92	931785	50.0	
* 3 1,4-Dichlorobenzene-d4	152	11.570	11.571	-0.001	98	436528	50.0	
$ 5 Dibromofluoromethane (Surr)	113	6.210	6.210	0.0	57	376637	44.5	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	6.553	6.542	0.011	92	496538	49.2	
$ 7 Toluene-d8 (Surr)	98	8.352	8.352	0.0	96	1385004	51.8	
$ 131 4-Bromofluorobenzene (Surr)	95	10.588	10.588	0.0	84	426054	50.8	
12 Dichlorodifluoromethane	85		1.442					
13 Chloromethane	50		1.607					
14 Vinyl chloride	62		1.737					
15 Bromomethane	94		2.069					
16 Chloroethane	64		2.187					
18 Trichlorofluoromethane	101		2.507					
21 1,1-Dichloroethene	96		3.157					
23 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.193					
22 Acetone	43	3.275	3.264	0.011	89	29347	0.9759	
26 Carbon disulfide	76	3.429	3.441	-0.012	96	21673	4.22	
30 Methylene Chloride	84	3.891	3.903	-0.012	81	61874	0.7117	
31 2-Methyl-2-propanol	59		4.199					
33 trans-1,2-Dichloroethene	96		4.317					
34 Methyl tert-butyl ether	73		4.353					
36 1,1-Dichloroethane	63		4.921					
37 Vinyl acetate	86		5.039					
38 Isopropyl ether	87		5.074					
40 Tert-butyl ethyl ether	59		5.524					
43 2,2-Dichloropropane	77		5.642					
42 cis-1,2-Dichloroethene	96		5.654					
41 2-Butanone (MEK)	43		5.702					
47 Chlorobromomethane	128		5.926					
49 Chloroform	83	6.032	6.033	-0.001	84	491622	32.3	
50 1,1,1-Trichloroethane	97		6.210					

Sample Calculation

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49285

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/28/2012 14:23 Calibration End Date: 06/28/2012 17:16 Calibration ID: 9778

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Methyl acetate	0.4236 0.2803	0.3291 0.2614	0.2939 0.2674	0.2641 0.2529	0.2579	Lin1	0.1579	0.2582							0.9990		0.9900
Methylene Chloride	3.5454 0.3588	2.1209 0.3082	1.2661 0.2969	0.6018 0.2677	0.4304	Lin1	1.7480	0.2673							0.9960		0.9900
tert-Butyl alcohol	0.0305 0.0240	0.0248 0.0218	0.0225 0.0231	0.0199 0.0205	0.0208	Ave		0.0231				14.0		15.0			
Acrylonitrile	0.1236 0.1220	0.1069 0.1187	0.1155 0.1223	0.1147 0.1111	0.1101	Ave		0.1161				5.1		15.0			
trans-1,2-Dichloroethene	0.2915 0.2903	0.2443 0.3091	0.2545 0.3136	0.2779 0.2921	0.2604	Ave		0.2815				8.6		15.0			
Methyl tert-butyl ether	0.6525 0.6893	0.6208 0.7148	0.6251 0.7374	0.6173 0.6840	0.6201	Ave		0.6624				6.9		15.0			
Hexane	0.1453 0.0796	0.1016 0.0842	0.0695 0.0797	0.0876 0.0806	0.0813	Lin1	0.0220	0.0804							0.9990		0.9900
1,1-Dichloroethane	0.6121 0.6136	0.5775 0.6636	0.5871 0.6772	0.6057 0.6395	0.5946	Ave		0.6190			0.1000	5.5		15.0			
Vinyl acetate	0.0339 0.0290	0.0339 0.0300	0.0247 0.0319	0.0245 0.0327	0.0274	Ave		0.0298				12.0		15.0			
2,2-Dichloropropane	0.1696 0.2375	0.1803 0.2767	0.1773 0.2943	0.2234 0.2680	0.2248	Lin1	-0.107	0.2743							0.9960		0.9900
cis-1,2-Dichloroethene	0.2813 0.2976	0.2970 0.3197	0.2716 0.3203	0.2976 0.3022	0.2697	Ave		0.2952				6.2		15.0			
2-Butanone	0.4645 0.1493	0.2620 0.1305	0.1888 0.1329	0.1467 0.1322	0.1417	Lin1	0.2926	0.1312							0.9990		0.9900
Bromochloromethane	0.1456 0.1387	0.1358 0.1429	0.1308 0.1463	0.1316 0.1382	0.1282	Ave		0.1376				4.8		15.0			
Tetrahydrofuran	0.2835 0.1046	0.2150 0.0954	0.1414 0.0986	0.1142 0.0908	0.1042	Lin1	0.1054	0.0931							0.9980		0.9900
Chloroform	0.4360 0.4900	0.4307 0.5178	0.4452 0.5255	0.4790 0.5029	0.4605	Ave		0.4764				7.4		15.0			
1,1,1-Trichloroethane	0.2879 0.3973	0.3217 0.4443	0.3017 0.4615	0.3592 0.4360	0.3651	Lin1	-0.153	0.4412							0.9980		0.9900
Cyclohexane	0.5798 0.8296	0.6788 0.8976	0.5798 0.9194	0.8210 0.8736	0.7750	Lin1	-0.264	0.8867							0.9990		0.9900
1,1-Dichloropropene	0.3611 0.4036	0.3612 0.4292	0.3275 0.4357	0.3963 0.4235	0.3837	Ave		0.3913				9.3		15.0			
Carbon tetrachloride	0.2639 0.3709	0.2939 0.4262	0.2599 0.4455	0.3216 0.4276	0.3332	Lin1	-0.183	0.4282							0.9970		0.9900
Benzene	1.0444 1.0599	1.0304 1.1063	0.9760 1.1156	1.0604 1.0914	1.0174	Ave		1.0558				4.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Sample Calculation

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 | Lab Sample ID: 240-13070-5

Matrix: Solid | Lab File ID: 20723021.D

Analysis Method: 8270D | Date Collected: 07/10/2012 10:25

Extract. Method: 3540C | Date Extracted: 07/19/2012 12:29

Sample wt/vol: 29.65(g) | Date Analyzed: 07/23/2012 14:41

Con. Extract Vol.: 2.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 51606 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	120	U	120	27
111-44-4	Bis(2-chloroethyl)ether	120	U	120	2.4
117-81-7	Bis(2-ethylhexyl) phthalate	38	J	61	23
85-68-7	Butyl benzyl phthalate	61	U	61	12
105-60-2	Caprolactam	400	U	400	45
86-74-8	Carbazole	61	U	61	33
218-01-9	Chrysene	160		8.1	1.3
84-74-2	Di-n-butyl phthalate	35	J	61	18
117-84-0	Di-n-octyl phthalate	61	U	61	33
53-70-3	Dibenzo(a,h)anthracene	28		8.1	4.0
132-64-9	Dibenzofuran	61	U	61	4.0
84-66-2	Diethyl phthalate	61	U	61	19
131-11-3	Dimethyl phthalate	61	U	61	21
206-44-0	Fluoranthene	190		8.1	4.0
86-73-7	Fluorene	8.1	U	8.1	4.0
118-74-1	Hexachlorobenzene	8.1	U	8.1	2.5
87-68-3	Hexachlorobutadiene	61	U	61	33
77-47-4	Hexachlorocyclopentadiene	400	U	400	33
67-72-1	Hexachloroethane	61	U	61	11
193-39-5	Indeno[1,2,3-cd]pyrene	98		8.1	4.0
78-59-1	Isophorone	61	U	61	16
621-64-7	N-Nitrosodi-n-propylamine	61	U	61	33
62-75-9	N-Nitrosodimethylamine	120	U	120	19
86-30-6	N-Nitrosodiphenylamine	61	U	61	25
91-20-3	Naphthalene	30		8.1	4.0
98-95-3	Nitrobenzene	120	U	120	2.7
87-86-5	Pentachlorophenol	180	U	180	97
85-01-8	Phenanthrene	65		8.1	4.0
108-95-2	Phenol	37	J	61	33
129-00-0	Pyrene	210		8.1	4.0
108-60-1	2,2'-oxybis[1-chloropropane]	120	U	120	11
606-20-2	2,6-Dinitrotoluene	240	U	240	25
100-02-7	4-Nitrophenol	400	U	400	97

Report Date: 24-Jul-2012 15:38:26 Chrom Revision: 2.0 08-Feb-2012 11:07:54

Sample Calculation

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\Ncchrom\ChromData\A4HP9\20120723-11733.b\20723021.D
Lims ID: 240-13070-G-5-D Client ID: MT-SB17-0-2
Inject. Date: 23-Jul-2012 14:41:30 Dil. Factor: 1.0000
Sample Type: Client
Sample ID: 240-0011733-021
Misc. Info.: 240-13070-G-5-D =240-13070-G-5-D
Operator: 001574 Instrument ID: A4HP9
Vol. Injected: 1.0000 ALS Bottle#: 21
Lims Batch ID: 51606 Lims Sample ID: 21
Detector: MS SCAN

Method: \\Ncchrom\ChromData\A4HP9\20120723-11733.b\8270 _9.m
Last Update: 24-Jul-2012 15:38:03 Calib Date: 18-Jul-2012 15:20:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\Ncchrom\ChromData\A4HP9\20120718-11621.b\20718019.D
Limit Group: MSS 8270D ICAL
Integrator: RTE ID Type: Deconvolution ID
Process Host: XAWRK002

First Level Reviewer: ulmanm Date: 24-Jul-2012 13:39:27

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	3.682	3.686	-0.004	83	97976	4.00	
* 2 Naphthalene-d8	136	4.644	4.647	-0.003	97	421859	4.00	
* 3 Acenaphthene-d10	164	5.942	5.940	0.002	67	270081	4.00	
* 4 Phenanthrene-d10	188	7.021	7.025	-0.004	77	463616	4.00	
* 5 Chrysene-d12	240	8.966	8.969	-0.003	80	416782	4.00	
* 6 Perylene-d12	264	10.248	10.251	-0.003	77	294812	4.00	
$ 7 2-Fluorophenol	112	2.699	2.679	0.020	92	444459	10.3	
$ 8 Phenol-d5	99	3.389	3.378	0.011	0	756630	11.2	
$ 9 Nitrobenzene-d5	82	4.099	4.105	-0.006	84	517816	5.82	
$ 10 2-Fluorobiphenyl (Surr)	172	5.429	5.435	-0.006	94	599122	5.75	
$ 11 2,4,6-Tribromophenol	330	6.514	6.520	-0.006	70	96254	12.2	
$ 12 Terphenyl-d14	244	8.159	8.160	-0.001	79	771713	8.47	
16 2,3-Dichlorophenol	1		0.000					
23 2,5-Dichlorophenol	1		0.000					
17 4-Chlorophenol	1		0.000					
22 Bis(2-hydroxyphenyl)methane	1		0.000					
13 Octachlorocyclopentene	1		0.000					
20 Dimethylformamide	1		0.000					
19 Octachlorostyrene	1		0.000					
18 Bis(4-hydroxyphenyl)methane	1		0.000					
25 1,4-Dioxane	88		1.573					
26 N-Nitrosodimethylamine	74		1.765					
27 Pyridine	79		1.792					
28 Ethyl methacrylate	69		2.032					
29 3-Chloropropionitrile	54		2.235					
31 2-Picoline	93		2.275					
32 N-Nitrosomethylethylamine	88		2.339					
33 Malononitrile	66		2.422					
34 Methyl methanesulfonate	80		2.559					
30 3-Picoline	93		2.617					
233 n,n'-Dimethylacetamide	44		2.628					

Sample Calculation

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
228 Diallate Peak 1	86		6.608					
137 Phenacetin	108		6.613					
138 Phorate	121		6.613					
230 Diallate Peak 2	86		6.672					
139 4-Bromophenyl phenyl ether	248		6.680					
140 Dimethoate	87		6.741					
141 Hexachlorobenzene	284		6.749					
142 Atrazine	200		6.776					
129 4-Aminobiphenyl	169		6.870					
143 Pentachlorophenol	266		6.883					
145 Pentachloronitrobenzene	237		6.891					
144 Pronamide	173		6.891					
146 Disulfoton	88		6.987					
147 Dinoseb	211		6.992					
148 Phenanthrene	178	7.037	7.043	-0.006	81	108632	0.8012	
149 Anthracene	178	7.075	7.081	-0.006	78	43873	0.3129	
151 Carbazole	167		7.187					
152 Methyl parathion	109		7.265					
154 Di-n-butyl phthalate	149	7.390	7.396	-0.006	95	73882	0.4348	
155 Ethyl Parathion	97		7.537					
156 4-Nitroquinoline-1-oxide	190		7.591					
153 Diphenylsulfone	125		7.616					
157 Methapyrilene	58		7.623					
158 Isodrin	66		7.794					
159 Fluoranthene	202	7.908	7.909	-0.001	78	359896	2.38	
160 Benzidine	184		7.978					
161 Pyrene	202	8.074	8.079	-0.005	71	409748	2.66	
166 4,4'-DDE	246		8.107					
226 Aramite Peak 1	185		8.114					
229 Aramite Peak 2	185		8.168					
163 p-Dimethylamino azobenzene	225		8.259					
164 Chlorobenzilate	139		8.280					
165 4,4'-DDD	235		8.353					
167 Famphur	218		8.462					
168 Butyl benzyl phthalate	149		8.496					
169 3,3'-Dimethylbenzidine	212		8.504					
170 4,4'-DDT	235		8.583					
171 2-Acetylaminofluorene	181		8.702					
172 3,3'-Dimethoxybenzidine	244		8.897					
173 Bis(2-ethylhexyl) phthalate	149	8.896	8.908	-0.012	85	51815	0.4679	
174 4,4'-Methylene bis(2-chloroanili	231		8.924					
175 3,3'-Dichlorobenzidine	252		8.929					
177 Benzo[a]anthracene	228	8.960	8.972	-0.012	88	200226	1.41	
178 Chrysene	228	8.987	8.998	-0.011	80	247512	1.95	
176 Hexabromobenzene	232		9.208					
180 Di-n-octyl phthalate	149		9.404					
179 6-Methylchrysene	242		9.576					
181 7,12-Dimethylbenz(a)anthracene	256		9.840					
182 Benzo[b]fluoranthene	252	9.858	9.869	-0.011	81	292496	2.31	M
183 Benzo[k]fluoranthene	252	9.869	9.896	-0.027	83	159635	1.23	M
184 Benzo[a]pyrene	252	10.189	10.206	-0.017	77	218804	1.86	
185 3-Methylcholanthrene	268		10.566					

Sample Calculation

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 51126

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/18/2012 09:54 Calibration End Date: 07/18/2012 12:29 Calibration ID: 10168

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Di-n-butyl phthalate		1.3243	1.3784	1.3597	1.3971	Ave		1.4660			0.0100	7.9		20.0			
	1.5042	1.5493	1.5776	1.6372													
Fluoranthene	1.2988	1.1705	1.2218	1.1901	1.2336	Ave		1.3058			0.6000	8.2		20.0			
	1.3616	1.3873	1.4265	1.4618													
Benzidine		0.6766	0.7293	0.6994	0.7834	Ave		0.7729				8.3		20.0			
	0.8547	0.8348	0.8121	0.7926													
Pyrene	1.5064	1.3954	1.4240	1.3627	1.4080	Ave		1.4809			0.6000	5.8		20.0			
	1.5142	1.5594	1.5521	1.6063													
Butyl benzyl phthalate		0.7009	0.6804	0.6584	0.7178	Ave		0.7326			0.0100	6.8		20.0			
	0.7678	0.7755	0.7672	0.7929													
3,3'-Dimethoxybenzidine		0.2632	0.3112	0.3169	0.3561	Ave		0.3514				14.0		20.0			
	0.3840	0.3903	0.3851	0.4047													
Bis(2-ethylhexyl) phthalate		0.9763	0.9914	0.9615	1.0027	Ave		1.0629			0.0100	8.3		20.0			
	1.1000	1.1412	1.1597	1.1703													
4,4'-Methylene bis(2-chloroaniline)		0.2158	0.2494	0.2578	0.2704	Ave		0.2734				11.0		20.0			
	0.2905	0.3015	0.2965	0.3056													
3,3'-Dichlorobenzidine		0.4299	0.4451	0.4581	0.4782	Ave		0.4863			0.0100	8.1		20.0			
	0.5050	0.5217	0.5160	0.5363													
Benzo[a]anthracene	1.5473	1.3099	1.3096	1.2620	1.2984	Ave		1.3656			0.8000	6.3		20.0			
	1.3698	1.3901	1.3701	1.4335													
Chrysene	1.3272	1.1577	1.1743	1.1348	1.1569	Ave		1.2212			0.7000	5.6		20.0			
	1.2366	1.2666	1.2444	1.2925													
Di-n-octyl phthalate		2.0943	2.2085	2.2950	2.4178	Ave		2.4712			0.0100	10.0		20.0			
	2.6027	2.6600	2.7206	2.7706													
Benzo[b]fluoranthene	1.6393	1.4488	1.5975	1.5883	1.6086	Ave		1.7144			0.7000	11.0		20.0			
	1.7471	1.8173	1.9395	2.0434													
Benzo[k]fluoranthene	1.8351	1.5771	1.6406	1.6927	1.8214	Ave		1.7601			0.7000	5.7		20.0			
	1.8718	1.8389	1.7697	1.7939													
Benzo[a]pyrene	1.5703	1.4324	1.5187	1.5179	1.5461	Ave		1.5921			0.7000	6.2		20.0			
	1.6723	1.6655	1.6693	1.7368													
Indeno[1,2,3-cd]pyrene	1.6770	1.4554	1.5488	1.6029	1.6514	Ave		1.6927			0.5000	8.4		20.0			
	1.7904	1.8060	1.8222	1.8804													
Dibenzo(a,h)anthracene	1.2068	1.1140	1.2375	1.2778	1.3735	Ave		1.3666			0.4000	12.0		20.0			
	1.4718	1.5009	1.5309	1.5863													
Benzo[g,h,i]perylene	1.4397	1.2402	1.2673	1.3168	1.3402	Ave		1.3791			0.5000	6.7		20.0			
	1.4221	1.4240	1.4426	1.5187													
2-Fluorophenol (Surr)		1.6394	1.7092	1.6253	1.6640	Ave		1.7650				6.6		20.0			
	1.8389	1.9144	1.8652	1.8632													
Phenol-d5 (Surr)		2.6680	2.5819	2.4865	2.5611	Ave		2.7511				7.1		20.0			
	2.9128	2.9215	2.9653	2.9119													

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

Sample Calculation

FORM I

GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SS18-0-2 | Lab Sample ID: 240-13070-2

Matrix: Solid | Lab File ID: YF071812.D

Analysis Method: 8015C | Date Collected: 07/10/2012 09:15

Sample wt/vol: 5(g) | Date Analyzed: 07/18/2012 20:06

Soil Aliquot Vol: | Dilution Factor: 2

Soil Extract Vol.: | GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 16.1 | Level: (low/med) Low

Analysis Batch No.: 51212 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	380		240	110

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	78		10-150

Report Date: 19-Jul-2012 10:58:36 Chrom Revision: 2.0 08-Feb-2012 11:07:54

Sample Calculation

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\YPID\20120718-11637.b\YF071812.D		
Lims ID:	240-13070-B-2	Client ID:	MT-SS18-0-2
Inject. Date:	18-Jul-2012 20:06:32	Dil. Factor:	2.0000
Sample Type:	Client		
Sample ID:	240-0011637-012		
Misc. Info.:			
Operator:	1765	Instrument ID:	YPID
Vol. Injected:	1.0000	ALS Bottle#:	1
Lims Batch ID:	51212	Lims Sample ID:	12
Detector 1 :	GC ELC2B		
Detector 2 :	GC FID1A		
Method:	\\Ncchrom\ChromData\YPID\20120718-11637.b\Y80158021.m		
Last Update:	19-Jul-2012 10:58:21	Calib Date:	29-Jun-2012 17:30:24
Quant Method:	Internal/External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\YPID\20120629-11227.b\YF062909.D		
Limit Group:	GCV 8015C GRO ICAL		
Integrator:	Falcon		
Process Host:	XAWRK026		

Compound	Det	RT	ADJ RT	DLT RT	Response	On-Col Amt ug/l	Flags
* 15 Fluorobenzene	1	0.000	8.477	-8.477	0	0	
$ 16 Trifluorotoluene (Surr)	2	9.750	9.754	-0.004	2579447	7.76	
A 5 C6-C10	2	11.794	4.790 - 18.790		53453394	157.7	

Sample Calculation

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49409

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/29/2012 13:39 Calibration End Date: 06/29/2012 17:30 Calibration ID: 9879

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-49409/4	YF062904.D
Level 2	STD2 240-49409/5	YF062905.D
Level 3	STD3 240-49409/6	YF062906.D
Level 4	STD4 240-49409/7	YF062907.D
Level 5	STD5 240-49409/8	YF062908.D
Level 6	STD6 240-49409/9	YF062909.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	396398 309079	363256 311555	337661	315467	Ave		338902.687				10.0		20.0			
C6-C12	482905 340285	415902 342255	378953	348850	Ave		384858.436				15.0		20.0			
Trifluorotoluene (Surr)	284961 354937	292193 411371	314695	335646	Ave		332300.483				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

Sample Calculation

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: MT-SB17-0-2 | Lab Sample ID: 240-13070-5

Matrix: Solid | Lab File ID: P5B72605.D

Analysis Method: 8015C | Date Collected: 07/10/2012 10:25

Extraction Method: 3540C | Date Extracted: 07/20/2012 11:12

Sample wt/vol: 29.95(g) | Date Analyzed: 07/26/2012 16:09

Con. Extract Vol.: 5.0(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: ID:

% Moisture: 16.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 52120 | Units: mg/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	240		20	11

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	35		10-110

TestAmerica Laboratories
Target Compound Quantitation Report

Sample Calculation

Data File:	\\Ncchrom\ChromData\A2HP5R\20120726-11853.b\P5B72605.D		
Lims ID:	240-13070-G-5-G	Client ID:	MT-SB17-0-2
Inject. Date:	26-Jul-2012 16:09:17	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0011853-005		
Misc. Info.:			
Operator:	4275	Instrument ID:	A2HP5R
Vol. Injected:	1.0000	ALS Bottle#:	55
Lims Batch ID:	52120	Lims Sample ID:	5
Detector:	GC FID2B		
Method:	\\Ncchrom\ChromData\A2HP5R\20120726-11853.b\TPH5R.m		
Last Update:	27-Jul-2012 08:54:26	Calib Date:	12-Jun-2012 15:37:32
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A2HP5R\20120612-10665.b\P5B61214.D		
Limit Group:	GC 8015C TPH ICAL		
Integrator:	Falcon		
Process Host:	XAWRK027		

RT	EXP RT	DLT RT	Response	On-Col Amt ng/ul	Flags
$ 8 n-Nonane					
3.574	3.597	-0.023	6284435	34.8	
A 15 Diesel					
8.977	4.757 - 13.197		113844523	730.7	
A 17 C10-C32					
9.549	4.757 - 14.341		185485652	1190.6	

Sample Calculation

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47065

SDG No.:

Instrument ID: A2HP5R GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 06/12/2012 10:28 Calibration End Date: 06/12/2012 12:32 Calibration ID: 9252

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-47065/4	P5B61204.D
Level 2	STD2 240-47065/5	P5B61205.D
Level 3	STD3 240-47065/6	P5B61206.D
Level 4	STD4 240-47065/7	P5B61207.D
Level 5	STD5 240-47065/8	P5B61208.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	165734 158267	149495	178830	126631	Ave		155791.354				13.0		20.0			
n-Nonane	196545 186321	175458	192406	151130	Ave		180372.163				10.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: BFB14171.D BFB Injection Date: 06/28/2012

Instrument ID: A3UX14 BFB Injection Time: 13:38

Analysis Batch No.: 49285

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	29.3	
75	30.0 - 60.0 % of mass 95	49.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	79.7	
175	5.0 - 9.0 % of mass 174	6.3	(7.9)1
176	95.0 - 101.0 % of mass 174	79.7	(100.0)1
177	5.0 - 9.0 % of mass 176	5.4	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 240-49285/3	146443.D	06/28/2012	14:23
	IC 240-49285/4	146444.D	06/28/2012	14:44
	ICIS 240-49285/5	146445.D	06/28/2012	15:06
	IC 240-49285/6	146446.D	06/28/2012	15:27
	IC 240-49285/7	146447.D	06/28/2012	15:49
	IC 240-49285/8	146448.D	06/28/2012	16:11
	IC 240-49285/9	146449.D	06/28/2012	16:32
	IC 240-49285/10	146450.D	06/28/2012	16:54
	IC 240-49285/11	146451.D	06/28/2012	17:16
	IC 240-49285/12	146452.D	06/28/2012	17:38
	IC 240-49285/13	146453.D	06/28/2012	17:59
	IC 240-49285/14	146454.D	06/28/2012	18:21
	IC 240-49285/15	146455.D	06/28/2012	18:43
	IC 240-49285/16	146456.D	06/28/2012	19:04
	IC 240-49285/17	146457.D	06/28/2012	19:26
	IC 240-49285/18	146458.D	06/28/2012	19:48
	IC 240-49285/19	146459.D	06/28/2012	20:09
	IC 240-49285/20	146460.D	06/28/2012	20:31
	ICV 240-49285/21	146461.D	06/28/2012	20:52

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49285

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/28/2012 14:23 Calibration End Date: 06/28/2012 17:16 Calibration ID: 9778

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-49285/11	146451.D
Level 2	IC 240-49285/10	146450.D
Level 3	IC 240-49285/9	146449.D
Level 4	IC 240-49285/8	146448.D
Level 5	IC 240-49285/7	146447.D
Level 6	IC 240-49285/6	146446.D
Level 7	ICIS 240-49285/5	146445.D
Level 8	IC 240-49285/4	146444.D
Level 9	IC 240-49285/3	146443.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2474 0.3302	0.3106 0.3542	0.2505 0.3632	0.3465 0.3503	0.3076	Ave		0.3178				14.0		15.0			
Chloromethane	0.6187 0.6430	0.6349 0.6469	0.6274 0.6476	0.6591 0.6590	0.5983	Ave		0.6372			0.1000	3.1		15.0			
Vinyl chloride	0.3247 0.4121	0.3680 0.4297	0.3750 0.4487	0.4034 0.4233	0.3856	Ave		0.3967				9.5		15.0			
Bromomethane	0.1479 0.1281	0.2156 0.1379	0.1410 0.1403	0.1321 0.1273	0.1237	Lin1	0.0280	0.1317							0.9970		0.9900
Chloroethane	0.1796 0.1768	0.1847 0.1980	0.1564 0.2062	0.1946 0.1936	0.1786	Ave		0.1854				8.0		15.0			
Trichlorofluoromethane	0.2243 0.3481	0.2681 0.3897	0.2440 0.4124	0.3299 0.3997	0.3138	Lin1	-0.169	0.3985							0.9980		0.9900
Acrolein	0.0307 0.0389	0.0361 0.0387	0.0353 0.0407	0.0341 0.0374	0.0359	Ave		0.0364				8.1		15.0			
1,1-Dichloroethene	0.1865 0.2426	0.2307 0.2614	0.1960 0.2702	0.2378 0.2606	0.2309	Ave		0.2352				12.0		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	+++++ 0.2293	0.1854 0.2536	0.1750 0.2570	0.2473 0.2434	0.2145	Ave		0.2257				14.0		15.0			
Acetone	0.8608 0.1154	0.5410 0.0989	0.3159 0.0931	0.1645 0.0857	0.1256	Lin1	0.8348	0.0866							0.9970		0.9900
Iodomethane	0.3760 0.4045	0.4013 0.4655	0.3664 0.4779	0.4028 0.4452	0.3931	Ave		0.4148				9.4		15.0			
Carbon disulfide	+++++ 0.5185	+++++ 0.6788	+++++ 0.7582	0.4181 0.7479	0.4509	Lin1	-2.517	0.7569							0.9970		0.9900
Acetonitrile	0.0537 0.0372	0.0392 0.0351	0.0363 0.0366	0.0331 0.0331	0.0347	Lin1	0.0758	0.0344							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49285

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/28/2012 14:23 Calibration End Date: 06/28/2012 17:16 Calibration ID: 9778

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Methyl acetate	0.4236 0.2803	0.3291 0.2614	0.2939 0.2674	0.2641 0.2529	0.2579	Lin1	0.1579	0.2582							0.9990		0.9900
Methylene Chloride	3.5454 0.3588	2.1209 0.3082	1.2661 0.2969	0.6018 0.2677	0.4304	Lin1	1.7480	0.2673							0.9960		0.9900
tert-Butyl alcohol	0.0305 0.0240	0.0248 0.0218	0.0225 0.0231	0.0199 0.0205	0.0208	Ave		0.0231				14.0		15.0			
Acrylonitrile	0.1236 0.1220	0.1069 0.1187	0.1155 0.1223	0.1147 0.1111	0.1101	Ave		0.1161				5.1		15.0			
trans-1,2-Dichloroethene	0.2915 0.2903	0.2443 0.3091	0.2545 0.3136	0.2779 0.2921	0.2604	Ave		0.2815				8.6		15.0			
Methyl tert-butyl ether	0.6525 0.6893	0.6208 0.7148	0.6251 0.7374	0.6173 0.6840	0.6201	Ave		0.6624				6.9		15.0			
Hexane	0.1453 0.0796	0.1016 0.0842	0.0695 0.0797	0.0876 0.0806	0.0813	Lin1	0.0220	0.0804							0.9990		0.9900
1,1-Dichloroethane	0.6121 0.6136	0.5775 0.6636	0.5871 0.6772	0.6057 0.6395	0.5946	Ave		0.6190			0.1000	5.5		15.0			
Vinyl acetate	0.0339 0.0290	0.0339 0.0300	0.0247 0.0319	0.0245 0.0327	0.0274	Ave		0.0298				12.0		15.0			
2,2-Dichloropropane	0.1696 0.2375	0.1803 0.2767	0.1773 0.2943	0.2234 0.2680	0.2248	Lin1	-0.107	0.2743							0.9960		0.9900
cis-1,2-Dichloroethene	0.2813 0.2976	0.2970 0.3197	0.2716 0.3203	0.2976 0.3022	0.2697	Ave		0.2952				6.2		15.0			
2-Butanone	0.4645 0.1493	0.2620 0.1305	0.1888 0.1329	0.1467 0.1322	0.1417	Lin1	0.2926	0.1312							0.9990		0.9900
Bromochloromethane	0.1456 0.1387	0.1358 0.1429	0.1308 0.1463	0.1316 0.1382	0.1282	Ave		0.1376				4.8		15.0			
Tetrahydrofuran	0.2835 0.1046	0.2150 0.0954	0.1414 0.0986	0.1142 0.0908	0.1042	Lin1	0.1054	0.0931							0.9980		0.9900
Chloroform	0.4360 0.4900	0.4307 0.5178	0.4452 0.5255	0.4790 0.5029	0.4605	Ave		0.4764				7.4		15.0			
1,1,1-Trichloroethane	0.2879 0.3973	0.3217 0.4443	0.3017 0.4615	0.3592 0.4360	0.3651	Lin1	-0.153	0.4412							0.9980		0.9900
Cyclohexane	0.5798 0.8296	0.6788 0.8976	0.5798 0.9194	0.8210 0.8736	0.7750	Lin1	-0.264	0.8867							0.9990		0.9900
1,1-Dichloropropene	0.3611 0.4036	0.3612 0.4292	0.3275 0.4357	0.3963 0.4235	0.3837	Ave		0.3913				9.3		15.0			
Carbon tetrachloride	0.2639 0.3709	0.2939 0.4262	0.2599 0.4455	0.3216 0.4276	0.3332	Lin1	-0.183	0.4282							0.9970		0.9900
Benzene	1.0444 1.0599	1.0304 1.1063	0.9760 1.1156	1.0604 1.0914	1.0174	Ave		1.0558				4.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49285

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/28/2012 14:23 Calibration End Date: 06/28/2012 17:16 Calibration ID: 9778

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,2-Dichloroethane	0.4351 0.4191	0.4136 0.4255	0.3895 0.4274	0.4315 0.4177	0.4086	Ave		0.4187				3.3		15.0			
Trichloroethene	0.3056 0.3042	0.2688 0.3169	0.2697 0.3261	0.2955 0.3215	0.2934	Ave		0.3002				6.9		15.0			
Methylcyclohexane	0.3490 0.5329	0.4048 0.5863	0.3547 0.5939	0.5190 0.5659	0.5013	Lin1	-0.196	0.5746							0.9990		0.9900
1,2-Dichloropropane	0.2685 0.3045	0.2807 0.3167	0.2800 0.3209	0.2983 0.3214	0.2966	Ave		0.2986				6.4		15.0			
Dibromomethane	0.1007 0.1283	0.1249 0.1299	0.1103 0.1346	0.1145 0.1313	0.1191	Ave		0.1215				9.2		15.0			
1,4-Dioxane	0.0025 0.0019	0.0017 0.0018	0.0016 0.0019	0.0018 0.0018	0.0017	Ave		0.0019				14.0		15.0			
Bromodichloromethane	0.1935 0.2692	0.2408 0.2972	0.2021 0.3205	0.2371 0.3265	0.2414	Lin1	-0.135	0.3170							0.9960		0.9900
2-Chloroethyl vinyl ether	0.0637 0.0949	0.0664 0.0930	0.0723 0.1007	0.0850 0.1112	0.0929	Lin1	-0.086	0.1052							0.9950		0.9900
cis-1,3-Dichloropropene	0.2351 0.3165	0.2128 0.3441	0.2373 0.3657	0.2648 0.3860	0.2877	Lin1	-0.176	0.3704							0.9960		0.9900
4-Methyl-2-pentanone	0.4233 0.4213	0.3823 0.4050	0.3480 0.4123	0.3515 0.3951	0.3803	Ave		0.3910				7.1		15.0			
Toluene	2.0952 1.6765	1.8570 1.7346	1.6845 1.7009	1.7516 1.6689	1.6298	Ave		1.7554				8.1		15.0			
trans-1,3-Dichloropropene	0.3048 0.3910	0.3054 0.4150	0.3007 0.4384	0.3374 0.4590	0.3596	Lin1	-0.174	0.4431							0.9970		0.9900
Ethyl methacrylate	0.2715 0.3135	0.2825 0.2997	0.2504 0.3115	0.2568 0.3241	0.2798	Ave		0.2878				9.0		15.0			
1,1,2-Trichloroethane	0.2149 0.2476	0.2561 0.2457	0.2331 0.2440	0.2353 0.2403	0.2506	Ave		0.2408				5.0		15.0			
Tetrachloroethene	0.3389 0.3670	0.3182 0.3744	0.3052 0.3643	0.3584 0.3570	0.3491	Ave		0.3481				6.7		15.0			
1,3-Dichloropropane	0.3718 0.4470	0.4537 0.4456	0.4438 0.4413	0.4396 0.4424	0.4473	Ave		0.4369				5.7		15.0			
2-Hexanone	0.2735 0.2328	0.2355 0.2112	0.1970 0.2191	0.2062 0.2269	0.2222	Ave		0.2249				9.8		15.0			
Dibromochloromethane	0.1711 0.2636	0.2360 0.2958	0.1746 0.3219	0.2304 0.3269	0.2362	Lin1	-0.154	0.3171							0.9950		0.9900
1,2-Dibromoethane	0.2605 0.2513	0.2800 0.2496	0.2340 0.2508	0.2442 0.2487	0.2446	Ave		0.2515				5.1		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2367	0.2683 0.2132	0.2147 0.2243	0.2081 0.2528	0.2046	Ave		0.2278				10.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49285

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/28/2012 14:23 Calibration End Date: 06/28/2012 17:16 Calibration ID: 9778

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Chlorobenzene	1.0199 1.0341	1.0420 1.0647	0.9849 1.0683	1.0541 1.0669	1.0130	Ave		1.0387			0.3000	2.8		15.0			
1,1,1,2-Tetrachloroethane	+++++ 0.3826	0.3799 0.4348	0.3026 0.4328	0.3698 0.4081	0.3635	Ave		0.3843				11.0		15.0			
Ethylbenzene	0.5653 0.5729	0.5513 0.5907	0.4963 0.5947	0.5742 0.5828	0.5554	Ave		0.5649				5.2		15.0			
m-Xylene & p-Xylene	0.7788 0.7091	0.6394 0.7310	0.5891 0.7257	0.7047 0.7147	0.6893	Ave		0.6980				7.9		15.0			
o-Xylene	0.7253 0.7233	0.6501 0.7625	0.5919 0.7504	0.7180 0.7047	0.6762	Ave		0.7003				7.6		15.0			
Styrene	1.1280 1.0517	0.9483 1.0748	0.8906 1.0968	1.0160 1.0998	1.0339	Ave		1.0378				7.4		15.0			
Bromoform	+++++ 0.1245	+++++ 0.1361	0.0991 0.1540	0.0997 0.1623	0.1093	Lin1	-0.239	0.1566			0.1000				0.9950		0.9900
Isopropylbenzene	1.5213 1.9831	1.5974 2.1756	1.4837 2.1410	1.8760 2.0713	1.8318	Ave		1.8535				14.0		15.0			
1,1,2,2-Tetrachloroethane	0.5485 0.5747	0.5095 0.5683	0.4432 0.5831	0.5292 0.5831	0.5335	Ave		0.5415			0.3000	8.3		15.0			
Bromobenzene	0.8042 0.7894	0.7367 0.7911	0.6989 0.8109	0.7737 0.8310	0.7413	Ave		0.7752				5.4		15.0			
1,2,3-Trichloropropane	0.2409 0.1937	0.1947 0.1876	0.1967 0.1877	0.2041 0.1916	0.1899	Ave		0.1985				8.4		15.0			
n-Propylbenzene	0.8740 0.9946	0.7088 1.0315	0.7289 1.0469	0.8995 1.0774	0.9345	Ave		0.9218				14.0		15.0			
2-Chlorotoluene	0.7603 0.8579	0.7609 0.8909	0.6335 0.8991	0.8522 0.9057	0.8363	Ave		0.8219				11.0		15.0			
1,3,5-Trimethylbenzene	2.2277 3.2457	2.2249 3.5247	2.3065 3.5074	2.9812 3.4944	2.9685	Lin1	-1.262	3.4869							0.9990		0.9900
4-Chlorotoluene	0.7886 0.8309	0.8277 0.8510	0.7026 0.8628	0.8540 0.8796	0.7974	Ave		0.8216				6.5		15.0			
tert-Butylbenzene	2.1197 3.0590	2.2892 3.3538	2.0242 3.3334	2.8238 3.2899	2.7703	Lin1	-1.182	3.2949							0.9990		0.9900
1,2,4-Trimethylbenzene	2.4758 3.1940	2.4794 3.3674	2.4631 3.3866	2.8950 3.3975	2.9627	Ave		2.9579				14.0		15.0			
sec-Butylbenzene	2.7988 4.1810	2.9287 4.6051	2.9342 4.6116	3.8853 4.4955	3.8633	Lin1	-1.649	4.5231							0.9990		0.9900
1,3-Dichlorobenzene	1.9083 1.6742	1.7948 1.6775	1.6025 1.6811	1.6570 1.6846	1.6254	Ave		1.7006				5.5		15.0			
p-Isopropyltoluene	2.1840 3.5562	2.4570 3.8831	2.3821 3.8908	3.3686 3.8284	3.2993	Lin1	-1.467	3.8389							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49285

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/28/2012 14:23 Calibration End Date: 06/28/2012 17:16 Calibration ID: 9778

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	2.0459 1.6478	1.9037 1.6754	1.6511 1.6907	1.7025 1.7054	1.6265	Ave		1.7388				8.1		15.0			
n-Butylbenzene	2.2313 2.8773	2.3778 3.1856	2.2281 3.2040	2.6816 3.2174	2.7026	Lin1	-1.025	3.1874							0.9990		0.9900
1,2-Dichlorobenzene	1.6895 1.5644	1.5822 1.6399	1.5295 1.6072	1.5841 1.5744	1.4908	Ave		1.5847				3.7		15.0			
1,2-Dibromo-3-Chloropropane	0.0782 0.0951	0.1022 0.1060	0.0881 0.1107	0.0792 0.1085	0.0824	Ave		0.0945				14.0		15.0			
1,3,5-Trichlorobenzene	1.3213 1.3049	1.3266 1.4050	1.2004 1.3806	1.2851 1.3081	1.2228	Ave		1.3061				5.0		15.0			
1,2,4-Trichlorobenzene	1.1938 1.0788	1.1198 1.1711	1.1220 1.1703	1.0888 1.0767	1.0063	Ave		1.1142				5.3		15.0			
Hexachlorobutadiene	0.4995 0.6176	0.4996 0.6576	0.5138 0.6404	0.5767 0.5963	0.5731	Ave		0.5750				10.0		15.0			
Naphthalene	2.4114 2.1437	2.1487 2.1952	1.8498 2.2636	1.9130 2.0549	1.8136	Ave		2.0882				9.5		15.0			
1,2,3-Trichlorobenzene	0.9793 0.9889	1.0203 0.9961	0.9388 1.0044	0.9367 0.9116	0.9084	Ave		0.9649				4.3		15.0			
Dibromofluoromethane (Surr)	0.4146 0.2685	0.3272 0.2566	0.2722 0.2725	0.2686 0.2630	0.2575	Lin1	0.0581	0.2639							0.9990		0.9900
1,2-Dichloroethane-d4 (Surr)	0.6737 0.3243	0.4048 0.2962	0.3949 0.3206	0.3387 0.3149	0.3434	Lin1	0.1529	0.3131							0.9990		0.9900
Toluene-d8 (Surr)	2.4495 1.4659	1.7725 1.4095	1.5821 1.4407	1.4769 1.4265	1.5133	Lin1	0.4390	1.4257							1.0000		0.9900
4-Bromofluorobenzene (Surr)	1.9686 0.9571	1.4836 0.8698	1.1463 0.9312	1.0032 0.9915	0.9914	Lin1	0.4582	0.9514							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49285

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/28/2012 17:38 Calibration End Date: 06/28/2012 20:31 Calibration ID: 9780

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 240-49285/20	146460.D
Level 2	IC 240-49285/19	146459.D
Level 3	IC 240-49285/18	146458.D
Level 4	IC 240-49285/17	146457.D
Level 5	IC 240-49285/16	146456.D
Level 6	IC 240-49285/15	146455.D
Level 7	IC 240-49285/14	146454.D
Level 8	IC 240-49285/13	146453.D
Level 9	IC 240-49285/12	146452.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.5102 0.4674	0.4438 0.4715	0.4005 0.4684	0.4625 0.4569	0.4739	Ave		0.4617				6.3		15.0			
Ethyl ether	+++++ 0.2842	0.3671 0.2974	0.3170 0.3221	0.2920 0.2997	0.3225	Ave		0.3128				8.4		15.0			
3-Chloro-1-propene	+++++ 0.1294	+++++ 0.1381	+++++ 0.1490	0.1095 0.1525	0.1199	Ave		0.1331				13.0		15.0			
2-Chloro-1,3-butadiene	0.5984 0.7006	0.5499 0.7384	0.5296 0.7764	0.6251 0.7794	0.6850	Ave		0.6647				14.0		15.0			
Diisopropyl ether	0.2265 0.2487	0.2119 0.2508	0.2244 0.2526	0.2311 0.2457	0.2450	Ave		0.2374				6.0		15.0			
Ethyl-t-butyl ether (ETBE)	0.9925 1.0696	0.8658 1.1070	0.9836 1.1594	0.9645 1.1988	1.0408	Ave		1.0424				10.0		15.0			
Propionitrile	+++++ 0.0430	0.0426 0.0427	0.0484 0.0445	0.0386 0.0473	0.0387	Ave		0.0432				8.2		15.0			
Ethyl acetate	0.3774 0.2753	0.2710 0.2803	0.2830 0.2988	0.2797 0.3226	0.2554	Ave		0.2937				12.0		15.0			
Methacrylonitrile	0.2344 0.1874	0.2599 0.1910	0.1896 0.2020	0.1789 0.2167	0.1775	Ave		0.2042				14.0		15.0			
Isobutyl alcohol	0.0110 0.0100	0.0097 0.0104	0.0106 0.0112	0.0103 0.0122	0.0086	Ave		0.0104				9.7		15.0			
Tert-amyl-methyl ether (TAME)	0.5163 0.6218	0.5181 0.6529	0.5540 0.7006	0.5513 0.7204	0.6082	Ave		0.6048				13.0		15.0			
n-Heptane	0.1006 0.0806	0.0842 0.0836	0.0617 0.0856	0.0784 0.0844	0.0831	Ave		0.0825				12.0		15.0			
n-Butanol	0.0175 0.0116	0.0146 0.0116	0.0152 0.0137	0.0106 0.0146	0.0102	Qua	-0.153	0.0121	0						0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 49285

SDG No.:

Instrument ID: A3UX14 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/28/2012 17:38 Calibration End Date: 06/28/2012 20:31 Calibration ID: 9780

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Methyl methacrylate	0.2154 0.2155	0.2130 0.2265	0.2008 0.2482	0.1985 0.2681	0.2004	Ave		0.2207				11.0		15.0			
2-Nitropropane	0.0550 0.0364	0.0423 0.0386	0.0426 0.0467	0.0299 0.0568	0.0303	Qua	-0.037	0.0354	0.0001						1.0000		0.9900
Cyclohexanone	0.0419 0.0450	0.0394 0.0507	0.0305 0.0510	0.0398 0.0524	0.0383	Lin1	-0.184	0.0511							0.9970		0.9900
1,2,3-Trimethylbenzene	2.7339 3.0640	2.6231 3.2067	2.4748 3.3624	2.6179 3.3121	2.9593	Ave		2.9282				11.0		15.0			
2-Methylnaphthalene	1.1438 1.2610	1.0025 1.3895	0.9247 1.4740	0.9362 1.4193	1.0819	Lin1	-1.082	1.4150							0.9960		0.9900
n-Butyl acetate	+++++ 0.5234	+++++ 0.5563	0.6449 0.6018	0.4986 0.6477	0.4871	Lin1	-0.846	0.6192							0.9950		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49285/21 Calibration Date: 06/28/2012 20:52

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146461.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3178	0.2973		46.8	50.0	-6.5	50.0
Chloromethane	Ave	0.6372	0.6533	0.1000	51.3	50.0	2.5	50.0
Vinyl chloride	Ave	0.3967	0.4058		51.1	50.0	2.3	20.0
Bromomethane	Lin1		0.1284		48.5	50.0	-3.0	50.0
Chloroethane	Ave	0.1854	0.1844		49.7	50.0	-0.5	50.0
Trichlorofluoromethane	Lin1		0.3857		48.8	50.0	-2.4	50.0
1,1-Dichloroethene	Ave	0.2352	0.2707		57.6	50.0	15.1	20.0
1,1,2-Trichloro-1,2,2-trichf luoroethane	Ave	0.2257	0.2683		59.4	50.0	18.9	50.0
Acetone	Lin1		0.0942		99.2	100	-0.8	50.0
Iodomethane	Ave	0.4148	0.4611		55.6	50.0	11.2	50.0
Carbon disulfide	Lin1		0.6017		43.1	50.0	-13.8	50.0
Methyl acetate	Lin1		0.3003		57.5	50.0	15.0	50.0
Methylene Chloride	Lin1		0.3122		51.9	50.0	3.8	50.0
tert-Butyl alcohol	Ave	0.0231	0.0209		907	1000	-9.3	50.0
trans-1,2-Dichloroethene	Ave	0.2815	0.3034		53.9	50.0	7.8	50.0
Methyl tert-butyl ether	Ave	0.6624	0.6990		52.8	50.0	5.5	50.0
Hexane	Lin1		0.0857		53.0	50.0	6.0	20.0
1,1-Dichloroethane	Ave	0.6190	0.6790	0.1000	54.9	50.0	9.7	50.0
Vinyl acetate	Ave	0.0298	0.0328		55.2	50.0	10.3	50.0
2,2-Dichloropropane	Lin1		0.2584		47.5	50.0	-5.0	50.0
cis-1,2-Dichloroethene	Ave	0.2952	0.3136		53.1	50.0	6.2	50.0
2-Butanone	Lin1		0.1325		98.8	100	-1.2	50.0
Bromochloromethane	Ave	0.1376	0.1412		51.3	50.0	2.6	50.0
Tetrahydrofuran	Lin1		0.0941		49.4	50.0	-1.2	50.0
Chloroform	Ave	0.4764	0.5038		52.9	50.0	5.7	20.0
1,1,1-Trichloroethane	Lin1		0.4315		49.2	50.0	-1.6	50.0
Cyclohexane	Lin1		0.8555		48.5	50.0	-3.0	50.0
1,1-Dichloropropene	Ave	0.3913	0.4242		54.2	50.0	8.4	50.0
Carbon tetrachloride	Lin1		0.4185		49.3	50.0	-1.4	50.0
Benzene	Ave	1.056	1.143		54.1	50.0	8.3	50.0
1,2-Dichloroethane	Ave	0.4187	0.4524		54.0	50.0	8.1	50.0
Trichloroethene	Ave	0.3002	0.3235		53.9	50.0	7.8	50.0
Methylcyclohexane	Lin1		0.5410		47.4	50.0	-5.2	50.0
1,2-Dichloropropane	Ave	0.2986	0.3321		55.6	50.0	11.2	20.0
Dibromomethane	Ave	0.1215	0.1379		56.7	50.0	13.5	50.0
Bromodichloromethane	Lin1		0.3052		48.6	50.0	-2.8	50.0
2-Chloroethyl vinyl ether	Lin1		0.1013		49.0	50.0	-2.0	50.0
cis-1,3-Dichloropropene	Lin1		0.3447		47.0	50.0	-6.0	50.0
4-Methyl-2-pentanone	Ave	0.3910	0.4162		106	100	6.4	50.0
Toluene	Ave	1.755	1.718		48.9	50.0	-2.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49285/21 Calibration Date: 06/28/2012 20:52

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146461.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
trans-1,3-Dichloropropene	Lin1		0.4189		47.7	50.0	-4.6	50.0
1,1,2-Trichloroethane	Ave	0.2408	0.2634		54.7	50.0	9.4	50.0
Tetrachloroethene	Ave	0.3481	0.3518		50.5	50.0	1.1	50.0
1,3-Dichloropropane	Ave	0.4369	0.4587		52.5	50.0	5.0	50.0
2-Hexanone	Ave	0.2249	0.2251		100	100	0.0	50.0
Dibromochloromethane	Lin1		0.2977		47.4	50.0	-5.2	50.0
1,2-Dibromoethane	Ave	0.2515	0.2504		49.8	50.0	-0.4	50.0
Chlorobenzene	Ave	1.039	1.047	0.3000	50.4	50.0	0.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3843	0.4118		53.6	50.0	7.2	50.0
Ethylbenzene	Ave	0.5649	0.5847		51.8	50.0	3.5	20.0
m-Xylene & p-Xylene	Ave	0.6980	0.7157		103	100	2.5	50.0
o-Xylene	Ave	0.7003	0.7295		52.1	50.0	4.2	50.0
Styrene	Ave	1.038	1.077		51.9	50.0	3.8	50.0
Bromoform	Lin1		0.1337	0.1000	44.2	50.0	-11.6	50.0
Isopropylbenzene	Ave	1.853	2.046		55.2	50.0	10.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5415	0.5606	0.3000	51.8	50.0	3.5	50.0
Bromobenzene	Ave	0.7752	0.8282		53.4	50.0	6.8	50.0
1,2,3-Trichloropropane	Ave	0.1985	0.1889		47.6	50.0	-4.8	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2278	0.2206		96.8	100	-3.2	50.0
n-Propylbenzene	Ave	0.9218	1.043		56.6	50.0	13.2	50.0
2-Chlorotoluene	Ave	0.8219	0.8732		53.1	50.0	6.2	50.0
1,3,5-Trimethylbenzene	Lin1		3.330		48.1	50.0	-3.8	50.0
4-Chlorotoluene	Ave	0.8216	0.8362		50.9	50.0	1.8	50.0
tert-Butylbenzene	Lin1		3.181		48.6	50.0	-2.8	50.0
1,2,4-Trimethylbenzene	Ave	2.958	3.207		54.2	50.0	8.4	50.0
sec-Butylbenzene	Lin1		4.285		47.7	50.0	-4.6	50.0
1,3-Dichlorobenzene	Ave	1.701	1.591		46.8	50.0	-6.5	50.0
p-Isopropyltoluene	Lin1		3.704		48.6	50.0	-2.8	50.0
1,4-Dichlorobenzene	Ave	1.739	1.569		45.1	50.0	-9.8	50.0
n-Butylbenzene	Lin1		2.825		44.6	50.0	-10.8	50.0
1,2-Dichlorobenzene	Ave	1.585	1.511		47.7	50.0	-4.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0945	0.0924		48.9	50.0	-2.3	50.0
1,2,4-Trichlorobenzene	Ave	1.114	0.8851		39.7	50.0	-20.6	50.0
Hexachlorobutadiene	Ave	0.5750	0.5282		45.9	50.0	-8.1	50.0
Naphthalene	Ave	2.088	1.942		46.5	50.0	-7.0	50.0
1,2,3-Trichlorobenzene	Ave	0.9649	0.8450		43.8	50.0	-12.4	50.0
Dibromofluoromethane (Surr)	Lin1		0.2495		47.0	50.0	-6.0	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3026		47.8	50.0	-4.4	50.0
Toluene-d8 (Surr)	Lin1		1.409		49.1	50.0	-1.8	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.8706		45.3	50.0	-9.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-49285/21 Calibration Date: 06/28/2012 20:52

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 17:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 20:31

Lab File ID: 146461.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3128	0.3099		49.5	50.0	-0.9	50.0
Diisopropyl ether	Ave	0.2374	0.2512		52.9	50.0	5.8	50.0
Isobutyl alcohol	Ave	0.0104	0.0102		2440	2500	-2.3	50.0
Cyclohexanone	Lin1		0.0132		262	1000	-73.8*	50.0
1,2,3-Trimethylbenzene	Ave	2.928	3.293		56.2	50.0	12.5	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: BFB14185.D BFB Injection Date: 07/13/2012

Instrument ID: A3UX14 BFB Injection Time: 12:08

Analysis Batch No.: 50749

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.3	
75	30.0 - 60.0 % of mass 95	49.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	79.3	
175	5.0 - 9.0 % of mass 174	6.3	(8.0)1
176	95.0 - 101.0 % of mass 174	76.8	(96.9)1
177	5.0 - 9.0 % of mass 176	5.2	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-50749/3	146686.D	07/13/2012	12:50
	CCV 240-50749/4	146687.D	07/13/2012	13:12
	LCS 240-50627/2-A	146690.D	07/13/2012	14:17
	MB 240-50627/1-A	146691.D	07/13/2012	14:38

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50749/3 Calibration Date: 07/13/2012 12:50

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146686.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3178	0.2875		45.2	50.0	-9.5	50.0
Chloromethane	Ave	0.6372	0.6330	0.1000	49.7	50.0	-0.7	50.0
Vinyl chloride	Ave	0.3967	0.4158		52.4	50.0	4.8	20.0
Bromomethane	Lin1		0.1381		52.2	50.0	4.4	50.0
Chloroethane	Ave	0.1854	0.1852		49.9	50.0	-0.1	50.0
Trichlorofluoromethane	Lin1		0.3917		49.6	50.0	-0.8	50.0
Acrolein	Ave	0.0364	0.0324		444	500	-11.1	50.0
1,1-Dichloroethene	Ave	0.2352	0.2501		53.2	50.0	6.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2257	0.2276		50.4	50.0	0.8	50.0
Acetone	Lin1		0.1121		120	100	19.9	50.0
Iodomethane	Ave	0.4148	0.3872		46.7	50.0	-6.6	50.0
Carbon disulfide	Lin1		0.5563		40.1	50.0	-19.8	50.0
Acetonitrile	Lin1		0.0387		560	500	12.1	50.0
Methyl acetate	Lin1		0.3029		117	100	16.7	50.0
Methylene Chloride	Lin1		0.2718		44.3	50.0	-11.4	50.0
tert-Butyl alcohol	Ave	0.0231	0.0212		918	1000	-8.3	50.0
Acrylonitrile	Ave	0.1161	0.1277		110	100	10.0	50.0
trans-1,2-Dichloroethene	Ave	0.2815	0.2855		50.7	50.0	1.4	50.0
Methyl tert-butyl ether	Ave	0.6624	0.6900		52.1	50.0	4.2	50.0
Hexane	Lin1		0.0775		47.9	50.0	-4.2	20.0
1,1-Dichloroethane	Ave	0.6190	0.6471	0.1000	52.3	50.0	4.5	50.0
Vinyl acetate	Ave	0.0298	0.0262		44.0	50.0	-12.0	50.0
2,2-Dichloropropane	Lin1		0.2224		40.9	50.0	-18.2	50.0
cis-1,2-Dichloroethene	Ave	0.2952	0.2885		48.9	50.0	-2.3	50.0
2-Butanone	Lin1		0.1574		118	100	17.8	50.0
Bromochloromethane	Ave	0.1376	0.1313		47.7	50.0	-4.6	50.0
Tetrahydrofuran	Lin1		0.0943		49.5	50.0	-1.0	50.0
Chloroform	Ave	0.4764	0.5131		53.9	50.0	7.7	20.0
1,1,1-Trichloroethane	Lin1		0.4221		48.2	50.0	-3.6	50.0
Cyclohexane	Lin1		0.8505		48.3	50.0	-3.4	50.0
1,1-Dichloropropene	Ave	0.3913	0.4254		54.4	50.0	8.7	50.0
Carbon tetrachloride	Lin1		0.4154		48.9	50.0	-2.2	50.0
Benzene	Ave	1.056	1.090		51.6	50.0	3.2	50.0
1,2-Dichloroethane	Ave	0.4187	0.4773		57.0	50.0	14.0	50.0
Trichloroethene	Ave	0.3002	0.3011		50.2	50.0	0.3	50.0
Methylcyclohexane	Lin1		0.5367		47.0	50.0	-6.0	50.0
1,2-Dichloropropane	Ave	0.2986	0.3265		54.7	50.0	9.3	20.0
Dibromomethane	Ave	0.1215	0.1371		56.4	50.0	12.8	50.0
1,4-Dioxane	Ave	0.0019	0.0017		2270	2500	-9.1	50.0
Bromodichloromethane	Lin1		0.3091		49.2	50.0	-1.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50749/3 Calibration Date: 07/13/2012 12:50

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146686.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Lin1		0.1084		104	100	3.9	50.0
cis-1,3-Dichloropropene	Lin1		0.3603		49.1	50.0	-1.8	50.0
4-Methyl-2-pentanone	Ave	0.3910	0.4728		121	100	20.9	50.0
Toluene	Ave	1.755	1.842		52.5	50.0	4.9	20.0
trans-1,3-Dichloropropene	Lin1		0.4715		53.6	50.0	7.2	50.0
Ethyl methacrylate	Ave	0.2878	0.3448		59.9	50.0	19.8	50.0
1,1,2-Trichloroethane	Ave	0.2408	0.2747		57.0	50.0	14.1	50.0
Tetrachloroethene	Ave	0.3481	0.3913		56.2	50.0	12.4	50.0
1,3-Dichloropropane	Ave	0.4369	0.4904		56.1	50.0	12.2	50.0
2-Hexanone	Ave	0.2249	0.2766		123	100	22.9	50.0
Dibromochloromethane	Lin1		0.3037		48.4	50.0	-3.2	50.0
1,2-Dibromoethane	Ave	0.2515	0.2631		52.3	50.0	4.6	50.0
Chlorobenzene	Ave	1.039	1.114	0.3000	53.6	50.0	7.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3843	0.3969		51.6	50.0	3.3	50.0
Ethylbenzene	Ave	0.5649	0.5911		52.3	50.0	4.6	20.0
m-Xylene & p-Xylene	Ave	0.6980	0.7326		105	100	5.0	50.0
o-Xylene	Ave	0.7003	0.7095		50.7	50.0	1.3	50.0
Styrene	Ave	1.038	1.071		51.6	50.0	3.2	50.0
Bromoform	Lin1		0.1432	0.1000	47.2	50.0	-5.6	50.0
Isopropylbenzene	Ave	1.853	2.018		54.4	50.0	8.9	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5415	0.6012	0.3000	55.5	50.0	11.0	50.0
Bromobenzene	Ave	0.7752	0.8094		52.2	50.0	4.4	50.0
1,2,3-Trichloropropane	Ave	0.1985	0.2010		50.6	50.0	1.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2278	0.2657		58.3	50.0	16.6	50.0
n-Propylbenzene	Ave	0.9218	1.050		57.0	50.0	13.9	50.0
2-Chlorotoluene	Ave	0.8219	0.8704		53.0	50.0	5.9	50.0
1,3,5-Trimethylbenzene	Lin1		3.372		48.7	50.0	-2.6	50.0
4-Chlorotoluene	Ave	0.8216	0.8656		52.7	50.0	5.3	50.0
tert-Butylbenzene	Lin1		3.036		46.4	50.0	-7.2	50.0
1,2,4-Trimethylbenzene	Ave	2.958	3.234		54.7	50.0	9.3	50.0
sec-Butylbenzene	Lin1		4.155		46.3	50.0	-7.4	50.0
1,3-Dichlorobenzene	Ave	1.701	1.646		48.4	50.0	-3.2	50.0
p-Isopropyltoluene	Lin1		3.561		46.8	50.0	-6.4	50.0
1,4-Dichlorobenzene	Ave	1.739	1.636		47.0	50.0	-5.9	50.0
n-Butylbenzene	Lin1		3.141		49.6	50.0	-0.8	50.0
1,2-Dichlorobenzene	Ave	1.585	1.515		47.8	50.0	-4.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0945	0.0806		42.7	50.0	-14.7	50.0
1,3,5-Trichlorobenzene	Ave	1.306	1.065		40.8	50.0	-18.5	50.0
1,2,4-Trichlorobenzene	Ave	1.114	0.8234		37.0	50.0	-26.1	50.0
Hexachlorobutadiene	Ave	0.5750	0.4795		41.7	50.0	-16.6	50.0
Naphthalene	Ave	2.088	1.514		36.2	50.0	-27.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50749/3 Calibration Date: 07/13/2012 12:50

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146686.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.9649	0.6424		33.3	50.0	-33.4	50.0
Dibromofluoromethane (Surr)	Lin1		0.2565		48.4	50.0	-3.2	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3399		53.8	50.0	7.6	50.0
Toluene-d8 (Surr)	Lin1		1.508		52.6	50.0	5.2	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.9636		50.2	50.0	0.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50749/4 Calibration Date: 07/13/2012 13:12

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146687.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Lin1		0.2476		46.7	50.0	-6.6	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3249		51.4	50.0	2.8	50.0
Toluene-d8 (Surr)	Lin1		1.455		50.7	50.0	1.4	50.0
4-Bromofluorobenzene (Surr)	Lin1		1.026		53.4	50.0	6.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50749/4 Calibration Date: 07/13/2012 13:12

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 17:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 20:31

Lab File ID: 146687.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4617	0.4496		48.7	50.0	-2.6	50.0
Ethyl ether	Ave	0.3128	0.2810		44.9	50.0	-10.1	50.0
3-Chloro-1-propene	Ave	0.1331	0.1225		46.0	50.0	-7.9	50.0
2-Chloro-1,3-butadiene	Ave	0.6647	0.7134		53.7	50.0	7.3	50.0
Diisopropyl ether	Ave	0.2374	0.2244		236	250	-5.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.042	1.040		49.9	50.0	-0.2	50.0
Propionitrile	Ave	0.0432	0.0418		96.6	100	-3.4	50.0
Ethyl acetate	Ave	0.2937	0.2912		99.1	100	-0.9	50.0
Methacrylonitrile	Ave	0.2042	0.1971		48.3	50.0	-3.4	50.0
Isobutyl alcohol	Ave	0.0104	0.0108		1030	1000	3.5	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6048	0.6229		51.5	50.0	3.0	50.0
n-Heptane	Ave	0.0825	0.0841		51.0	50.0	2.0	50.0
n-Butanol	Qua		0.0126		1000	1000	0.4	50.0
Methyl methacrylate	Ave	0.2207	0.2447		55.4	50.0	10.9	50.0
2-Nitropropane	Qua		0.0466		113	100	13.1	50.0
Cyclohexanone	Lin1		0.0575		566	500	13.2	50.0
1,2,3-Trimethylbenzene	Ave	2.928	3.322		56.7	50.0	13.4	50.0
2-Methylnaphthalene	Lin1		1.045		74.6	100	-25.4	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 146691.D Lab Sample ID: MB 240-50627/1-A

Matrix: Solid Heated Purge: (Y/N) Y

Instrument ID: A3UX14 Date Analyzed: 07/13/2012 14:38

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-50627/2-A	146690.D	07/13/2012 14:17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50627/1-A

Matrix: Solid | Lab File ID: 146691.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 07/13/2012 14:38

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 50749 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	250	U	250	9.1
71-55-6	1,1,1-Trichloroethane	250	U	250	21
79-34-5	1,1,2,2-Tetrachloroethane	250	U	250	8.9
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	250	U	250	39
75-34-3	1,1-Dichloroethane	250	U	250	17
75-35-4	1,1-Dichloroethene	250	U	250	18
563-58-6	1,1-Dichloropropene	250	U	250	10
87-61-6	1,2,3-Trichlorobenzene	250	U	250	10
96-18-4	1,2,3-Trichloropropane	250	U	250	21
526-73-8	1,2,3-Trimethylbenzene	250	U	250	0.17
120-82-1	1,2,4-Trichlorobenzene	7.64	J	250	7.3
95-63-6	1,2,4-Trimethylbenzene	250	U	250	5.0
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	500	50
95-50-1	1,2-Dichlorobenzene	250	U	250	8.6
107-06-2	1,2-Dichloroethane	250	U	250	10
78-87-5	1,2-Dichloropropane	250	U	250	8.2
541-73-1	1,3-Dichlorobenzene	5.18	J	250	4.8
142-28-9	1,3-Dichloropropane	250	U	250	22
106-46-7	1,4-Dichlorobenzene	250	U	250	8.0
594-20-7	2,2-Dichloropropane	250	U	250	23
110-75-8	2-Chloroethyl vinyl ether	1000	U	1000	43
95-49-8	2-Chlorotoluene	250	U	250	9.0
591-78-6	2-Hexanone	1000	U	1000	20
106-43-4	4-Chlorotoluene	250	U	250	9.9
67-64-1	Acetone	1000	U	1000	170
71-43-2	Benzene	250	U	250	12
108-86-1	Bromobenzene	250	U	250	13
74-97-5	Bromochloromethane	250	U	250	13
75-25-2	Bromoform	250	U	250	19
74-83-9	Bromomethane	250	U	250	29
75-15-0	Carbon disulfide	250	U	250	12
56-23-5	Carbon tetrachloride	250	U	250	6.4
108-90-7	Chlorobenzene	250	U	250	6.4
75-00-3	Chloroethane	250	U	250	61
67-66-3	Chloroform	250	U	250	8.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50627/1-A

Matrix: Solid Lab File ID: 146691.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5.00(g) Date Analyzed: 07/13/2012 14:38

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 50749 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	250	U	250	14
156-59-2	cis-1,2-Dichloroethene	250	U	250	6.9
75-27-4	Bromodichloromethane	250	U	250	9.9
10061-01-5	cis-1,3-Dichloropropene	250	U	250	7.9
106-93-4	1,2-Dibromoethane	250	U	250	10
74-95-3	Dibromomethane	250	U	250	14
75-71-8	Dichlorodifluoromethane	250	U	250	16
108-20-3	Diisopropyl ether	500	U	500	50
100-41-4	Ethylbenzene	250	U	250	5.4
87-68-3	Hexachlorobutadiene	250	U	250	14
98-82-8	Isopropylbenzene	250	U	250	6.5
78-93-3	2-Butanone	1000	U	1000	43
108-10-1	4-Methyl-2-pentanone	1000	U	1000	48
179601-23-1	m-Xylene & p-Xylene	7.27	J	500	6.2
1634-04-4	Methyl tert-butyl ether	1000	U	1000	7.1
91-20-3	Naphthalene	10.6	J	250	6.7
104-51-8	n-Butylbenzene	250	U	250	8.0
75-09-2	Methylene Chloride	250	U	250	77
103-65-1	n-Propylbenzene	250	U	250	14
95-47-6	o-Xylene	250	U	250	8.5
99-87-6	p-Isopropyltoluene	250	U	250	4.8
135-98-8	sec-Butylbenzene	250	U	250	4.7
637-92-3	Ethyl-t-butyl ether (ETBE)	250	U	250	0.22
100-42-5	Styrene	250	U	250	5.6
994-05-8	Tert-amyl-methyl ether (TAME)	250	U	250	0.37
98-06-6	tert-Butylbenzene	250	U	250	6.5
127-18-4	Tetrachloroethene	250	U	250	12
108-88-3	Toluene	250	U	250	17
156-60-5	trans-1,2-Dichloroethene	250	U	250	9.2
10061-02-6	trans-1,3-Dichloropropene	250	U	250	20
79-01-6	Trichloroethene	250	U	250	9.7
75-69-4	Trichlorofluoromethane	250	U	250	16
75-65-0	tert-Butyl alcohol	10000	U	10000	240
108-05-4	Vinyl acetate	500	U	500	23
75-01-4	Vinyl chloride	250	U	250	18
124-48-1	Dibromochloromethane	250	U	250	12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50627/1-A

Matrix: Solid Lab File ID: 146691.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5.00(g) Date Analyzed: 07/13/2012 14:38

Soil Aliquot Vol: 100 (uL) Dilution Factor: 1

Soil Extract Vol.: 5(mL) GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 50749 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	500	U	500	8.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		39-128
460-00-4	4-Bromofluorobenzene (Surr)	102		26-141
2037-26-5	Toluene-d8 (Surr)	107		33-134
1868-53-7	Dibromofluoromethane (Surr)	99		30-122

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50627/1-A

Matrix: Solid | Lab File ID: 146691.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5.00(g) | Date Analyzed: 07/13/2012 14:38

Soil Aliquot Vol: 100 (uL) | Dilution Factor: 1

Soil Extract Vol.: 5(mL) | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 50749 | Units: ug/Kg

Number TICs Found: 1 | TIC Result Total: 43.5

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
91-57-6	2-Methylnaphthalene	14.29	43.5	J

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: BFB14186.D BFB Injection Date: 07/16/2012

Instrument ID: A3UX14 BFB Injection Time: 11:07

Analysis Batch No.: 50900

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.6	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	76.4	
175	5.0 - 9.0 % of mass 174	5.8	(7.6)1
176	95.0 - 101.0 % of mass 174	73.9	(96.7)1
177	5.0 - 9.0 % of mass 176	5.0	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-50900/3	146719.D	07/16/2012	11:51
	CCV 240-50900/4	146720.D	07/16/2012	12:12
	LCS 240-50900/5	146721.D	07/16/2012	12:34
	MB 240-50900/6	146722.D	07/16/2012	12:56
	240-13217-A-1 MS	146724.D	07/16/2012	13:39
	240-13217-A-1 MSD	146725.D	07/16/2012	14:01
MT-SB17-0-2	240-13070-5	146741.D	07/16/2012	19:47
MT-SB17-8-10	240-13070-6	146742.D	07/16/2012	20:09

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50900/3 Calibration Date: 07/16/2012 11:51

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146719.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3178	0.2868		45.1	50.0	-9.8	50.0
Chloromethane	Ave	0.6372	0.6278	0.1000	49.3	50.0	-1.5	50.0
Vinyl chloride	Ave	0.3967	0.4052		51.1	50.0	2.1	20.0
Bromomethane	Lin1		0.1243		47.0	50.0	-6.0	50.0
Chloroethane	Ave	0.1854	0.1773		47.8	50.0	-4.3	50.0
Trichlorofluoromethane	Lin1		0.3636		46.1	50.0	-7.8	50.0
Acrolein	Ave	0.0364	0.0382		524	500	4.8	50.0
1,1-Dichloroethene	Ave	0.2352	0.2425		51.6	50.0	3.1	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2257	0.2165		48.0	50.0	-4.1	50.0
Acetone	Lin1		0.1100		118	100	17.5	50.0
Iodomethane	Ave	0.4148	0.3718		44.8	50.0	-10.4	50.0
Carbon disulfide	Lin1		0.5347		38.6	50.0	-22.8	50.0
Acetonitrile	Lin1		0.0380		551	500	10.1	50.0
Methyl acetate	Lin1		0.2832		109	100	9.1	50.0
Methylene Chloride	Lin1		0.2608		42.2	50.0	-15.6	50.0
tert-Butyl alcohol	Ave	0.0231	0.0223		964	1000	-3.6	50.0
Acrylonitrile	Ave	0.1161	0.1268		109	100	9.2	50.0
trans-1,2-Dichloroethene	Ave	0.2815	0.2753		48.9	50.0	-2.2	50.0
Methyl tert-butyl ether	Ave	0.6624	0.6805		51.4	50.0	2.7	50.0
Hexane	Lin1		0.0777		48.0	50.0	-4.0	20.0
1,1-Dichloroethane	Ave	0.6190	0.6319	0.1000	51.0	50.0	2.1	50.0
Vinyl acetate	Ave	0.0298	0.0318		53.3	50.0	6.7	50.0
2,2-Dichloropropane	Lin1		0.2239		41.2	50.0	-17.6	50.0
cis-1,2-Dichloroethene	Ave	0.2952	0.2867		48.6	50.0	-2.9	50.0
2-Butanone	Lin1		0.1561		117	100	16.8	50.0
Bromochloromethane	Ave	0.1376	0.1229		44.7	50.0	-10.7	50.0
Tetrahydrofuran	Lin1		0.0990		52.0	50.0	4.0	50.0
Chloroform	Ave	0.4764	0.4989		52.4	50.0	4.7	20.0
1,1,1-Trichloroethane	Lin1		0.4124		47.1	50.0	-5.8	50.0
Cyclohexane	Lin1		0.8244		46.8	50.0	-6.4	50.0
1,1-Dichloropropene	Ave	0.3913	0.4138		52.9	50.0	5.8	50.0
Carbon tetrachloride	Lin1		0.4024		47.4	50.0	-5.2	50.0
Benzene	Ave	1.056	1.076		50.9	50.0	1.9	50.0
1,2-Dichloroethane	Ave	0.4187	0.4519		54.0	50.0	7.9	50.0
Trichloroethene	Ave	0.3002	0.2944		49.0	50.0	-1.9	50.0
Methylcyclohexane	Lin1		0.5330		46.7	50.0	-6.6	50.0
1,2-Dichloropropane	Ave	0.2986	0.3330		55.8	50.0	11.5	20.0
Dibromomethane	Ave	0.1215	0.1323		54.4	50.0	8.8	50.0
1,4-Dioxane	Ave	0.0019	0.0017		2280	2500	-9.0	50.0
Bromodichloromethane	Lin1		0.3163		50.3	50.0	0.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50900/3 Calibration Date: 07/16/2012 11:51

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146719.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Lin1		0.0956		91.7	100	-8.3	50.0
cis-1,3-Dichloropropene	Lin1		0.3703		50.5	50.0	1.0	50.0
4-Methyl-2-pentanone	Ave	0.3910	0.4805		123	100	22.9	50.0
Toluene	Ave	1.755	1.861		53.0	50.0	6.0	20.0
trans-1,3-Dichloropropene	Lin1		0.4863		55.3	50.0	10.6	50.0
Ethyl methacrylate	Ave	0.2878	0.3604		62.6	50.0	25.2	50.0
1,1,2-Trichloroethane	Ave	0.2408	0.2817		58.5	50.0	17.0	50.0
Tetrachloroethene	Ave	0.3481	0.3804		54.6	50.0	9.3	50.0
1,3-Dichloropropane	Ave	0.4369	0.5187		59.4	50.0	18.7	50.0
2-Hexanone	Ave	0.2249	0.2698		120	100	20.0	50.0
Dibromochloromethane	Lin1		0.3234		51.5	50.0	3.0	50.0
1,2-Dibromoethane	Ave	0.2515	0.2670		53.1	50.0	6.1	50.0
Chlorobenzene	Ave	1.039	1.139	0.3000	54.8	50.0	9.7	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3843	0.4222		54.9	50.0	9.9	50.0
Ethylbenzene	Ave	0.5649	0.6186		54.8	50.0	9.5	20.0
m-Xylene & p-Xylene	Ave	0.6980	0.7450		107	100	6.7	50.0
o-Xylene	Ave	0.7003	0.7345		52.4	50.0	4.9	50.0
Styrene	Ave	1.038	1.109		53.4	50.0	6.8	50.0
Bromoform	Lin1		0.1567	0.1000	51.6	50.0	3.2	50.0
Isopropylbenzene	Ave	1.853	2.081		56.1	50.0	12.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5415	0.6447	0.3000	59.5	50.0	19.1	50.0
Bromobenzene	Ave	0.7752	0.8362		53.9	50.0	7.9	50.0
1,2,3-Trichloropropane	Ave	0.1985	0.2060		51.9	50.0	3.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2278	0.2759		60.6	50.0	21.1	50.0
n-Propylbenzene	Ave	0.9218	1.075		58.3	50.0	16.6	50.0
2-Chlorotoluene	Ave	0.8219	0.9046		55.0	50.0	10.1	50.0
1,3,5-Trimethylbenzene	Lin1		3.430		49.6	50.0	-0.8	50.0
4-Chlorotoluene	Ave	0.8216	0.8963		54.5	50.0	9.1	50.0
tert-Butylbenzene	Lin1		3.222		49.3	50.0	-1.4	50.0
1,2,4-Trimethylbenzene	Ave	2.958	3.361		56.8	50.0	13.6	50.0
sec-Butylbenzene	Lin1		4.442		49.5	50.0	-1.0	50.0
1,3-Dichlorobenzene	Ave	1.701	1.712		50.3	50.0	0.7	50.0
p-Isopropyltoluene	Lin1		3.734		49.0	50.0	-2.0	50.0
1,4-Dichlorobenzene	Ave	1.739	1.702		48.9	50.0	-2.1	50.0
n-Butylbenzene	Lin1		3.259		51.5	50.0	3.0	50.0
1,2-Dichlorobenzene	Ave	1.585	1.534		48.4	50.0	-3.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0945	0.0872		46.1	50.0	-7.7	50.0
1,3,5-Trichlorobenzene	Ave	1.306	1.139		43.6	50.0	-12.8	50.0
1,2,4-Trichlorobenzene	Ave	1.114	0.9043		40.6	50.0	-18.8	50.0
Hexachlorobutadiene	Ave	0.5750	0.5218		45.4	50.0	-9.2	50.0
Naphthalene	Ave	2.088	1.706		40.8	50.0	-18.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50900/3 Calibration Date: 07/16/2012 11:51

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146719.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.9649	0.7019		36.4	50.0	-27.3	50.0
Dibromofluoromethane (Surr)	Lin1		0.2833		53.5	50.0	7.0	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3569		56.5	50.0	13.0	50.0
Toluene-d8 (Surr)	Lin1		1.636		57.1	50.0	14.2	50.0
4-Bromofluorobenzene (Surr)	Lin1		1.010		52.6	50.0	5.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50900/4 Calibration Date: 07/16/2012 12:12

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146720.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Lin1		0.2567		48.4	50.0	-3.2	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3293		52.1	50.0	4.2	50.0
Toluene-d8 (Surr)	Lin1		1.579		55.1	50.0	10.2	50.0
4-Bromofluorobenzene (Surr)	Lin1		1.034		53.9	50.0	7.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50900/4 Calibration Date: 07/16/2012 12:12

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 17:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 20:31

Lab File ID: 146720.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4617	0.4852		52.5	50.0	5.1	50.0
Ethyl ether	Ave	0.3128	0.2933		46.9	50.0	-6.2	50.0
3-Chloro-1-propene	Ave	0.1331	0.1468		55.2	50.0	10.3	50.0
2-Chloro-1,3-butadiene	Ave	0.6647	0.7674		57.7	50.0	15.4	50.0
Diisopropyl ether	Ave	0.2374	0.2329		245	250	-1.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.042	1.060		50.8	50.0	1.7	50.0
Propionitrile	Ave	0.0432	0.0384		88.8	100	-11.2	50.0
Ethyl acetate	Ave	0.2937	0.2732		93.0	100	-7.0	50.0
Methacrylonitrile	Ave	0.2042	0.1905		46.7	50.0	-6.7	50.0
Isobutyl alcohol	Ave	0.0104	0.0089		856	1000	-14.4	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6048	0.6209		51.3	50.0	2.6	50.0
n-Heptane	Ave	0.0825	0.0865		52.5	50.0	4.9	50.0
n-Butanol	Qua		0.0119		946	1000	-5.4	50.0
Methyl methacrylate	Ave	0.2207	0.2230		50.5	50.0	1.0	50.0
2-Nitropropane	Qua		0.0405		100	100	0.1	50.0
Cyclohexanone	Lin1		0.0494		486	500	-2.8	50.0
1,2,3-Trimethylbenzene	Ave	2.928	3.287		56.1	50.0	12.3	50.0
2-Methylnaphthalene	Lin1		1.045		74.6	100	-25.4	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 146722.D Lab Sample ID: MB 240-50900/6

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX14 Date Analyzed: 07/16/2012 12:56

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-50900/5	146721.D	07/16/2012 12:34
	240-13217-A-1 MS	146724.D	07/16/2012 13:39
	240-13217-A-1 MSD	146725.D	07/16/2012 14:01
MT-SB17-0-2	240-13070-5	146741.D	07/16/2012 19:47
MT-SB17-8-10	240-13070-6	146742.D	07/16/2012 20:09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50900/6

Matrix: Solid Lab File ID: 146722.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/16/2012 12:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.62
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.56
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.34
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	1.3
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.36
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.52
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.30
87-61-6	1,2,3-Trichlorobenzene	0.413	J	5.0	0.38
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.17
120-82-1	1,2,4-Trichlorobenzene	0.330	J	5.0	0.27
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.65
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.3
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.36
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.34
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.69
541-73-1	1,3-Dichlorobenzene	5.0	U	5.0	0.35
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.34
106-46-7	1,4-Dichlorobenzene	5.0	U	5.0	0.66
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.94
110-75-8	2-Chloroethyl vinyl ether	50	U	50	1.4
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.40
591-78-6	2-Hexanone	20	U	20	0.63
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.41
67-64-1	Acetone	20	U	20	6.3
71-43-2	Benzene	5.0	U	5.0	0.23
108-86-1	Bromobenzene	5.0	U	5.0	0.33
74-97-5	Bromochloromethane	5.0	U	5.0	0.71
75-25-2	Bromoform	5.0	U	5.0	0.33
74-83-9	Bromomethane	5.0	U	5.0	0.54
75-15-0	Carbon disulfide	5.0	U	5.0	0.44
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.37
108-90-7	Chlorobenzene	5.0	U	5.0	0.33
75-00-3	Chloroethane	5.0	U	5.0	0.86
67-66-3	Chloroform	5.0	U	5.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50900/6

Matrix: Solid Lab File ID: 146722.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/16/2012 12:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U	5.0	0.41
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.36
75-27-4	Bromodichloromethane	5.0	U	5.0	0.28
10061-01-5	cis-1,3-Dichloropropene	0.540	J	5.0	0.34
106-93-4	1,2-Dibromoethane	5.0	U	5.0	0.50
74-95-3	Dibromomethane	5.0	U	5.0	0.63
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.50
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	5.0	U	5.0	0.26
87-68-3	Hexachlorobutadiene	5.0	U	5.0	1.2
98-82-8	Isopropylbenzene	5.0	U	5.0	0.16
78-93-3	2-Butanone	20	U	20	1.4
108-10-1	4-Methyl-2-pentanone	20	U	20	0.54
179601-23-1	m-Xylene & p-Xylene	10	U	10	1.2
1634-04-4	Methyl tert-butyl ether	20	U	20	0.43
91-20-3	Naphthalene	0.682	J	5.0	0.19
104-51-8	n-Butylbenzene	0.446	J	5.0	0.23
75-09-2	Methylene Chloride	5.0	U	5.0	0.67
103-65-1	n-Propylbenzene	5.0	U	5.0	0.40
95-47-6	o-Xylene	5.0	U	5.0	0.35
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.21
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.18
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.22
100-42-5	Styrene	0.164	J	5.0	0.15
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.37
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.29
127-18-4	Tetrachloroethene	5.0	U	5.0	0.52
108-88-3	Toluene	5.0	U	5.0	0.27
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.41
10061-02-6	trans-1,3-Dichloropropene	5.0	U	5.0	0.54
79-01-6	Trichloroethene	5.0	U	5.0	0.42
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.34
75-65-0	tert-Butyl alcohol	200	U	200	7.6
108-05-4	Vinyl acetate	10	U	10	0.25
75-01-4	Vinyl chloride	5.0	U	5.0	0.39
124-48-1	Dibromochloromethane	5.0	U	5.0	0.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50900/6

Matrix: Solid Lab File ID: 146722.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/16/2012 12:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	10	U	10	0.67

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		58-123
460-00-4	4-Bromofluorobenzene (Surr)	102		52-136
2037-26-5	Toluene-d8 (Surr)	103		67-125
1868-53-7	Dibromofluoromethane (Surr)	95		37-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50900/6

Matrix: Solid Lab File ID: 146722.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/16/2012 12:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50900 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: BFB14188.D BFB Injection Date: 07/17/2012

Instrument ID: A3UX14 BFB Injection Time: 11:55

Analysis Batch No.: 51061

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	28.6	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	81.0	
175	5.0 - 9.0 % of mass 174	6.2	(7.7)1
176	95.0 - 101.0 % of mass 174	77.9	(96.1)1
177	5.0 - 9.0 % of mass 176	5.1	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-51061/3	146752.D	07/17/2012	12:38
	CCV 240-51061/4	146753.D	07/17/2012	13:00
	LCS 240-51061/5	146754.D	07/17/2012	13:22
	MB 240-51061/6	146755.D	07/17/2012	13:44
MT-SS18-0-2	240-13070-2	146763.D	07/17/2012	16:36
MT-SS18-8-10	240-13070-3	146770.D	07/17/2012	19:06
	240-13194-A-2 MS	146775.D	07/17/2012	20:53
	240-13194-A-2 MSD	146776.D	07/17/2012	21:15

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-51061/3 Calibration Date: 07/17/2012 12:38

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146752.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3178	0.2686		42.3	50.0	-15.5	50.0
Chloromethane	Ave	0.6372	0.5950	0.1000	46.7	50.0	-6.6	50.0
Vinyl chloride	Ave	0.3967	0.3802		47.9	50.0	-4.2	20.0
Bromomethane	Lin1		0.1194		45.1	50.0	-9.8	50.0
Chloroethane	Ave	0.1854	0.1745		47.1	50.0	-5.9	50.0
Trichlorofluoromethane	Lin1		0.3381		42.8	50.0	-14.4	50.0
Acrolein	Ave	0.0364	0.0339		465	500	-6.9	50.0
1,1-Dichloroethene	Ave	0.2352	0.2286		48.6	50.0	-2.8	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.2257	0.2047		45.3	50.0	-9.3	50.0
Acetone	Lin1		0.0986		104	100	4.2	50.0
Iodomethane	Ave	0.4148	0.3469		41.8	50.0	-16.4	50.0
Carbon disulfide	Lin1		0.4813		35.1	50.0	-29.8	50.0
Acetonitrile	Lin1		0.0343		496	500	-0.9	50.0
Methyl acetate	Lin1		0.2891		111	100	11.4	50.0
Methylene Chloride	Lin1		0.2598		42.1	50.0	-15.8	50.0
tert-Butyl alcohol	Ave	0.0231	0.0208		899	1000	-10.1	50.0
Acrylonitrile	Ave	0.1161	0.1228		106	100	5.8	50.0
trans-1,2-Dichloroethene	Ave	0.2815	0.2601		46.2	50.0	-7.6	50.0
Methyl tert-butyl ether	Ave	0.6624	0.6629		50.0	50.0	0.0	50.0
Hexane	Lin1		0.0769		47.5	50.0	-5.0	20.0
1,1-Dichloroethane	Ave	0.6190	0.6125	0.1000	49.5	50.0	-1.1	50.0
Vinyl acetate	Ave	0.0298	0.0308		51.7	50.0	3.3	50.0
2,2-Dichloropropane	Lin1		0.2082		38.3	50.0	-23.4	50.0
cis-1,2-Dichloroethene	Ave	0.2952	0.2771		46.9	50.0	-6.1	50.0
2-Butanone	Lin1		0.1552		116	100	16.1	50.0
Bromochloromethane	Ave	0.1376	0.1233		44.8	50.0	-10.4	50.0
Tetrahydrofuran	Lin1		0.0963		50.6	50.0	1.2	50.0
Chloroform	Ave	0.4764	0.4799		50.4	50.0	0.7	20.0
1,1,1-Trichloroethane	Lin1		0.3883		44.3	50.0	-11.4	50.0
Cyclohexane	Lin1		0.8393		47.6	50.0	-4.8	50.0
1,1-Dichloropropene	Ave	0.3913	0.4009		51.2	50.0	2.4	50.0
Carbon tetrachloride	Lin1		0.3811		44.9	50.0	-10.2	50.0
Benzene	Ave	1.056	1.037		49.1	50.0	-1.8	50.0
1,2-Dichloroethane	Ave	0.4187	0.4410		52.7	50.0	5.3	50.0
Trichloroethene	Ave	0.3002	0.2885		48.1	50.0	-3.9	50.0
Methylcyclohexane	Lin1		0.5160		45.2	50.0	-9.6	50.0
1,2-Dichloropropane	Ave	0.2986	0.3222		54.0	50.0	7.9	20.0
Dibromomethane	Ave	0.1215	0.1272		52.3	50.0	4.6	50.0
1,4-Dioxane	Ave	0.0019	0.0017		2260	2500	-9.6	50.0
Bromodichloromethane	Lin1		0.3097		49.3	50.0	-1.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-51061/3 Calibration Date: 07/17/2012 12:38

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146752.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Linl		0.1119		107	100	7.2	50.0
cis-1,3-Dichloropropene	Linl		0.3663		49.9	50.0	-0.2	50.0
4-Methyl-2-pentanone	Ave	0.3910	0.4883		125	100	24.9	50.0
Toluene	Ave	1.755	1.817		51.8	50.0	3.5	20.0
trans-1,3-Dichloropropene	Linl		0.4950		56.3	50.0	12.6	50.0
Ethyl methacrylate	Ave	0.2878	0.3859		67.0	50.0	34.1	50.0
1,1,2-Trichloroethane	Ave	0.2408	0.2836		58.9	50.0	17.8	50.0
Tetrachloroethene	Ave	0.3481	0.3834		55.1	50.0	10.2	50.0
1,3-Dichloropropane	Ave	0.4369	0.5093		58.3	50.0	16.6	50.0
2-Hexanone	Ave	0.2249	0.2953		131	100	31.3	50.0
Dibromochloromethane	Linl		0.3183		50.7	50.0	1.4	50.0
1,2-Dibromoethane	Ave	0.2515	0.2613		52.0	50.0	3.9	50.0
Chlorobenzene	Ave	1.039	1.130	0.3000	54.4	50.0	8.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3843	0.4062		52.9	50.0	5.7	50.0
Ethylbenzene	Ave	0.5649	0.5990		53.0	50.0	6.0	20.0
m-Xylene & p-Xylene	Ave	0.6980	0.7317		105	100	4.8	50.0
o-Xylene	Ave	0.7003	0.7213		51.5	50.0	3.0	50.0
Styrene	Ave	1.038	1.114		53.7	50.0	7.3	50.0
Bromoform	Linl		0.1594	0.1000	52.4	50.0	4.8	50.0
Isopropylbenzene	Ave	1.853	2.005		54.1	50.0	8.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5415	0.6441	0.3000	59.5	50.0	19.0	50.0
Bromobenzene	Ave	0.7752	0.8493		54.8	50.0	9.6	50.0
1,2,3-Trichloropropane	Ave	0.1985	0.2134		53.8	50.0	7.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2278	0.2887		63.4	50.0	26.7	50.0
n-Propylbenzene	Ave	0.9218	1.091		59.2	50.0	18.4	50.0
2-Chlorotoluene	Ave	0.8219	0.8992		54.7	50.0	9.4	50.0
1,3,5-Trimethylbenzene	Linl		3.390		49.0	50.0	-2.0	50.0
4-Chlorotoluene	Ave	0.8216	0.8999		54.8	50.0	9.5	50.0
tert-Butylbenzene	Linl		3.195		48.8	50.0	-2.4	50.0
1,2,4-Trimethylbenzene	Ave	2.958	3.317		56.1	50.0	12.1	50.0
sec-Butylbenzene	Linl		4.369		48.7	50.0	-2.6	50.0
1,3-Dichlorobenzene	Ave	1.701	1.711		50.3	50.0	0.6	50.0
p-Isopropyltoluene	Linl		3.708		48.7	50.0	-2.6	50.0
1,4-Dichlorobenzene	Ave	1.739	1.703		49.0	50.0	-2.0	50.0
n-Butylbenzene	Linl		3.224		50.9	50.0	1.8	50.0
1,2-Dichlorobenzene	Ave	1.585	1.547		48.8	50.0	-2.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.0945	0.0924		48.9	50.0	-2.2	50.0
1,3,5-Trichlorobenzene	Ave	1.306	1.097		42.0	50.0	-16.0	50.0
1,2,4-Trichlorobenzene	Ave	1.114	0.8790		39.4	50.0	-21.1	50.0
Hexachlorobutadiene	Ave	0.5750	0.4817		41.9	50.0	-16.2	50.0
Naphthalene	Ave	2.088	1.713		41.0	50.0	-18.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-51061/3 Calibration Date: 07/17/2012 12:38

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146752.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.9649	0.6765		35.1	50.0	-29.9	50.0
Dibromofluoromethane (Surr)	Lin1		0.2518		47.5	50.0	-5.0	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3177		50.2	50.0	0.4	50.0
Toluene-d8 (Surr)	Lin1		1.514		52.8	50.0	5.6	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.9892		51.5	50.0	3.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51061/4 Calibration Date: 07/17/2012 13:00

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 14:23

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 17:16

Lab File ID: 146753.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Lin1		0.2340		44.1	50.0	-11.8	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.3131		49.5	50.0	-1.0	50.0
Toluene-d8 (Surr)	Lin1		1.443		50.3	50.0	0.6	50.0
4-Bromofluorobenzene (Surr)	Lin1		1.000		52.1	50.0	4.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-51061/4 Calibration Date: 07/17/2012 13:00

Instrument ID: A3UX14 Calib Start Date: 06/28/2012 17:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/28/2012 20:31

Lab File ID: 146753.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4617	0.4471		48.4	50.0	-3.1	50.0
Ethyl ether	Ave	0.3128	0.2895		46.3	50.0	-7.4	50.0
3-Chloro-1-propene	Ave	0.1331	0.1313		49.3	50.0	-1.3	50.0
2-Chloro-1,3-butadiene	Ave	0.6647	0.7145		53.7	50.0	7.5	50.0
Diisopropyl ether	Ave	0.2374	0.2231		235	250	-6.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.042	1.073		51.5	50.0	2.9	50.0
Propionitrile	Ave	0.0432	0.0426		98.5	100	-1.5	50.0
Ethyl acetate	Ave	0.2937	0.3101		106	100	5.6	50.0
Methacrylonitrile	Ave	0.2042	0.2035		49.8	50.0	-0.3	50.0
Isobutyl alcohol	Ave	0.0104	0.0106		1020	1000	1.9	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6048	0.6143		50.8	50.0	1.6	50.0
n-Heptane	Ave	0.0825	0.0905		54.8	50.0	9.7	50.0
n-Butanol	Qua		0.0132		1040	1000	4.4	50.0
Methyl methacrylate	Ave	0.2207	0.2694		61.0	50.0	22.1	50.0
2-Nitropropane	Qua		0.0479		116	100	15.9	50.0
Cyclohexanone	Lin1		0.0583		573	500	14.6	50.0
1,2,3-Trimethylbenzene	Ave	2.928	3.011		51.4	50.0	2.8	50.0
2-Methylnaphthalene	Lin1		1.054		75.3	100	-24.7	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: 146755.D Lab Sample ID: MB 240-51061/6

Matrix: Solid Heated Purge: (Y/N) Y

Instrument ID: A3UX14 Date Analyzed: 07/17/2012 13:44

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-51061/5	146754.D	07/17/2012 13:22

MT-5518-0-2
MT-5518-8-10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-51061/6

Matrix: Solid Lab File ID: 146755.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/17/2012 13:44

Soil Aliquot Vol: 5 (g) Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 51061 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	5.0	0.18
71-55-6	1,1,1-Trichloroethane	5.0	U	5.0	0.42
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	5.0	U	5.0	0.78
75-34-3	1,1-Dichloroethane	5.0	U	5.0	0.34
75-35-4	1,1-Dichloroethene	5.0	U	5.0	0.36
563-58-6	1,1-Dichloropropene	5.0	U	5.0	0.20
87-61-6	1,2,3-Trichlorobenzene	0.427	J	5.0	0.20
96-18-4	1,2,3-Trichloropropane	5.0	U	5.0	0.42
526-73-8	1,2,3-Trimethylbenzene	0.130	J	5.0	0.0034
120-82-1	1,2,4-Trichlorobenzene	0.361	J	5.0	0.15
95-63-6	1,2,4-Trimethylbenzene	5.0	U	5.0	0.10
96-12-8	1,2-Dibromo-3-Chloropropane	10	U	10	1.0
95-50-1	1,2-Dichlorobenzene	5.0	U	5.0	0.17
107-06-2	1,2-Dichloroethane	5.0	U	5.0	0.20
78-87-5	1,2-Dichloropropane	5.0	U	5.0	0.16
541-73-1	1,3-Dichlorobenzene	0.214	J	5.0	0.096
142-28-9	1,3-Dichloropropane	5.0	U	5.0	0.44
106-46-7	1,4-Dichlorobenzene	0.239	J	5.0	0.16
594-20-7	2,2-Dichloropropane	5.0	U	5.0	0.46
110-75-8	2-Chloroethyl vinyl ether	20	U	20	0.86
95-49-8	2-Chlorotoluene	5.0	U	5.0	0.18
591-78-6	2-Hexanone	0.669	J	20	0.40
106-43-4	4-Chlorotoluene	5.0	U	5.0	0.20
67-64-1	Acetone	20	U	20	3.4
71-43-2	Benzene	5.0	U	5.0	0.24
108-86-1	Bromobenzene	5.0	U	5.0	0.26
74-97-5	Bromochloromethane	5.0	U	5.0	0.26
75-25-2	Bromoform	5.0	U	5.0	0.38
74-83-9	Bromomethane	5.0	U	5.0	0.58
75-15-0	Carbon disulfide	5.0	U	5.0	0.24
56-23-5	Carbon tetrachloride	5.0	U	5.0	0.13
108-90-7	Chlorobenzene	5.0	U	5.0	0.13
75-00-3	Chloroethane	5.0	U	5.0	1.2
67-66-3	Chloroform	5.0	U	5.0	0.18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-51061/6

Matrix: Solid Lab File ID: 146755.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/17/2012 13:44

Soil Aliquot Vol: 5 (g) Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 51061 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	5.0	U	5.0	0.28
156-59-2	cis-1,2-Dichloroethene	5.0	U	5.0	0.14
75-27-4	Bromodichloromethane	5.0	U	5.0	0.20
10061-01-5	cis-1,3-Dichloropropene	5.0	U	5.0	0.16
106-93-4	1,2-Dibromoethane	5.0	U	5.0	0.20
74-95-3	Dibromomethane	5.0	U	5.0	0.28
75-71-8	Dichlorodifluoromethane	5.0	U	5.0	0.32
108-20-3	Diisopropyl ether	10	U	10	1.0
100-41-4	Ethylbenzene	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	5.0	U	5.0	0.28
98-82-8	Isopropylbenzene	5.0	U	5.0	0.13
78-93-3	2-Butanone	0.974	J	20	0.86
108-10-1	4-Methyl-2-pentanone	20	U	20	0.96
179601-23-1	m-Xylene & p-Xylene	0.189	J	10	0.12
1634-04-4	Methyl tert-butyl ether	20	U	20	0.14
91-20-3	Naphthalene	0.491	J	5.0	0.13
104-51-8	n-Butylbenzene	0.454	J	5.0	0.16
75-09-2	Methylene Chloride	5.0	U	5.0	1.5
103-65-1	n-Propylbenzene	5.0	U	5.0	0.28
95-47-6	o-Xylene	5.0	U	5.0	0.17
99-87-6	p-Isopropyltoluene	5.0	U	5.0	0.096
135-98-8	sec-Butylbenzene	5.0	U	5.0	0.094
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.0044
100-42-5	Styrene	0.172	J	5.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.0074
98-06-6	tert-Butylbenzene	5.0	U	5.0	0.13
127-18-4	Tetrachloroethene	5.0	U	5.0	0.24
108-88-3	Toluene	5.0	U	5.0	0.34
156-60-5	trans-1,2-Dichloroethene	5.0	U	5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	0.516	J	5.0	0.40
79-01-6	Trichloroethene	5.0	U	5.0	0.19
75-69-4	Trichlorofluoromethane	5.0	U	5.0	0.32
75-65-0	tert-Butyl alcohol	200	U	200	4.8
108-05-4	Vinyl acetate	10	U	10	0.46
75-01-4	Vinyl chloride	5.0	U	5.0	0.36
124-48-1	Dibromochloromethane	5.0	U	5.0	0.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-51061/6

Matrix: Solid Lab File ID: 146755.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/17/2012 13:44

Soil Aliquot Vol: 5 (g) Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 51061 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	0.189	J	10	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		39-128
460-00-4	4-Bromofluorobenzene (Surr)	100		26-141
2037-26-5	Toluene-d8 (Surr)	101		33-134
1868-53-7	Dibromofluoromethane (Surr)	89		30-122

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-51061/6

Matrix: Solid Lab File ID: 146755.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 07/17/2012 13:44

Soil Aliquot Vol: 5 (g) Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 51061 Units: ug/Kg

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: BFB989.D BFB Injection Date: 06/19/2012

Instrument ID: A3UX11 BFB Injection Time: 12:15

Analysis Batch No.: 47806

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.7	
75	30.0 - 60.0 % of mass 95	45.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	82.3	
175	5.0 - 9.0 % of mass 174	6.7	(8.2)1
176	95.0 - 101.0 % of mass 174	80.1	(97.4)1
177	5.0 - 9.0 % of mass 176	5.3	(6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-47806/4	UXJ5152.D	06/19/2012	13:56
	STD8260 240-47806/5	UXJ5153.D	06/19/2012	14:18
	STD8260 240-47806/6	UXJ5154.D	06/19/2012	14:41
	STD8260 240-47806/7	UXJ5155.D	06/19/2012	15:04
	STD8260 240-47806/8	UXJ5156.D	06/19/2012	15:26
	STD8260 240-47806/9	UXJ5157.D	06/19/2012	15:49
	STD6 240-47806/10	UXJ5158.D	06/19/2012	16:12
	STD5 240-47806/11	UXJ5159.D	06/19/2012	16:35
	STD4 240-47806/12	UXJ5160.D	06/19/2012	16:57
	STD3 240-47806/13	UXJ5161.D	06/19/2012	17:20
	STD2 240-47806/14	UXJ5162.D	06/19/2012	17:43
	STD1 240-47806/15	UXJ5163.D	06/19/2012	18:05
	ICV 240-47806/22	UXJ5170.D	06/19/2012	20:44

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47806

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2012 13:56 Calibration End Date: 06/19/2012 15:49 Calibration ID: 9354

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-47806/9	UXJ5157.D
Level 2	STD8260 240-47806/8	UXJ5156.D
Level 3	STD8260 240-47806/7	UXJ5155.D
Level 4	STD8260 240-47806/6	UXJ5154.D
Level 5	STD8260 240-47806/5	UXJ5153.D
Level 6	STD8260 240-47806/4	UXJ5152.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2106 0.2154	0.2066	0.1997	0.2437	0.2399	Ave		0.2193				8.3		15.0			
Chloromethane	0.3977 0.3706	0.3818	0.3575	0.3446	0.3613	Ave		0.3689			0.1000	5.1		15.0			
Vinyl chloride	0.3394 0.3587	0.3502	0.3483	0.3504	0.3544	Ave		0.3502				1.8		15.0			
Bromomethane	0.0907 0.1236	0.0965	0.1240	0.1094	0.1201	Ave		0.1107				13.0		15.0			
Chloroethane	0.1114 0.1297	0.1101	0.1362	0.1124	0.1267	Ave		0.1211				9.2		15.0			
Trichlorofluoromethane	0.2930 0.3121	0.2804	0.2938	0.3208	0.3349	Ave		0.3058				6.6		15.0			
Acrolein	0.0340 0.0369	0.0366	0.0386	0.0379	0.0383	Ave		0.0370				4.6		15.0			
1,1-Dichloroethene	0.2484 0.2421	0.2433	0.2498	0.2483	0.2507	Ave		0.2471				1.4		15.0			
Acetone	0.1017 0.0563	0.0915	0.0696	0.0624	0.0585	Lin1	0.1134	0.0556							0.9980		0.9900
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1581 0.1603	0.1564	0.1685	0.1893	0.1904	Ave		0.1705				9.1		15.0			
Iodomethane	0.3396 0.3452	0.3237	0.3606	0.3373	0.3419	Ave		0.3414				3.5		15.0			
Carbon disulfide	0.8425 0.8447	0.7922	0.8240	0.8283	0.8473	Ave		0.8298				2.5		15.0			
Acetonitrile	0.0270 0.0222	0.0267	0.0248	0.0257	0.0235	Ave		0.0250				7.4		15.0			
Methyl acetate	0.1903 0.1560	0.1741	0.1728	0.1650	0.1638	Ave		0.1703				6.9		15.0			
Methylene Chloride	0.4957 0.2736	0.3616	0.3075	0.2778	0.2692	Lin1	0.2150	0.2637							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47806

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2012 13:56 Calibration End Date: 06/19/2012 15:49 Calibration ID: 9354

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0220 0.0166	0.0208	0.0194	0.0188	0.0179	Ave		0.0192				10.0		15.0			
Acrylonitrile	0.0872 0.0834	0.0935	0.0926	0.0867	0.0857	Ave		0.0882				4.6		15.0			
Methyl tert-butyl ether	0.8243 0.7795	0.7836	0.7999	0.7743	0.7803	Ave		0.7903				2.4		15.0			
trans-1,2-Dichloroethene	0.3033 0.2848	0.2739	0.2893	0.2767	0.2801	Ave		0.2847				3.7		15.0			
Hexane	0.0581 0.0611	0.0583	0.0594	0.0737	0.0734	Ave		0.0640				12.0		15.0			
1,1-Dichloroethane	0.4974 0.4815	0.4776	0.4640	0.4568	0.4623	Ave		0.4733			0.1000	3.2		15.0			
Vinyl acetate	0.0516 0.0587	0.0539	0.0605	0.0558	0.0590	Ave		0.0566				6.1		15.0			
2-Butanone	0.1055 0.0871	0.0998	0.1038	0.0926	0.0933	Ave		0.0970				7.4		15.0			
cis-1,2-Dichloroethene	0.3206 0.3153	0.3168	0.3161	0.3020	0.3024	Ave		0.3122				2.5		15.0			
2,2-Dichloropropane	0.2924 0.2762	0.2677	0.2780	0.2854	0.2851	Ave		0.2808				3.1		15.0			
Bromochloromethane	0.1501 0.1462	0.1510	0.1478	0.1401	0.1423	Ave		0.1462				3.0		15.0			
Tetrahydrofuran	0.0720 0.0593	0.0675	0.0634	0.0640	0.0633	Ave		0.0649				6.7		15.0			
Chloroform	0.5108 0.4821	0.4793	0.4855	0.4678	0.4646	Ave		0.4817				3.4		15.0			
1,1,1-Trichloroethane	0.3733 0.3736	0.3666	0.3741	0.3758	0.3747	Ave		0.3730				0.9		15.0			
Cyclohexane	0.4265 0.4068	0.3940	0.4053	0.4599	0.4684	Ave		0.4268				7.2		15.0			
1,1-Dichloropropene	0.4133 0.3910	0.3770	0.3865	0.3843	0.3873	Ave		0.3899				3.2		15.0			
Carbon tetrachloride	0.3130 0.3237	0.2994	0.3154	0.3262	0.3289	Ave		0.3178				3.4		15.0			
1,2-Dichloroethane	0.3636 0.3558	0.3594	0.3672	0.3472	0.3439	Ave		0.3562				2.6		15.0			
Benzene	1.2322 1.2088	1.1764	1.1803	1.1447	1.1538	Ave		1.1827				2.8		15.0			
Trichloroethene	0.3257 0.3080	0.3104	0.3020	0.2899	0.2968	Ave		0.3055				4.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47806

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2012 13:56 Calibration End Date: 06/19/2012 15:49 Calibration ID: 9354

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichloropropane	0.3011 0.2796	0.2755	0.2778	0.2722	0.2708	Ave		0.2795				4.0		15.0			
Methylcyclohexane	0.4191 0.4112	0.3761	0.3972	0.4679	0.4779	Ave		0.4249				9.4		15.0			
Dibromomethane	0.1677 0.1549	0.1467	0.1570	0.1552	0.1561	Ave		0.1563				4.3		15.0			
1,4-Dioxane	0.0028 0.0022	0.0027	0.0026	0.0027	0.0024	Ave		0.0026				7.8		15.0			
Bromodichloromethane	0.3651 0.3692	0.3436	0.3475	0.3454	0.3520	Ave		0.3538				3.1		15.0			
2-Chloroethyl vinyl ether	0.1563 0.1709	0.1729	0.1760	0.1666	0.1677	Ave		0.1684				4.1		15.0			
cis-1,3-Dichloropropene	0.4551 0.4798	0.4583	0.4640	0.4431	0.4529	Ave		0.4589				2.7		15.0			
4-Methyl-2-pentanone	0.2098 0.1903	0.2120	0.2104	0.1959	0.1974	Ave		0.2026				4.5		15.0			
Toluene	1.8464 1.8696	1.7453	1.7767	1.7172	1.7755	Ave		1.7885				3.3		15.0			
trans-1,3-Dichloropropene	0.5535 0.5895	0.5249	0.5563	0.5518	0.5688	Ave		0.5575				3.8		15.0			
Ethyl methacrylate	0.4704 0.4865	0.4787	0.4870	0.4914	0.4968	Ave		0.4851				1.9		15.0			
1,1,2-Trichloroethane	0.3183 0.3219	0.3342	0.3260	0.3166	0.3252	Ave		0.3237				2.0		15.0			
1,3-Dichloropropane	0.6083 0.5863	0.5978	0.5892	0.5773	0.5741	Ave		0.5888				2.2		15.0			
Tetrachloroethene	0.3474 0.3368	0.3423	0.3240	0.3284	0.3357	Ave		0.3358				2.6		15.0			
2-Hexanone	0.1862 0.1696	0.1861	0.1923	0.1778	0.1837	Ave		0.1826				4.3		15.0			
Dibromochloromethane	0.3454 0.3729	0.3489	0.3391	0.3531	0.3605	Ave		0.3533				3.4		15.0			
1,2-Dibromoethane	0.3265 0.3291	0.3332	0.3338	0.3265	0.3336	Ave		0.3304				1.1		15.0			
Chlorobenzene	1.1352 1.1157	1.0657	1.0775	1.0492	1.0730	Ave		1.0860			0.3000	3.0		15.0			
1,1,1,2-Tetrachloroethane	0.3610 0.3689	0.3490	0.3624	0.3468	0.3648	Ave		0.3588				2.5		15.0			
Ethylbenzene	0.6471 0.6012	0.5717	0.5866	0.5657	0.5993	Ave		0.5952				4.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47806

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2012 13:56 Calibration End Date: 06/19/2012 15:49 Calibration ID: 9354

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.7514 0.7563	0.7162	0.7194	0.7116	0.7351	Ave		0.7317				2.6		15.0			
o-Xylene	0.7188 0.6877	0.6968	0.6813	0.6655	0.6778	Ave		0.6880				2.7		15.0			
Styrene	1.1931 1.1812	1.1166	1.1501	1.1249	1.1714	Ave		1.1562				2.7		15.0			
Bromoform	0.1696 0.1758	0.1756	0.1682	0.1834	0.1844	Ave		0.1762			0.1000	3.8		15.0			
Isopropylbenzene	1.6949 1.6644	1.6381	1.6453	1.6206	1.6542	Ave		1.6529				1.5		15.0			
1,1,2,2-Tetrachloroethane	0.8257 0.7345	0.8242	0.8369	0.7830	0.7938	Ave		0.7997			0.3000	4.8		15.0			
Bromobenzene	1.2416 1.1110	1.1784	1.1941	1.1215	1.1317	Ave		1.1631				4.3		15.0			
1,2,3-Trichloropropane	0.3185 0.2493	0.2993	0.2859	0.2707	0.2737	Ave		0.2829				8.5		15.0			
trans-1,4-Dichloro-2-butene	0.1228 0.1409	0.1270	0.1345	0.1501	0.1523	Ave		0.1379				8.7		15.0			
n-Propylbenzene	1.2972 1.2016	1.2518	1.2358	1.2105	1.2599	Ave		1.2428				2.8		15.0			
2-Chlorotoluene	1.1521 0.9515	1.0418	1.0579	0.9700	1.0061	Ave		1.0299				7.0		15.0			
1,3,5-Trimethylbenzene	3.3809 3.1612	3.3046	3.3624	3.2452	3.2844	Ave		3.2898				2.4		15.0			
4-Chlorotoluene	1.1135 0.9369	1.0086	1.0290	0.9518	0.9802	Ave		1.0033				6.4		15.0			
tert-Butylbenzene	3.0687 2.6123	2.8660	2.8552	2.7333	2.7823	Ave		2.8196				5.4		15.0			
1,2,4-Trimethylbenzene	3.1603 2.8657	2.9825	3.0184	2.8782	2.9676	Ave		2.9788				3.6		15.0			
sec-Butylbenzene	3.7057 3.2981	3.5130	3.5709	3.4328	3.4859	Ave		3.5011				3.9		15.0			
1,3-Dichlorobenzene	1.7023 1.5635	1.5498	1.5848	1.4870	1.5451	Ave		1.5721				4.6		15.0			
p-Isopropyltoluene	2.8521 2.6145	2.5981	2.6987	2.5662	2.6202	Ave		2.6583				3.9		15.0			
1,4-Dichlorobenzene	1.6947 1.6237	1.6387	1.6396	1.5116	1.5711	Ave		1.6132				3.9		15.0			
n-Butylbenzene	2.1341 2.2195	2.0519	2.1378	2.0439	2.1393	Ave		2.1211				3.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47806

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2012 13:56 Calibration End Date: 06/19/2012 15:49 Calibration ID: 9354

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.5587 1.5188	1.5024	1.5206	1.4546	1.5126	Ave		1.5113				2.2		15.0			
1,2-Dibromo-3-Chloropropane	0.1486 0.1346	0.1420	0.1545	0.1505	0.1574	Ave		0.1479				5.7		15.0			
1,3,5-Trichlorobenzene	1.1352 0.9729	1.0376	1.0366	0.9913	1.0399	Ave		1.0356				5.4		15.0			
1,2,4-Trichlorobenzene	0.9786 0.8311	0.9570	0.9797	0.9144	0.9479	Ave		0.9348				6.0		15.0			
Hexachlorobutadiene	0.4364 0.3413	0.4088	0.4266	0.3927	0.4028	Ave		0.4014				8.3		15.0			
Naphthalene	2.7074 1.9207	2.5124	2.5315	2.4135	2.4828	Ave		2.4281				11.0		15.0			
1,2,3-Trichlorobenzene	0.8793 0.6172	0.8643	0.8446	0.8098	0.8037	Ave		0.8031				12.0		15.0			
Dibromofluoromethane (Surr)	0.2458 0.2472	0.2441	0.2480	0.2385	0.2336	Ave		0.2429				2.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3370 0.2978	0.3172	0.3123	0.2895	0.2880	Ave		0.3070				6.2		15.0			
Toluene-d8 (Surr)	1.5285 1.5297	1.4881	1.4794	1.4433	1.4491	Ave		1.4863				2.5		15.0			
4-Bromofluorobenzene (Surr)	0.4706 0.3986	0.4623	0.4434	0.4197	0.4166	Ave		0.4352				6.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47806

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2012 16:12 Calibration End Date: 06/19/2012 18:05 Calibration ID: 9356

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-47806/15	UXJ5163.D
Level 2	STD2 240-47806/14	UXJ5162.D
Level 3	STD3 240-47806/13	UXJ5161.D
Level 4	STD4 240-47806/12	UXJ5160.D
Level 5	STD5 240-47806/11	UXJ5159.D
Level 6	STD6 240-47806/10	UXJ5158.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4341 0.4439	0.3941	0.4300	0.4461	0.4361	Ave		0.4307				4.4		15.0			
Ethyl ether	0.2378 0.2309	0.2160	0.2258	0.2366	0.2286	Ave		0.2293				3.5		15.0			
3-Chloro-1-propene	0.1741 0.1569	0.1382	0.1536	0.1580	0.1545	Ave		0.1559				7.4		15.0			
Diisopropyl ether	0.2821 0.2755	0.2580	0.2761	0.2778	0.2645	Ave		0.2723				3.3		15.0			
2-Chloro-1,3-butadiene	0.4405 0.4192	0.4037	0.4229	0.4258	0.4248	Ave		0.4228				2.8		15.0			
Ethyl-t-butyl ether (ETBE)	0.9129 0.8715	0.8230	0.8835	0.8880	0.8464	Ave		0.8709				3.7		15.0			
Ethyl acetate	0.2479 0.2118	0.2223	0.2195	0.2185	0.2141	Ave		0.2224				5.9		15.0			
Propionitrile	0.0366 0.0330	0.0316	0.0320	0.0343	0.0342	Ave		0.0336				5.4		15.0			
Methacrylonitrile	0.1672 0.1442	0.1452	0.1540	0.1524	0.1468	Ave		0.1516				5.7		15.0			
Isobutyl alcohol	0.0106 0.0089	0.0104	0.0102	0.0100	0.0096	Ave		0.0099				6.1		15.0			
Tert-amyl-methyl ether (TAME)	0.8891 0.8369	0.7654	0.8445	0.8497	0.8143	Ave		0.8333				4.9		15.0			
n-Heptane	0.0533 0.0551	0.0772	0.0539	0.0543	0.0741	Ave		0.0613				18.0	*	15.0			
n-Butanol	0.0092 0.0086	0.0092	0.0095	0.0096	0.0090	Ave		0.0092				4.0		15.0			
Methyl methacrylate	0.2440 0.2102	0.2148	0.2235	0.2231	0.2121	Ave		0.2213				5.6		15.0			
2-Nitropropane	0.0629 0.0605	0.0576	0.0614	0.0618	0.0613	Ave		0.0609				2.9		15.0			

Note: The ml coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 47806

SDG No.:

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2012 16:12 Calibration End Date: 06/19/2012 18:05 Calibration ID: 9356

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0557 0.0554	0.0496	0.0637	0.0519	0.0525	Ave		0.0548				9.0		15.0			
1,2,3-Trimethylbenzene	2.9059 2.9272	2.6208	2.8103	2.7997	2.7150	Ave		2.7965				4.1		15.0			
2-Methylnaphthalene	1.0483 0.9270	0.9629	1.0012	0.9726	0.9623	Ave		0.9791				4.2		15.0			
n-Butyl acetate	0.3624 0.3505	0.3413	0.3505	0.3514	0.3507	Ave		0.3511				1.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-47806/22 Calibration Date: 06/19/2012 20:44

Instrument ID: A3UX11 Calib Start Date: 06/19/2012 13:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/19/2012 15:49

Lab File ID: UXJ5170.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2193	0.2140		9.76	10.0	-2.4	50.0
Chloromethane	Ave	0.3689	0.3829	0.1000	10.4	10.0	3.8	50.0
Vinyl chloride	Ave	0.3502	0.3592		10.3	10.0	2.5	20.0
Bromomethane	Ave	0.1107	0.1330		12.0	10.0	20.2	50.0
Chloroethane	Ave	0.1211	0.1522		12.6	10.0	25.7	50.0
Trichlorofluoromethane	Ave	0.3058	0.3171		10.4	10.0	3.7	50.0
Acrolein	Ave	0.0370	0.0183		14.8	30.0	-50.7*	50.0
1,1-Dichloroethene	Ave	0.2471	0.2583		10.5	10.0	4.5	20.0
Acetone	Lin1		0.0599		19.5	20.0	-2.5	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1705	0.1786		10.5	10.0	4.7	50.0
Iodomethane	Ave	0.3414	0.4092		12.0	10.0	19.9	50.0
Carbon disulfide	Ave	0.8298	0.8210		9.89	10.0	-1.1	50.0
Acetonitrile	Ave	0.0250	0.0243		29.2	30.0	-2.8	50.0
Methyl acetate	Ave	0.1703	0.1819		10.7	10.0	6.8	50.0
Methylene Chloride	Lin1		0.2985		10.5	10.0	5.0	50.0
tert-Butyl alcohol	Ave	0.0192	0.0176		183	200	-8.4	50.0
Acrylonitrile	Ave	0.0882	0.0872		29.7	30.0	-1.2	50.0
Methyl tert-butyl ether	Ave	0.7903	0.7848		9.93	10.0	-0.7	50.0
trans-1,2-Dichloroethene	Ave	0.2847	0.2848		10.0	10.0	0.0	50.0
Hexane	Ave	0.0640	0.0536		8.37	10.0	-16.3	20.0
1,1-Dichloroethane	Ave	0.4733	0.4838	0.1000	10.2	10.0	2.2	50.0
Vinyl acetate	Ave	0.0566	0.0541		9.56	10.0	-4.4	50.0
2-Butanone	Ave	0.0970	0.0901		18.6	20.0	-7.2	50.0
2,2-Dichloropropane	Ave	0.2808	0.2620		9.33	10.0	-6.7	50.0
cis-1,2-Dichloroethene	Ave	0.3122	0.3099		9.93	10.0	-0.7	50.0
Bromochloromethane	Ave	0.1462	0.1457		9.96	10.0	-0.4	50.0
Tetrahydrofuran	Ave	0.0649	0.0613		9.45	10.0	-5.5	50.0
Chloroform	Ave	0.4817	0.4690		9.74	10.0	-2.6	20.0
1,1,1-Trichloroethane	Ave	0.3730	0.3719		9.97	10.0	-0.3	50.0
Cyclohexane	Ave	0.4268	0.3686		8.64	10.0	-13.6	50.0
1,1-Dichloropropene	Ave	0.3899	0.3719		9.54	10.0	-4.6	50.0
Carbon tetrachloride	Ave	0.3178	0.3138		9.87	10.0	-1.3	50.0
1,2-Dichloroethane	Ave	0.3562	0.3606		10.1	10.0	1.2	50.0
Benzene	Ave	1.183	1.178		9.96	10.0	-0.4	50.0
Trichloroethene	Ave	0.3055	0.3050		9.99	10.0	-0.1	50.0
1,2-Dichloropropane	Ave	0.2795	0.2787		9.97	10.0	-0.3	20.0
Methylcyclohexane	Ave	0.4249	0.3361		7.91	10.0	-20.9	50.0
Dibromomethane	Ave	0.1563	0.1662		10.6	10.0	6.4	50.0
Bromodichloromethane	Ave	0.3538	0.3626		10.2	10.0	2.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1684	0.1622		9.63	10.0	-3.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-47806/22 Calibration Date: 06/19/2012 20:44

Instrument ID: A3UX11 Calib Start Date: 06/19/2012 13:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/19/2012 15:49

Lab File ID: UXJ5170.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.4589	0.4435		9.67	10.0	-3.3	50.0
4-Methyl-2-pentanone	Ave	0.2026	0.1994		19.7	20.0	-1.6	50.0
Toluene	Ave	1.788	1.732		9.68	10.0	-3.2	20.0
trans-1,3-Dichloropropene	Ave	0.5575	0.5338		9.58	10.0	-4.2	50.0
1,1,2-Trichloroethane	Ave	0.3237	0.3315		10.2	10.0	2.4	50.0
1,3-Dichloropropane	Ave	0.5888	0.5821		9.89	10.0	-1.1	50.0
Tetrachloroethene	Ave	0.3358	0.3142		9.36	10.0	-6.4	50.0
2-Hexanone	Ave	0.1826	0.1773		19.4	20.0	-2.9	50.0
Dibromochloromethane	Ave	0.3533	0.3417		9.67	10.0	-3.3	50.0
1,2-Dibromoethane	Ave	0.3304	0.3290		9.95	10.0	-0.5	50.0
Chlorobenzene	Ave	1.086	1.069	0.3000	9.85	10.0	-1.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3588	0.3674		10.2	10.0	2.4	50.0
Ethylbenzene	Ave	0.5952	0.5732		9.63	10.0	-3.7	20.0
m-Xylene & p-Xylene	Ave	0.7317	0.7087		19.4	20.0	-3.1	50.0
o-Xylene	Ave	0.6880	0.6730		9.78	10.0	-2.2	50.0
Styrene	Ave	1.156	1.157		10.0	10.0	0.0	50.0
Bromoform	Ave	0.1762	0.1737	0.1000	9.86	10.0	-1.4	50.0
Isopropylbenzene	Ave	1.653	1.613		9.76	10.0	-2.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7997	0.7568	0.3000	9.46	10.0	-5.4	50.0
Bromobenzene	Ave	1.163	1.150		9.88	10.0	-1.2	50.0
1,2,3-Trichloropropane	Ave	0.2829	0.2828		10.0	10.0	-0.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1379	0.1284		18.6	20.0	-6.9	50.0
n-Propylbenzene	Ave	1.243	1.209		9.73	10.0	-2.7	50.0
2-Chlorotoluene	Ave	1.030	0.9918		9.63	10.0	-3.7	50.0
1,3,5-Trimethylbenzene	Ave	3.290	3.248		9.87	10.0	-1.3	50.0
4-Chlorotoluene	Ave	1.003	0.9464		9.43	10.0	-5.7	50.0
tert-Butylbenzene	Ave	2.820	2.680		9.51	10.0	-4.9	50.0
1,2,4-Trimethylbenzene	Ave	2.979	2.958		9.93	10.0	-0.7	50.0
sec-Butylbenzene	Ave	3.501	3.273		9.35	10.0	-6.5	50.0
1,3-Dichlorobenzene	Ave	1.572	1.492		9.49	10.0	-5.1	50.0
p-Isopropyltoluene	Ave	2.658	2.581		9.71	10.0	-2.9	50.0
1,4-Dichlorobenzene	Ave	1.613	1.567		9.71	10.0	-2.9	50.0
n-Butylbenzene	Ave	2.121	1.923		9.07	10.0	-9.3	50.0
1,2-Dichlorobenzene	Ave	1.511	1.468		9.72	10.0	-2.8	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1479	0.1493		10.1	10.0	0.9	50.0
1,2,4-Trichlorobenzene	Ave	0.9348	0.8561		9.16	10.0	-8.4	50.0
Hexachlorobutadiene	Ave	0.4014	0.3257		8.11	10.0	-18.9	50.0
Naphthalene	Ave	2.428	2.232		9.19	10.0	-8.1	50.0
1,2,3-Trichlorobenzene	Ave	0.8031	0.7733		9.63	10.0	-3.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-47806/22 Calibration Date: 06/19/2012 20:44

Instrument ID: A3UX11 Calib Start Date: 06/19/2012 16:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/19/2012 18:05

Lab File ID: UXJ5170.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.2293	0.2259		9.85	10.0	-1.5	50.0
Diisopropyl ether	Ave	0.2723	0.2676		9.83	10.0	-1.7	50.0
Isobutyl alcohol	Ave	0.0099	0.0082		410	500	-18.0	50.0
Cyclohexanone	Ave	0.0548	0.0193		70.6	200	-64.7*	50.0
1,2,3-Trimethylbenzene	Ave	2.796	2.767		9.90	10.0	-1.0	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: BFB015.D BFB Injection Date: 07/13/2012

Instrument ID: A3UX11 BFB Injection Time: 11:28

Analysis Batch No.: 50744

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.3	
75	30.0 - 60.0 % of mass 95	45.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	74.8	
175	5.0 - 9.0 % of mass 174	4.3	(5.8)1
176	95.0 - 101.0 % of mass 174	72.9	(97.4)1
177	5.0 - 9.0 % of mass 176	4.9	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-50744/2	UXJ5765.D	07/13/2012	11:51
	CCV 240-50744/3	UXJ5766.D	07/13/2012	12:14
	LCS 240-50744/4	UXJ5767.D	07/13/2012	12:36
	MB 240-50744/5	UXJ5768.D	07/13/2012	12:59
	240-13078-A-2 MS	UXJ5771.D	07/13/2012	15:08
	240-13078-D-2 MSD	UXJ5772.D	07/13/2012	15:31
TB-071012	240-13070-1	UXJ5774.D	07/13/2012	16:16

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50744/2 Calibration Date: 07/13/2012 11:51

Instrument ID: A3UX11 Calib Start Date: 06/19/2012 13:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/19/2012 15:49

Lab File ID: UXJ5765.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2193	0.2371		10.8	10.0	8.1	50.0
Chloromethane	Ave	0.3689	0.3354	0.1000	9.09	10.0	-9.1	50.0
Vinyl chloride	Ave	0.3502	0.3401		9.71	10.0	-2.9	20.0
Bromomethane	Ave	0.1107	0.1278		11.5	10.0	15.5	50.0
Chloroethane	Ave	0.1211	0.1140		9.42	10.0	-5.8	50.0
Trichlorofluoromethane	Ave	0.3058	0.2917		9.54	10.0	-4.6	50.0
Acrolein	Ave	0.0370	0.0237		64.1	100	-35.9	50.0
Acetone	Lin1		0.0608		19.8	20.0	-1.0	50.0
1,1-Dichloroethene	Ave	0.2471	0.2343		9.48	10.0	-5.2	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1705	0.1675		9.82	10.0	-1.8	50.0
Iodomethane	Ave	0.3414	0.3137		9.19	10.0	-8.1	50.0
Carbon disulfide	Ave	0.8298	0.7560		9.11	10.0	-8.9	50.0
Acetonitrile	Ave	0.0250	0.0247		99.0	100	-1.0	50.0
Methyl acetate	Ave	0.1703	0.1606		18.9	20.0	-5.7	50.0
Methylene Chloride	Lin1		0.2470		8.55	10.0	-14.5	50.0
tert-Butyl alcohol	Ave	0.0192	0.0160		166	200	-16.8	50.0
Acrylonitrile	Ave	0.0882	0.0853		19.3	20.0	-3.3	50.0
Methyl tert-butyl ether	Ave	0.7903	0.6863		8.68	10.0	-13.2	50.0
trans-1,2-Dichloroethene	Ave	0.2847	0.2604		9.15	10.0	-8.5	50.0
Hexane	Ave	0.0640	0.0619		9.68	10.0	-3.2	20.0
1,1-Dichloroethane	Ave	0.4733	0.4207	0.1000	8.89	10.0	-11.1	50.0
Vinyl acetate	Ave	0.0566	0.0425		7.52	10.0	-24.8	50.0
2-Butanone	Ave	0.0970	0.0886		18.3	20.0	-8.7	50.0
cis-1,2-Dichloroethene	Ave	0.3122	0.2809		9.00	10.0	-10.0	50.0
2,2-Dichloropropane	Ave	0.2808	0.2327		8.29	10.0	-17.1	50.0
Bromochloromethane	Ave	0.1462	0.1375		9.40	10.0	-6.0	50.0
Tetrahydrofuran	Ave	0.0649	0.0687		10.6	10.0	5.9	50.0
Chloroform	Ave	0.4817	0.4178		8.67	10.0	-13.3	20.0
1,1,1-Trichloroethane	Ave	0.3730	0.3212		8.61	10.0	-13.9	50.0
Cyclohexane	Ave	0.4268	0.3959		9.28	10.0	-7.2	50.0
1,1-Dichloropropene	Ave	0.3899	0.3433		8.80	10.0	-12.0	50.0
Carbon tetrachloride	Ave	0.3178	0.2848		8.96	10.0	-10.4	50.0
1,2-Dichloroethane	Ave	0.3562	0.3069		8.62	10.0	-13.8	50.0
Benzene	Ave	1.183	1.051		8.89	10.0	-11.1	50.0
Trichloroethene	Ave	0.3055	0.2830		9.26	10.0	-7.4	50.0
1,2-Dichloropropane	Ave	0.2795	0.2448		8.76	10.0	-12.4	20.0
Methylcyclohexane	Ave	0.4249	0.4039		9.51	10.0	-4.9	50.0
Dibromomethane	Ave	0.1563	0.1449		9.27	10.0	-7.3	50.0
1,4-Dioxane	Ave	0.0026	0.0022		420	500	-16.0	50.0
Bromodichloromethane	Ave	0.3538	0.3113		8.80	10.0	-12.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50744/2 Calibration Date: 07/13/2012 11:51

Instrument ID: A3UX11 Calib Start Date: 06/19/2012 13:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/19/2012 15:49

Lab File ID: UXJ5765.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1684	0.1583		18.8	20.0	-6.0	50.0
cis-1,3-Dichloropropene	Ave	0.4589	0.4138		9.02	10.0	-9.8	50.0
4-Methyl-2-pentanone	Ave	0.2026	0.1805		17.8	20.0	-10.9	50.0
Toluene	Ave	1.788	1.600		8.95	10.0	-10.5	20.0
trans-1,3-Dichloropropene	Ave	0.5575	0.4890		8.77	10.0	-12.3	50.0
Ethyl methacrylate	Ave	0.4851	0.4360		8.99	10.0	-10.1	50.0
1,1,2-Trichloroethane	Ave	0.3237	0.2962		9.15	10.0	-8.5	50.0
1,3-Dichloropropane	Ave	0.5888	0.5276		8.96	10.0	-10.4	50.0
Tetrachloroethene	Ave	0.3358	0.3198		9.53	10.0	-4.7	50.0
2-Hexanone	Ave	0.1826	0.1621		17.8	20.0	-11.2	50.0
Dibromochloromethane	Ave	0.3533	0.3352		9.49	10.0	-5.1	50.0
1,2-Dibromoethane	Ave	0.3304	0.3074		9.30	10.0	-7.0	50.0
Chlorobenzene	Ave	1.086	1.001	0.3000	9.22	10.0	-7.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3588	0.3408		9.50	10.0	-5.0	50.0
Ethylbenzene	Ave	0.5952	0.5283		8.87	10.0	-11.3	20.0
m-Xylene & p-Xylene	Ave	0.7317	0.6884		18.8	20.0	-5.9	50.0
o-Xylene	Ave	0.6880	0.6408		9.31	10.0	-6.9	50.0
Styrene	Ave	1.156	1.104		9.55	10.0	-4.5	50.0
Bromoform	Ave	0.1762	0.1880	0.1000	10.7	10.0	6.7	50.0
Isopropylbenzene	Ave	1.653	1.545		9.34	10.0	-6.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7997	0.7109	0.3000	8.89	10.0	-11.1	50.0
Bromobenzene	Ave	1.163	1.090		9.37	10.0	-6.3	50.0
1,2,3-Trichloropropane	Ave	0.2829	0.2601		9.19	10.0	-8.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1379	0.1799		13.0	10.0	30.4	50.0
n-Propylbenzene	Ave	1.243	1.151		9.26	10.0	-7.4	50.0
2-Chlorotoluene	Ave	1.030	0.9481		9.21	10.0	-7.9	50.0
1,3,5-Trimethylbenzene	Ave	3.290	3.097		9.41	10.0	-5.9	50.0
4-Chlorotoluene	Ave	1.003	0.9724		9.69	10.0	-3.1	50.0
tert-Butylbenzene	Ave	2.820	2.643		9.37	10.0	-6.3	50.0
1,2,4-Trimethylbenzene	Ave	2.979	2.855		9.58	10.0	-4.2	50.0
sec-Butylbenzene	Ave	3.501	3.307		9.44	10.0	-5.6	50.0
1,3-Dichlorobenzene	Ave	1.572	1.354		8.61	10.0	-13.9	50.0
p-Isopropyltoluene	Ave	2.658	2.450		9.21	10.0	-7.9	50.0
1,4-Dichlorobenzene	Ave	1.613	1.401		8.69	10.0	-13.1	50.0
n-Butylbenzene	Ave	2.121	1.745		8.23	10.0	-17.7	50.0
1,2-Dichlorobenzene	Ave	1.511	1.256		8.31	10.0	-16.9	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1479	0.1159		7.83	10.0	-21.7	50.0
1,3,5-Trichlorobenzene	Ave	1.036	0.8806		8.50	10.0	-15.0	50.0
1,2,4-Trichlorobenzene	Ave	0.9348	0.8005		8.56	10.0	-14.4	50.0
Hexachlorobutadiene	Ave	0.4014	0.3282		8.18	10.0	-18.2	50.0
Naphthalene	Ave	2.428	1.660		6.84	10.0	-31.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCVIS 240-50744/2 Calibration Date: 07/13/2012 11:51

Instrument ID: A3UX11 Calib Start Date: 06/19/2012 13:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/19/2012 15:49

Lab File ID: UXJ5765.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.8031	0.6494		8.09	10.0	-19.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2429	0.2393		8.22	8.34	-1.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3070	0.2762		7.50	8.34	-10.0	50.0
Toluene-d8 (Surr)	Ave	1.486	1.486		8.34	8.34	-0.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4352	0.4795		9.19	8.34	10.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50744/3 Calibration Date: 07/13/2012 12:14

Instrument ID: A3UX11 Calib Start Date: 06/19/2012 13:56

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/19/2012 15:49

Lab File ID: UXJ5766.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2429	0.2369		8.14	8.34	-2.5	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3070	0.2602		7.07	8.34	-15.3	50.0
Toluene-d8 (Surr)	Ave	1.486	1.417		7.95	8.34	-4.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4352	0.4644		8.90	8.34	6.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: CCV 240-50744/3 Calibration Date: 07/13/2012 12:14

Instrument ID: A3UX11 Calib Start Date: 06/19/2012 16:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/19/2012 18:05

Lab File ID: UXJ5766.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4307	0.3554		8.25	10.0	-17.5	50.0
Ethyl ether	Ave	0.2293	0.1873		8.17	10.0	-18.3	50.0
3-Chloro-1-propene	Ave	0.1559	0.1251		8.03	10.0	-19.7	50.0
Diisopropyl ether	Ave	0.2723	0.2373		43.6	50.0	-12.9	50.0
2-Chloro-1,3-butadiene	Ave	0.4228	0.3403		8.05	10.0	-19.5	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.8709	0.7163		8.22	10.0	-17.8	50.0
Ethyl acetate	Ave	0.2224	0.1742		15.7	20.0	-21.7	50.0
Propionitrile	Ave	0.0336	0.0289		17.2	20.0	-14.0	50.0
Methacrylonitrile	Ave	0.1516	0.1186		7.82	10.0	-21.8	50.0
Isobutyl alcohol	Ave	0.0099	0.0078		157	200	-21.4	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.8333	0.7077		8.49	10.0	-15.1	50.0
n-Heptane	Ave	0.0613	0.0625		10.2	10.0	1.8	50.0
n-Butanol	Ave	0.0092	0.0068		148	200	-26.1	50.0
Methyl methacrylate	Ave	0.2213	0.1804		8.15	10.0	-18.5	50.0
2-Nitropropane	Ave	0.0609	0.0466		15.3	20.0	-23.5	50.0
Cyclohexanone	Ave	0.0548	0.0509		92.9	100	-7.1	50.0
1,2,3-Trimethylbenzene	Ave	2.796	2.536		9.07	10.0	-9.3	50.0
2-Methylnaphthalene	Ave	0.9791	0.4893		10.0	20.0	-50.0	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: UXJ5768.D Lab Sample ID: MB 240-50744/5

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX11 Date Analyzed: 07/13/2012 12:59

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-50744/4	UXJ5767.D	07/13/2012 12:36
	240-13078-A-2 MS	UXJ5771.D	07/13/2012 15:08
	240-13078-D-2 MSD	UXJ5772.D	07/13/2012 15:31
TB-071012	240-13070-1	UXJ5774.D	07/13/2012 16:16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50744/5

Matrix: Water | Lab File ID: UXJ5768.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/13/2012 12:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50744 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29
67-66-3	Chloroform	1.0	U	1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-13070-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-50744/5

Matrix: Water | Lab File ID: UXJ5768.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 07/13/2012 12:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 50744 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
108-20-3	Diisopropyl ether	10	U	10	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
95-47-6	o-Xylene	1.0	U	1.0	0.14
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
100-42-5	Styrene	1.0	U	1.0	0.11
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
75-65-0	tert-Butyl alcohol	50	U	50	3.9
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50744/5

Matrix: Water Lab File ID: UXJ5768.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/13/2012 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50744 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		63-129
460-00-4	4-Bromofluorobenzene (Surr)	108		66-117
2037-26-5	Toluene-d8 (Surr)	97		74-115
1868-53-7	Dibromofluoromethane (Surr)	97		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-50744/5

Matrix: Water Lab File ID: UXJ5768.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/13/2012 12:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 50744 Units: ug/L

Number TICs Found: 1 TIC Result Total: 2.26

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	
109-99-9	Tetrahydrofuran	4.41	2.26	J

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab File ID: BFB1767.D BFB Injection Date: 02/07/2012

Instrument ID: A3UX12 BFB Injection Time: 19:19

Analysis Batch No.: 33074

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.8	
75	30.0 - 60.0 % of mass 95	43.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	73.0	
175	5.0 - 9.0 % of mass 174	5.8	(7.9)1
176	95.0 - 101.0 % of mass 174	69.6	(95.3)1
177	5.0 - 9.0 % of mass 176	4.7	(6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-33074/4	UX122177.D	02/07/2012	20:19
	STD8260 240-33074/5	UX122178.D	02/07/2012	20:43
	STD8260 240-33074/6	UX122179.D	02/07/2012	21:09
	STD8260 240-33074/7	UX122180.D	02/07/2012	21:34
	STD8260 240-33074/8	UX122181.D	02/07/2012	21:58
	STD8260 240-33074/9	UX122182.D	02/07/2012	22:23
	ICV 240-33074/15	UX122188.D	02/08/2012	00:54

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 33074

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2012 20:19 Calibration End Date: 02/07/2012 22:23 Calibration ID: 6865

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-33074/4	UX122177.D
Level 2	STD8260 240-33074/5	UX122178.D
Level 3	STD8260 240-33074/6	UX122179.D
Level 4	STD8260 240-33074/7	UX122180.D
Level 5	STD8260 240-33074/8	UX122181.D
Level 6	STD8260 240-33074/9	UX122182.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.1630	0.1529	0.1358	0.1607	0.1745	Ave		0.1574				9.1		15.0			
Chloromethane	0.3331 0.2369	0.2670	0.2268	0.2588	0.2564	Ave		0.2632			0.1000	14.0		15.0			
Vinyl chloride	0.3098 0.3082	0.3159	0.2929	0.3237	0.3326	Ave		0.3139				4.4		15.0			
Bromomethane	0.1786 0.1827	0.1761	0.1658	0.1753	0.1861	Ave		0.1774				3.9		15.0			
Chloroethane	0.2010 0.1993	0.1840	0.1891	0.2071	0.2093	Ave		0.1983				5.0		15.0			
Trichlorofluoromethane	0.2797	0.1786	0.2288	0.2770	0.2950	Lin1	-0.135	0.2838							0.9970		0.9900
Acrolein	0.0212	0.0240	0.0195	0.0222	0.0200	Ave		0.0214				8.4		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.2024	0.1932	0.1905	0.1670	0.2135	Ave		0.1933				8.9		15.0			
1,1-Dichloroethene	0.3433 0.3787	0.3698	0.3556	0.3520	0.3988	Ave		0.3664				5.5		15.0			
Acetone	0.0475	0.2237	0.0549	0.0519	0.0513	Lin1	0.3437	0.0450							0.9970		0.9900
Iodomethane	0.3897 0.3584	0.3624	0.3460	0.3536	0.3691	Ave		0.3632				4.2		15.0			
Carbon disulfide	0.7843 0.7808	0.7511	0.7650	0.7581	0.8179	Ave		0.7762				3.1		15.0			
Acetonitrile	0.0240	0.0339	0.0242	0.0256	0.0228	Lin1	0.1042	0.0236							0.9990		0.9900
Methyl acetate	0.1385	0.2115	0.1337	0.1518	0.1334	Lin1	0.1437	0.1367							0.9980		0.9900
Methylene Chloride	0.2923	0.4190	0.3066	0.2974	0.2984	Lin1	0.1289	0.2921							1.0000		0.9900

NT

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 33074

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2012 20:19 Calibration End Date: 02/07/2012 22:23 Calibration ID: 6865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Methyl-2-propanol	0.0216 0.0160	0.0152	0.0137	0.0180	0.0143	Lin1	0.0316	0.0156							0.9930		0.9900
Acrylonitrile	0.1113 0.0710	0.0727	0.0638	0.0726	0.0650	Lin1	0.0276	0.0687							0.9970		0.9900
Methyl tert-butyl ether	0.7371 0.6136	0.5773	0.5542	0.6286	0.5813	Ave		0.6154				11.0		15.0			
trans-1,2-Dichloroethene	0.3008 0.2850	0.2627	0.2877	0.2803	0.2930	Ave		0.2849				4.5		15.0			
Hexane	0.2146 0.1757	0.1787	0.1736	0.1362	0.1803	Ave		0.1765				14.0		15.0			
1,1-Dichloroethane	0.3970 0.3552	0.3508	0.3496	0.3533	0.3608	Ave		0.3611			0.1000	5.0		15.0			
Vinyl acetate	0.0328	0.0280	0.0312	0.0316	0.0324	Ave		0.0312				6.1		15.0			
2,2-Dichloropropane	0.1840 0.1587	0.1536	0.1680	0.1627	0.1647	Ave		0.1653				6.3		15.0			
2-Butanone (MEK)	0.0328 0.0223	0.0223	0.0186	0.0233	0.0205	Lin1	0.0063	0.0216							0.9960		0.9900
cis-1,2-Dichloroethene	0.2728 0.3051	0.3285	0.3115	0.3057	0.3052	Ave		0.3048				5.9		15.0			
Chlorobromomethane	0.2035 0.1724	0.1813	0.1664	0.1942	0.1718	Ave		0.1816				8.0		15.0			
Tetrahydrofuran	0.0510	0.0893	0.0413	0.0578	0.0457	Lin1	0.0338	0.0490							0.9900		0.9900
Chloroform	0.3749 0.3445	0.3595	0.3477	0.3332	0.3419	Ave		0.3503				4.2		15.0			
1,1,1-Trichloroethane	0.2477 0.2369	0.2084	0.2278	0.2184	0.2314	Ave		0.2285				6.0		15.0			
Cyclohexane	0.3370 0.2837	0.3015	0.2702	0.2373	0.2897	Ave		0.2866				12.0		15.0			
1,1-Dichloropropene	0.2557 0.2719	0.2436	0.2650	0.2561	0.2777	Ave		0.2617				4.7		15.0			
Carbon tetrachloride	0.1486 0.1860	0.1560	0.1699	0.1613	0.1823	Ave		0.1673				8.8		15.0			
1,2-Dichloroethane	0.2562 0.2581	0.2642	0.2399	0.2537	0.2537	Ave		0.2543				3.2		15.0			
Benzene	0.9727 0.8870	0.9302	0.8629	0.8552	0.8734	Ave		0.8969				5.1		15.0			
Trichloroethene	0.2160 0.2155	0.2270	0.2071	0.2124	0.2141	Ave		0.2154				3.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 33074

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2012 20:19 Calibration End Date: 02/07/2012 22:23 Calibration ID: 6865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2163 0.1781	0.1847	0.1749	0.1377	0.1852	Ave		0.1795				14.0		15.0			
1,2-Dichloropropane	0.1847 0.2137	0.2262	0.2033	0.2145	0.2137	Ave		0.2093				6.7		15.0			
1,4-Dioxane	0.0021 0.0024	0.0017	0.0020	0.0025	0.0023	Ave		0.0022				13.0		15.0			
Dibromomethane	0.1351 0.1271	0.1251	0.1244	0.1255	0.1242	Ave		0.1269				3.3		15.0			
Dichlorobromomethane	0.2803 0.2601	0.2544	0.2432	0.2538	0.2588	Ave		0.2584				4.7		15.0			
2-Chloroethyl vinyl ether	0.1459 0.1373	0.1221	0.1207	0.1323	0.1290	Ave		0.1312				7.2		15.0			
cis-1,3-Dichloropropene	0.3651 0.3684	0.3460	0.3457	0.3567	0.3661	Ave		0.3580				2.8		15.0			
4-Methyl-2-pentanone (MIBK)	0.2432 0.1588	0.1822	0.1345	0.1651	0.1438	Lin1	0.0681	0.1532							0.9960		0.9900
Toluene	1.2795 1.2309	1.1940	1.2234	1.1698	1.2374	Ave		1.2225				3.1		15.0			
trans-1,3-Dichloropropene	0.4659 0.4363	0.4232	0.4110	0.4202	0.4246	Ave		0.4302				4.5		15.0			
Ethyl methacrylate	0.4091 0.3893	0.3684	0.3489	0.3752	0.3580	Ave		0.3748				5.8		15.0			
1,1,2-Trichloroethane	0.2861 0.2451	0.2476	0.2378	0.2452	0.2383	Ave		0.2500				7.3		15.0			
Tetrachloroethene	0.2942 0.2371	0.2219	0.2230	0.2042	0.2416	Ave		0.2370				13.0		15.0			
1,3-Dichloropropane	0.4622 0.4694	0.4349	0.4555	0.4674	0.4642	Ave		0.4589				2.8		15.0			
2-Hexanone	0.1847 0.1483	0.1753	0.1291	0.1505	0.1342	Ave		0.1537				14.0		15.0			
Chlorodibromomethane	0.2270 0.2541	0.2093	0.2319	0.2424	0.2475	Ave		0.2354				6.9		15.0			
Ethylene Dibromide	0.2824 0.2519	0.2547	0.2523	0.2495	0.2440	Ave		0.2558				5.3		15.0			
Chlorobenzene	0.8558 0.8072	0.8081	0.7929	0.7663	0.8116	Ave		0.8070			0.3000	3.6		15.0			
1,1,1,2-Tetrachloroethane	0.2489 0.2614	0.2620	0.2362	0.2425	0.2588	Ave		0.2517				4.3		15.0			
Ethylbenzene	0.3442 0.3905	0.3377	0.3858	0.3614	0.3893	Ave		0.3681				6.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 33074

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2012 20:19 Calibration End Date: 02/07/2012 22:23 Calibration ID: 6865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.4724 0.5028	0.4770	0.4858	0.4598	0.4949	Ave		0.4821				3.2		15.0			
o-Xylene	0.5224 0.4985	0.4971	0.4996	0.4656	0.4994	Ave		0.4971				3.7		15.0			
Styrene	0.9362 0.9463	0.9496	0.9074	0.8729	0.9485	Ave		0.9268				3.3		15.0			
Bromoform	 0.1626	0.1571	0.1452	0.1532	0.1548	Ave		0.1546			0.1000	4.1		15.0			
Isopropylbenzene	1.0046 1.1487	1.1015	1.1243	1.0267	1.1519	Ave		1.0929				5.8		15.0			
1,1,2,2-Tetrachloroethane	0.9790 0.8175	0.8333	0.7705	0.8157	0.7403	Ave		0.8260			0.3000	10.0		15.0			
Bromobenzene	0.8614 0.7567	0.7407	0.7867	0.7198	0.7534	Ave		0.7698				6.5		15.0			
1,2,3-Trichloropropane	0.2559 0.2610	0.2410	0.2353	0.2608	0.2355	Ave		0.2482				5.0		15.0			
trans-1,4-Dichloro-2-butene	 0.2368	0.2516	0.2198	0.2272	0.2206	Ave		0.2312				5.8		15.0			
N-Propylbenzene	0.6082 0.7027	0.6887	0.7070	0.6213	0.6927	Ave		0.6701				6.5		15.0			
2-Chlorotoluene	0.7388 0.6464	0.5601	0.6604	0.6013	0.6342	Ave		0.6402				9.4		15.0			
1,3,5-Trimethylbenzene	2.2498 2.2431	2.0365	2.2253	1.9629	2.1834	Ave		2.1502				5.6		15.0			
4-Chlorotoluene	0.6971 0.6998	0.6516	0.6946	0.6579	0.6992	Ave		0.6834				3.3		15.0			
tert-Butylbenzene	1.7318 1.8665	1.7590	1.8288	1.6050	1.8294	Ave		1.7701				5.4		15.0			
1,2,4-Trimethylbenzene	2.2814 2.3203	2.2868	2.3104	2.0977	2.2776	Ave		2.2624				3.6		15.0			
sec-Butylbenzene	2.3725 2.7238	2.5627	2.6859	2.3321	2.6793	Ave		2.5594				6.6		15.0			
1,3-Dichlorobenzene	1.3785 1.3089	1.3083	1.3201	1.2398	1.3073	Ave		1.3105				3.4		15.0			
4-Isopropyltoluene	1.9362 2.2936	2.1326	2.2278	1.9853	2.2451	Ave		2.1368				6.9		15.0			
1,4-Dichlorobenzene	1.5718 1.3709	1.3465	1.3980	1.2771	1.3433	Ave		1.3846				7.2		15.0			
n-Butylbenzene	1.8636 2.0225	2.0343	1.9669	1.7509	2.0400	Ave		1.9464				6.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-13070-1 Analy Batch No.: 33074

SDG No.:

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 02/07/2012 20:19 Calibration End Date: 02/07/2012 22:23 Calibration ID: 6865

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.2736 1.2755	1.2404	1.2688	1.1998	1.2484	Ave		1.2511				2.3		15.0			
1,2-Dibromo-3-Chloropropane	0.1355	0.1112	0.1103	0.1312	0.1208	Ave		0.1218				9.4		15.0			
1,3,5-Trichlorobenzene	0.8515 0.8057	0.9239	0.7892	0.7395	0.7851	Ave		0.8158				7.9		15.0			
1,2,4-Trichlorobenzene	0.6778 0.6656	0.6516	0.5777	0.6335	0.6165	Ave		0.6371				5.7		15.0			
Hexachlorobutadiene	0.3902 0.3026	0.3201	0.3000	0.2619	0.2906	Ave		0.3109				14.0		15.0			
Naphthalene	1.6967 1.5465	1.2844	1.2198	1.5495	1.3099	Ave		1.4345				13.0		15.0			
1,2,3-Trichlorobenzene	0.4296 0.4542	0.4027	0.3454	0.4495	0.3853	Ave		0.4111				10.0		15.0			
Dibromofluoromethane (Surr)	0.1924	0.2050	0.1886	0.2238	0.1908	Ave		0.2001				7.3		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2318	0.2346	0.1982	0.2734	0.2236	Ave		0.2323				12.0		15.0			
Toluene-d8 (Surr)	1.0896	1.1248	1.0875	1.2038	1.0652	Ave		1.1142				4.9		15.0			
4-Bromofluorobenzene (Surr)	0.4203	0.4638	0.4337	0.4477	0.4215	Ave		0.4374				4.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-33074/15 Calibration Date: 02/08/2012 00:54

Instrument ID: A3UX12 Calib Start Date: 02/07/2012 20:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2012 22:23

Lab File ID: UX122188.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1574	0.1692		0.0215	0.0200	7.5	50.0
Chloromethane	Ave	0.2632	0.2739	0.1000	0.0208	0.0200	4.1	50.0
Vinyl chloride	Ave	0.3139	0.3135		0.0200	0.0200	-0.1	20.0
Bromomethane	Ave	0.1774	0.1698		0.0191	0.0200	-4.3	50.0
Chloroethane	Ave	0.1983	0.1944		0.0196	0.0200	-2.0	50.0
Trichlorofluoromethane	Lin1		0.2929		0.0211	0.0200	5.5	50.0
Acrolein	Ave	0.0214	0.0384		0.108	0.0600	79.8*	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1933	0.2221		0.0230	0.0200	14.9	50.0
1,1-Dichloroethene	Ave	0.3664	0.4054		0.0221	0.0200	10.6	20.0
Acetone	Lin1		0.0543		0.0406	0.0400	1.5	50.0
Iodomethane	Ave	0.3632	0.3757		0.0207	0.0200	3.4	50.0
Carbon disulfide	Ave	0.7762	0.7965		0.0205	0.0200	2.6	50.0
Acetonitrile	Lin1		0.0256		0.0607	0.0600	1.2	50.0
Methyl acetate	Lin1		0.1372		0.0190	0.0200	-5.0	50.0
Methylene Chloride	Lin1		0.3132		0.0210	0.0200	5.0	50.0
2-Methyl-2-propanol	Lin1		0.0183		0.467	0.400	16.7	50.0
Acrylonitrile	Lin1		0.0765		0.0664	0.0600	10.7	50.0
Methyl tert-butyl ether	Ave	0.6154	0.6332		0.0206	0.0200	2.9	50.0
trans-1,2-Dichloroethene	Ave	0.2849	0.2992		0.0210	0.0200	5.0	50.0
Hexane	Ave	0.1765	0.1810		0.0205	0.0200	2.6	20.0
1,1-Dichloroethane	Ave	0.3611	0.3771	0.1000	0.0209	0.0200	4.4	50.0
Vinyl acetate	Ave	0.0312	0.0542		0.0347	0.0200	73.5*	50.0
2,2-Dichloropropane	Ave	0.1653	0.1655		0.0200	0.0200	0.1	50.0
2-Butanone (MEK)	Lin1		0.0234		0.0429	0.0400	7.3	50.0
cis-1,2-Dichloroethene	Ave	0.3048	0.3122		0.0205	0.0200	2.4	50.0
Chlorobromomethane	Ave	0.1816	0.1748		0.0193	0.0200	-3.7	50.0
Tetrahydrofuran	Lin1		0.0523		0.0207	0.0200	3.5	50.0
Chloroform	Ave	0.3503	0.3651		0.0208	0.0200	4.2	20.0
1,1,1-Trichloroethane	Ave	0.2285	0.2277		0.0199	0.0200	-0.3	50.0
Cyclohexane	Ave	0.2866	0.2753		0.0192	0.0200	-3.9	50.0
1,1-Dichloropropene	Ave	0.2617	0.2731		0.0209	0.0200	4.4	50.0
Carbon tetrachloride	Ave	0.1673	0.1766		0.0211	0.0200	5.5	50.0
1,2-Dichloroethane	Ave	0.2543	0.2648		0.0208	0.0200	4.1	50.0
Benzene	Ave	0.8969	0.8696		0.0194	0.0200	-3.0	50.0
Trichloroethene	Ave	0.2154	0.2144		0.0199	0.0200	-0.4	50.0
Methylcyclohexane	Ave	0.1795	0.1650		0.0184	0.0200	-8.1	50.0
1,2-Dichloropropane	Ave	0.2093	0.2178		0.0208	0.0200	4.0	20.0
Dibromomethane	Ave	0.1269	0.1324		0.0209	0.0200	4.3	50.0
Dichlorobromomethane	Ave	0.2584	0.2544		0.0197	0.0200	-1.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1312	0.1413		0.0215	0.0200	7.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-33074/15 Calibration Date: 02/08/2012 00:54

Instrument ID: A3UX12 Calib Start Date: 02/07/2012 20:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2012 22:23

Lab File ID: UX122188.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.3580	0.3448		0.0193	0.0200	-3.7	50.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.1714		0.0443	0.0400	10.8	50.0
Toluene	Ave	1.223	1.217		0.0199	0.0200	-0.5	20.0
trans-1,3-Dichloropropene	Ave	0.4302	0.4304		0.0200	0.0200	0.0	50.0
1,1,2-Trichloroethane	Ave	0.2500	0.2492		0.0199	0.0200	-0.3	50.0
Tetrachloroethene	Ave	0.2370	0.2279		0.0192	0.0200	-3.8	50.0
1,3-Dichloropropane	Ave	0.4589	0.4792		0.0209	0.0200	4.4	50.0
2-Hexanone	Ave	0.1537	0.1607		0.0418	0.0400	4.5	50.0
Chlorodibromomethane	Ave	0.2354	0.2245		0.0191	0.0200	-4.6	50.0
Ethylene Dibromide	Ave	0.2558	0.2585		0.0202	0.0200	1.1	50.0
Chlorobenzene	Ave	0.8070	0.8029	0.3000	0.0199	0.0200	-0.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2517	0.2443		0.0194	0.0200	-2.9	50.0
Ethylbenzene	Ave	0.3681	0.3810		0.0207	0.0200	3.5	20.0
m-Xylene & p-Xylene	Ave	0.4821	0.4747		0.0394	0.0400	-1.5	50.0
o-Xylene	Ave	0.4971	0.4838		0.0195	0.0200	-2.7	50.0
Styrene	Ave	0.9268	0.9264		0.0200	0.0200	-0.0	50.0
Bromoform	Ave	0.1546	0.1439	0.1000	0.0186	0.0200	-6.9	50.0
Isopropylbenzene	Ave	1.093	1.096		0.0201	0.0200	0.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8260	0.7638	0.3000	0.0185	0.0200	-7.5	50.0
Bromobenzene	Ave	0.7698	0.7017		0.0182	0.0200	-8.8	50.0
1,2,3-Trichloropropane	Ave	0.2482	0.2560		0.0206	0.0200	3.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2312	0.2149		0.0372	0.0400	-7.0	50.0
N-Propylbenzene	Ave	0.6701	0.6308		0.0188	0.0200	-5.9	50.0
2-Chlorotoluene	Ave	0.6402	0.5835		0.0182	0.0200	-8.9	50.0
1,3,5-Trimethylbenzene	Ave	2.150	1.957		0.0182	0.0200	-9.0	50.0
4-Chlorotoluene	Ave	0.6834	0.6460		0.0189	0.0200	-5.5	50.0
tert-Butylbenzene	Ave	1.770	1.626		0.0184	0.0200	-8.1	50.0
1,2,4-Trimethylbenzene	Ave	2.262	2.039		0.0180	0.0200	-9.9	50.0
sec-Butylbenzene	Ave	2.559	2.273		0.0178	0.0200	-11.2	50.0
1,3-Dichlorobenzene	Ave	1.310	1.202		0.0183	0.0200	-8.3	50.0
4-Isopropyltoluene	Ave	2.137	2.018		0.0189	0.0200	-5.6	50.0
1,4-Dichlorobenzene	Ave	1.385	1.257		0.0182	0.0200	-9.2	50.0
n-Butylbenzene	Ave	1.946	1.729		0.0178	0.0200	-11.2	50.0
1,2-Dichlorobenzene	Ave	1.251	1.157		0.0185	0.0200	-7.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1218	0.1240		0.0204	0.0200	1.8	50.0
1,2,4-Trichlorobenzene	Ave	0.6371	0.5481		0.0172	0.0200	-14.0	50.0
Hexachlorobutadiene	Ave	0.3109	0.2588		0.0167	0.0200	-16.7	50.0
Naphthalene	Ave	1.434	1.435		0.0200	0.0200	0.0	50.0
1,2,3-Trichlorobenzene	Ave	0.4111	0.3983		0.0194	0.0200	-3.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2001	0.2190		0.0219	0.0200	9.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2323	0.2433		0.0209	0.0200	4.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-33074/15 Calibration Date: 02/08/2012 00:54

Instrument ID: A3UX12 Calib Start Date: 02/07/2012 20:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/07/2012 22:23

Lab File ID: UX122188.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.114	1.228		0.0221	0.0200	10.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4374	0.4605		0.0211	0.0200	5.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-13070-1

SDG No.:

Lab Sample ID: ICV 240-33074/15 Calibration Date: 02/08/2012 00:54

Instrument ID: A3UX12 Calib Start Date: 02/07/2012 22:48

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 02/08/2012 00:29

Lab File ID: UX122188.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.1573	0.1810		0.0230	0.0200	15.0	50.0
Isopropyl ether	Ave	0.1866	0.1986		0.0213	0.0200	6.4	50.0
Isobutyl alcohol	Ave	0.0058	0.0070		1.20	1.00	19.8	50.0
Cyclohexanone	Ave	0.0258	0.0235		0.365	0.400	-8.8	50.0

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **OCTOBER 2, 2012**

FROM: **EDWARD SEDLMYER** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION- VOC/SVOC/TPH/METALS**
LOCKHEED MARTIN – MSA
SDG 240-14408-1

SAMPLES: 4/Aqueous/VOC/SVOC/PCB/PET

MT-MW09S-082112 MT-MW11S-082112 MT-MW12S-082112
TB-082112

Overview

The sample set for Lockheed Martin – MSA, SDG 240-14408-1 consists of three (3) aqueous environmental samples and one (1) trip blank. The samples were analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), total petroleum hydrocarbons (TPH C6-C10 & TPH C10-C32), total and dissolved metals. The trip blank was analyzed for VOCs only.

The samples were collected by Tetra Tech on August 21, 2012 and analyzed by Test America (North Canton). All analyses were conducted in accordance with SW-846 Methods 8260B, 8270D, 8015C, 6020A, and 7470A analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, internal standard recoveries, ICP interference results, laboratory duplicate results, ICP serial dilution results, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX17. Only non-detected results were reported for tert-butyl alcohol and vinyl acetate and these results were rejected (UR).

Minor

- The following compounds were detected in the organic method blanks at the maximum concentrations indicated below:

Compound	Concentration	Action Level
1,2,3-Trichlorobenzene	0.177 ug/L	0.885 ug/L
TPH (C6-C10)	43.7 ug/L	218.5 ug/L
TPH (C10-C32)	348 ug/L	1,740 ug/L

An action level of 5 times the maximum contaminant concentration was established for 1,2,3-

trichlorobenzene, TPH (C6-C10), and TPH (C10-C32) to evaluate laboratory contamination. Dilution factors and sample aliquots were taken into consideration during the application of all action levels. No action was taken on for 1,2,3-trichlorobenzene because all results were nondetected. All results for TPH (C6-C10) and TPH (C10-C32) were qualified (B) as a result of laboratory blank contamination.

- The VOC continuing calibration percent differences (%Ds) were greater than the quality control limit of 20% and less than 50% for bromomethane, chloroethane, trichlorofluoromethane, 1,1,2-trichlorotrifuloromethane, 2-butanone, 4-methyl-2-pentanone, trans-1,3-dichloropropene, 2-hexanone, 1,2-dibromo-3-chloropropane, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene for instrument A3UX17 on 08/31/12 @ 21:33. Only nondetected results were reported for the aforementioned compounds, except for naphthalene, in the affected samples. No action was taken on the nondetected results. The positive naphthalene result in sample MT-MW12S-082112 was qualified as estimated (J).

- The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Barium[(1)]	0.678 ug/L	3.39 ug/L
Copper[(1)]	0.514 ug/L	2.57 ug/L
Molybdenum[(2)]	1.08 ug/L	5.4 ug/L
Thallium[(2)]	0.376 ug/L	1.88 ug/L
Zinc[(1)]	6.90 ug/L	34.5 ug/L

(1) Maximum concentration present in a method blank affecting all samples.
(2) Maximum concentration present in a preparation blank affecting all samples.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level reported for copper, molybdenum, thallium and zinc were qualified (B) as a result of laboratory blank contamination.

The CRDL percent recovery for cadmium and copper were > 110% quality control limit affecting all samples. Positive results < 2X CRDL for cadmium and copper were qualified as estimated, (J), as a result of conflicting noncompliances or qualified (K) as biased high.

- Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

Notes

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for ethyl-tert-butyl ether, tert-amyl-methyl-ether, and 1,2,3-trimethylbenzene for instrument A3UX17 on 08/31/12 @ 21:56. No action was taken on this basis because only nondetected results were reported for the aforementioned compounds in the affected samples.

The VOC MS/MSD associated with batch 56479 had zero percent recovery for 2-chloroethyl vinyl ether and a low percent recovery for tert-butyl alcohol in the MS. No action was taken on this basis because the batch MS/MSD was not performed on a Tetra Tech sample.

The laboratory control sample (LCS) associated with batch 55629 had a percent recovery greater than the quality control limit for benzaldehyde. No action was taken on this basis because only nondetects were reported for benzaldehyde.

The CRDL percent recoveries for nickel, silver, and zinc were > 110% quality control limit affecting all

samples. However, no validation actions were required as all sample results were either > 2X CRDL or nondetects

Naphthalene and hexachlorobutadiene were reported in both the VOC and SVOC analytical fractions. No validation action was taken on this basis.

Executive Summary

Laboratory Performance: Two VOC compounds had RRF noncompliances resulting in the rejection of data. Naphthalene was qualified as estimated in one sample due to a percent difference calibration noncompliance. Blank contamination for the TPH (C6-C10), TPH (C10-C32), total and dissolved metals fraction resulted in the qualification of data. The CRDL percent recoveries for several analytes were outside the 90-110% quality control limits.

Other Factors Affecting Data Quality: Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994) and Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993). The text of this report has been formulated to address only those problem areas affecting data quality.

for

Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04054	NSAMPLE	MT-MW09S-082112			MT-MW11S-082112			MT-MW12S-082112			TB-082112		
SDG: 240-14408-1	LAB_ID	240-14408-2			240-14408-3			240-14408-4			240-14408-1		
FRACTION: OV	SAMP_DATE	8/21/2012			8/21/2012			8/21/2012			8/21/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE		0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE		0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE		0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE		0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE		0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE		0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE		0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE		0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE		0.57	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER		0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE		0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE		0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE		0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE		0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE		0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE		1.9	J	P	2.8	J	P	1.1	U		1.1	U	
BENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE		0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM		0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE		0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 04054	NSAMPLE	MT-MW09S-082112			MT-MW11S-082112			MT-MW12S-082112			TB-082112		
SDG: 240-14408-1	LAB_ID	240-14408-2			240-14408-3			240-14408-4			240-14408-1		
FRACTION: OV	SAMP_DATE	8/21/2012			8/21/2012			8/21/2012			8/21/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		2.9			0.46	J	P	0.13	U		0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.34	J	P	0.13	U	
CHLOROBENZENE		0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE		0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE		0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM		0.16	U		0.36	J	P	11			0.16	U	
CHLOROMETHANE		0.3	U		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.17	U		0.17	U		0.17	U		0.17	U	
CIS-1,3-DICHLOROPROPENE		0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE		0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE		0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER		1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER		0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE		0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE		0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES		0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER		0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE		0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE		0.24	U		0.24	U		0.54	J	CP	0.24	U	
N-BUTYLBENZENE		0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE		0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE		0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
SILANOL, TRIMETHYL-											1	R	Z2
STYRENE		0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER		0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE		0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL		3.9	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE		0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE		0.13	U		0.13	U		0.13	U		0.13	U	
TOTAL XYLENES		0.28	U		0.28	U		0.28	U		0.28	U	
TRANS-1,2-DICHLOROETHENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE		0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE		0.17	U		0.17	U		0.17	U		0.17	U	

PROJ_NO: 04054	NSAMPLE	MT-MW09S-082112			MT-MW11S-082112			MT-MW12S-082112			TB-082112		
SDG: 240-14408-1	LAB_ID	240-14408-2			240-14408-3			240-14408-4			240-14408-1		
FRACTION: OV	SAMP_DATE	8/21/2012			8/21/2012			8/21/2012			8/21/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 04054	NSAMPLE	MT-MW09S-082112			MT-MW11S-082112			MT-MW12S-082112		
SDG: 240-14408-1	LAB_ID	240-14408-2			240-14408-3			240-14408-4		
FRACTION: OS	SAMP_DATE	8/21/2012			8/21/2012			8/21/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		0.76	U		0.76	U		0.76	U	
1,4-DIOXANE		0.47	U		0.47	U		0.47	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		0.38	U		0.38	U		0.38	U	
2,4,5-TRICHLOROPHENOL		0.29	U		0.29	U		0.29	U	
2,4,6-TRICHLOROPHENOL		0.76	U		0.76	U		0.76	U	
2,4-DICHLOROPHENOL		0.76	U		0.76	U		0.76	U	
2,4-DIMETHYLPHENOL		0.76	U		0.76	U		0.76	U	
2,4-DINITROPHENOL		2.3	U		2.3	U		2.3	U	
2,4-DINITROTOLUENE		0.26	U		0.26	U		0.26	U	
2,6-DINITROTOLUENE		0.76	U		0.76	U		0.76	U	
2-CHLORONAPHTHALENE		0.095	U		0.095	U		0.095	U	
2-CHLOROPHENOL		0.28	U		0.28	U		0.28	U	
2-METHYLNAPHTHALENE		0.095	U		0.095	U		0.095	U	
2-METHYLPHENOL		0.76	U		0.76	U		0.76	U	
2-NITROANILINE		0.76	U		0.76	U		0.76	U	
2-NITROPHENOL		0.27	U		0.27	U		0.27	U	
3&4-METHYLPHENOL		0.71	U		0.71	U		0.71	U	
3,3'-DICHLOROBENZIDINE		0.35	U		0.35	U		0.35	U	
3-NITROANILINE		0.27	U		0.27	U		0.27	U	
4,6-DINITRO-2-METHYLPHENOL		2.3	U		2.3	U		2.3	U	
4-BROMOPHENYL PHENYL ETHER		0.76	U		0.76	U		0.76	U	
4-CHLORO-3-METHYLPHENOL		0.76	U		0.76	U		0.76	U	
4-CHLOROANILINE		0.76	U		0.76	U		0.76	U	
4-CHLOROPHENYL PHENYL ETHER		0.29	U		0.29	U		0.29	U	
4-NITROANILINE		0.76	U		0.76	U		0.76	U	
4-NITROPHENOL		2.3	U		2.3	U		2.3	U	
ACENAPHTHENE		0.095	U		0.095	U		0.095	U	
ACENAPHTHYLENE		0.095	U		0.095	U		0.095	U	
ACETOPHENONE		0.32	U		0.32	U		0.32	U	
ANTHRACENE		0.095	U		0.095	U		0.095	U	
ATRAZINE		0.32	U		0.32	U		0.32	U	
BENZALDEHYDE		0.37	U		0.37	U		0.37	U	
BENZO(A)ANTHRACENE		0.095	U		0.095	U		0.095	U	
BENZO(A)PYRENE		0.095	U		0.095	U		0.095	U	
BENZO(B)FLUORANTHENE		0.095	U		0.095	U		0.095	U	

PROJ_NO: 04054	NSAMPLE	MT-MW09S-082112			MT-MW11S-082112			MT-MW12S-082112		
SDG: 240-14408-1	LAB_ID	240-14408-2			240-14408-3			240-14408-4		
FRACTION: OS	SAMP_DATE	8/21/2012			8/21/2012			8/21/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		0.095	U		0.095	U		0.095	U	
BENZO(K)FLUORANTHENE		0.095	U		0.095	U		0.095	U	
BIS(2-CHLOROETHOXY)METHANE		0.3	U		0.3	U		0.3	U	
BIS(2-CHLOROETHYL)ETHER		0.095	U		0.095	U		0.095	U	
BIS(2-ETHYLHEXYL)PHTHALATE		1.5	J	P	1.5	J	P	1.1	J	P
BUTYL BENZYL PHTHALATE		0.76	U		0.76	U		0.76	U	
CAPROLACTAM		1.7	J	P	0.76	U		0.76	U	
CARBAZOLE		0.27	U		0.27	U		0.27	U	
CHRYSENE		0.095	U		0.095	U		0.095	U	
DIBENZO(A,H)ANTHRACENE		0.095	U		0.095	U		0.095	U	
DIBENZOFURAN		0.095	U		0.095	U		0.095	U	
DIETHYL PHTHALATE		0.57	U		0.57	U		0.57	U	
DIMETHYL PHTHALATE		0.28	U		0.28	U		0.28	U	
DI-N-BUTYL PHTHALATE		0.64	U		0.64	U		0.64	U	
DI-N-OCTYL PHTHALATE		0.76	U		0.76	U		0.76	U	
FLUORANTHENE		0.095	U		0.095	U		0.095	U	
FLUORENE		0.095	U		0.095	U		0.095	U	
HEXACHLOROBENZENE		0.095	U		0.095	U		0.095	U	
HEXACHLOROBUTADIENE		0.26	U		0.26	U		0.26	U	
HEXACHLOROCYCLOPENTADIENE		0.76	U		0.76	U		0.76	U	
HEXACHLOROETHANE		0.76	U		0.76	U		0.76	U	
INDENO(1,2,3-CD)PYRENE		0.095	U		0.095	U		0.095	U	
ISOPHORONE		0.26	U		0.26	U		0.26	U	
NAPHTHALENE		0.095	U		0.095	U		0.095	U	
NITROBENZENE		0.038	U		0.038	U		0.038	U	
N-NITROSODIMETHYLAMINE		0.3	U		0.3	U		0.3	U	
N-NITROSO-DI-N-PROPYLAMINE		0.76	U		0.76	U		0.76	U	
N-NITROSODIPHENYLAMINE		0.3	U		0.3	U		0.3	U	
PENTACHLOROPHENOL		2.3	U		2.3	U		2.3	U	
PHENANTHRENE		0.095	U		0.095	U		0.095	U	
PHENOL		0.57	U		0.57	U		0.57	U	
PYRENE		0.095	U		0.095	U		0.095	U	

PROJ_NO: 04054	NSAMPLE	MT-MW09S-082112			MT-MW11S-082112			MT-MW12S-082112		
SDG: 240-14408-1	LAB_ID	240-14408-2			240-14408-3			240-14408-4		
FRACTION: PET	SAMP_DATE	8/21/2012			8/21/2012			8/21/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		56	B	A	61	B	A	64	B	A
TPH (C10-C32)		470	B	A	410	B	A	240	B	A

PROJ_NO: 04054	NSAMPLE	MT-MW09S-082112			MT-MW11S-082112			MT-MW12S-082112		
SDG: 240-14408-1	LAB_ID	240-14408-2			240-14408-3			240-14408-4		
FRACTION: M	SAMP_DATE	8/21/2012			8/21/2012			8/21/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		1.9	J	P	1.3	J	P	0.49	J	P
ARSENIC		0.6	J	P	1.2	J	P	0.75	J	P
BARIUM		59			120			100		
BERYLLIUM		1.8			0.44	J	P	4.9		
CADMIUM		0.13	U		0.13	U		0.75	J	CP
CHROMIUM		1.8	J	P	21			1.2	J	P
COBALT		7.6			86			390		
COPPER		2.2	B	A	2.8	K	C	12		
LEAD		0.79	J	P	0.76	J	P	0.54	J	P
MERCURY		0.12	U		0.12	U		0.12	J	P
MOLYBDENUM		1.9	B	A	3.9	B	A	1.2	B	A
NICKEL		12			140			690		
SELENIUM		0.62	J	P	0.57	U		0.79	J	P
SILVER		0.08	U		0.08	U		0.08	U	
THALLIUM		0.57	B	A	0.37	B	A	0.38	B	A
VANADIUM		0.84	J	P	2.6	J	P	0.87	J	P
ZINC		43			160			670		

PROJ_NO: 04054	NSAMPLE	MT-MW09S-082112			MT-MW11S-082112			MT-MW12S-082112		
SDG: 240-14408-1	LAB_ID	240-14408-2			240-14408-3			240-14408-4		
FRACTION: MF	SAMP_DATE	8/21/2012			8/21/2012			8/21/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		3			1.1	J	P	0.28	J	P
ARSENIC		0.52	J	P	0.74	J	P	0.4	U	
BARIUM		47			110			110		
BERYLLIUM		1.7			0.2	U		1.9		
CADMIUM		0.13	U		0.13	U		0.42	J	CP
CHROMIUM		0.71	U		0.71	U		0.71	U	
COBALT		7.5			54			400		
COPPER		0.41	B	A	0.39	B	A	0.31	B	A
LEAD		0.18	U		0.18	U		0.18	U	
MERCURY		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		2.5	B	A	4.2	B	A	0.97	B	A
NICKEL		12			83			680		
SELENIUM		0.57	U		0.57	U		0.57	U	
SILVER		0.08	U		0.08	U		0.08	U	
THALLIUM		0.44	B	A	0.3	B	A	0.33	B	A
VANADIUM		0.44	U		0.89	J	P	0.44	U	
ZINC		43			11	B	A	580		

Appendix B

Results as Reported by the Laboratory

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR945.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2325			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2325				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.23	1.0
1,1,1-Trichloroethane	1.0	U	0.22	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.28	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
1,1-Dichloroethene	1.0	U	0.19	1.0
1,1-Dichloropropene	1.0	U	0.13	1.0
1,2,3-Trichlorobenzene	1.0	U	0.17	1.0
1,2,3-Trichloropropane	1.0	U	0.43	1.0
1,2,3-Trimethylbenzene	5.0	U	0.0059	5.0
1,2,4-Trichlorobenzene	1.0	U	0.15	1.0
1,2,4-Trimethylbenzene	1.0	U	0.12	1.0
1,2-Dibromo-3-Chloropropane	2.0	U	0.67	2.0
1,2-Dichlorobenzene	1.0	U	0.13	1.0
1,2-Dichloroethane	1.0	U	0.22	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
1,3-Dichlorobenzene	1.0	U	0.14	1.0
1,3-Dichloropropane	1.0	U	0.16	1.0
1,4-Dichlorobenzene	1.0	U	0.13	1.0
2,2-Dichloropropane	1.0	U	0.13	1.0
2-Chloroethyl vinyl ether	10	U	0.99	10
2-Chlorotoluene	1.0	U	0.11	1.0
2-Hexanone	10	U	0.41	10
Bromobenzene	1.0	U	0.13	1.0
Bromochloromethane	1.0	U	0.29	1.0
4-Chlorotoluene	1.0	U	0.18	1.0
p-Isopropyltoluene	1.0	U	0.12	1.0
Acetone	1.9	J	1.1	10
Benzene	1.0	U	0.13	1.0
Bromoform	1.0	U	0.64	1.0
Bromomethane	1.0	U	0.41	1.0
Carbon disulfide	2.9		0.13	1.0
Carbon tetrachloride	1.0	U	0.13	1.0
Chlorobenzene	1.0	U	0.15	1.0
Chloroethane	1.0	U	0.29	1.0
Chloroform	1.0	U	0.16	1.0
Chloromethane	1.0	U	0.30	1.0
cis-1,2-Dichloroethene	1.0	U	0.17	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
Hexachlorobutadiene	1.0	U	0.30	1.0
Dibromomethane	1.0	U	0.28	1.0
Bromodichloromethane	1.0	U	0.15	1.0
Dichlorodifluoromethane	1.0	U	0.31	1.0
Ethylbenzene	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.24	1.0
Diisopropyl ether	10	U	1.5	10

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR945.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2325			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2325				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.24	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.12	1.0
Isopropylbenzene	1.0	U	0.13	1.0
n-Propylbenzene	1.0	U	0.14	1.0
2-Butanone	10	U	0.57	10
4-Methyl-2-pentanone	10	U	0.32	10
sec-Butylbenzene	1.0	U	0.13	1.0
Methyl tert-butyl ether	5.0	U	0.17	5.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.067	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.14	1.0
Styrene	1.0	U	0.11	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.11	5.0
tert-Butylbenzene	1.0	U	0.13	1.0
Tetrachloroethene	1.0	U	0.29	1.0
Toluene	1.0	U	0.13	1.0
trans-1,2-Dichloroethene	1.0	U	0.19	1.0
trans-1,3-Dichloropropene	1.0	U	0.19	1.0
Trichloroethene	1.0	U	0.17	1.0
Trichlorofluoromethane	1.0	U	0.21	1.0
Vinyl acetate	2.0	U	0.19	2.0
Vinyl chloride	1.0	U	0.22	1.0
tert-Butyl alcohol	50	U	3.9	50
Xylenes, Total	2.0	U	0.28	2.0
Dibromochloromethane	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		63 - 129
4-Bromofluorobenzene (Surr)	82		66 - 117
Toluene-d8 (Surr)	84		74 - 115
Dibromofluoromethane (Surr)	103		75 - 121

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR945.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2325			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2325				

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR946.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2347			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2347				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.23	1.0
1,1,1-Trichloroethane	1.0	U	0.22	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.28	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
1,1-Dichloroethene	1.0	U	0.19	1.0
1,1-Dichloropropene	1.0	U	0.13	1.0
1,2,3-Trichlorobenzene	1.0	U	0.17	1.0
1,2,3-Trichloropropane	1.0	U	0.43	1.0
1,2,3-Trimethylbenzene	5.0	U	0.0059	5.0
1,2,4-Trichlorobenzene	1.0	U	0.15	1.0
1,2,4-Trimethylbenzene	1.0	U	0.12	1.0
1,2-Dibromo-3-Chloropropane	2.0	U	0.67	2.0
1,2-Dichlorobenzene	1.0	U	0.13	1.0
1,2-Dichloroethane	1.0	U	0.22	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
1,3-Dichlorobenzene	1.0	U	0.14	1.0
1,3-Dichloropropane	1.0	U	0.16	1.0
1,4-Dichlorobenzene	1.0	U	0.13	1.0
2,2-Dichloropropane	1.0	U	0.13	1.0
2-Chloroethyl vinyl ether	10	U	0.99	10
2-Chlorotoluene	1.0	U	0.11	1.0
2-Hexanone	10	U	0.41	10
Bromobenzene	1.0	U	0.13	1.0
Bromochloromethane	1.0	U	0.29	1.0
4-Chlorotoluene	1.0	U	0.18	1.0
p-Isopropyltoluene	1.0	U	0.12	1.0
Acetone	2.8	J	1.1	10
Benzene	1.0	U	0.13	1.0
Bromoform	1.0	U	0.64	1.0
Bromomethane	1.0	U	0.41	1.0
Carbon disulfide	0.46	J	0.13	1.0
Carbon tetrachloride	1.0	U	0.13	1.0
Chlorobenzene	1.0	U	0.15	1.0
Chloroethane	1.0	U	0.29	1.0
Chloroform	0.36	J	0.16	1.0
Chloromethane	1.0	U	0.30	1.0
cis-1,2-Dichloroethene	1.0	U	0.17	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
Hexachlorobutadiene	1.0	U	0.30	1.0
Dibromomethane	1.0	U	0.28	1.0
Bromodichloromethane	1.0	U	0.15	1.0
Dichlorodifluoromethane	1.0	U	0.31	1.0
Ethylbenzene	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.24	1.0
Diisopropyl ether	10	U	1.5	10

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR946.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2347			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2347				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.24	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.12	1.0
Isopropylbenzene	1.0	U	0.13	1.0
n-Propylbenzene	1.0	U	0.14	1.0
2-Butanone	10	U	0.57	10
4-Methyl-2-pentanone	10	U	0.32	10
sec-Butylbenzene	1.0	U	0.13	1.0
Methyl tert-butyl ether	5.0	U	0.17	5.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.067	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.14	1.0
Styrene	1.0	U	0.11	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.11	5.0
tert-Butylbenzene	1.0	U	0.13	1.0
Tetrachloroethene	1.0	U	0.29	1.0
Toluene	1.0	U	0.13	1.0
trans-1,2-Dichloroethene	1.0	U	0.19	1.0
trans-1,3-Dichloropropene	1.0	U	0.19	1.0
Trichloroethene	1.0	U	0.17	1.0
Trichlorofluoromethane	1.0	U	0.21	1.0
Vinyl acetate	2.0	U	0.19	2.0
Vinyl chloride	1.0	U	0.22	1.0
tert-Butyl alcohol	50	U	3.9	50
Xylenes, Total	2.0	U	0.28	2.0
Dibromochloromethane	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		63 - 129
4-Bromofluorobenzene (Surr)	90		66 - 117
Toluene-d8 (Surr)	91		74 - 115
Dibromofluoromethane (Surr)	112		75 - 121

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR946.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2347			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2347				

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR947.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0009			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0009				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.23	1.0
1,1,1-Trichloroethane	1.0	U	0.22	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.28	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
1,1-Dichloroethene	1.0	U	0.19	1.0
1,1-Dichloropropene	1.0	U	0.13	1.0
1,2,3-Trichlorobenzene	1.0	U	0.17	1.0
1,2,3-Trichloropropane	1.0	U	0.43	1.0
1,2,3-Trimethylbenzene	5.0	U	0.0059	5.0
1,2,4-Trichlorobenzene	1.0	U	0.15	1.0
1,2,4-Trimethylbenzene	1.0	U	0.12	1.0
1,2-Dibromo-3-Chloropropane	2.0	U	0.67	2.0
1,2-Dichlorobenzene	1.0	U	0.13	1.0
1,2-Dichloroethane	1.0	U	0.22	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
1,3-Dichlorobenzene	1.0	U	0.14	1.0
1,3-Dichloropropane	1.0	U	0.16	1.0
1,4-Dichlorobenzene	1.0	U	0.13	1.0
2,2-Dichloropropane	1.0	U	0.13	1.0
2-Chloroethyl vinyl ether	10	U	0.99	10
2-Chlorotoluene	1.0	U	0.11	1.0
2-Hexanone	10	U	0.41	10
Bromobenzene	1.0	U	0.13	1.0
Bromochloromethane	1.0	U	0.29	1.0
4-Chlorotoluene	1.0	U	0.18	1.0
p-Isopropyltoluene	1.0	U	0.12	1.0
Acetone	10	U	1.1	10
Benzene	1.0	U	0.13	1.0
Bromoform	1.0	U	0.64	1.0
Bromomethane	1.0	U	0.41	1.0
Carbon disulfide	1.0	U	0.13	1.0
Carbon tetrachloride	0.34	J	0.13	1.0
Chlorobenzene	1.0	U	0.15	1.0
Chloroethane	1.0	U	0.29	1.0
Chloroform	11		0.16	1.0
Chloromethane	1.0	U	0.30	1.0
cis-1,2-Dichloroethene	1.0	U	0.17	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
Hexachlorobutadiene	1.0	U	0.30	1.0
Dibromomethane	1.0	U	0.28	1.0
Bromodichloromethane	1.0	U	0.15	1.0
Dichlorodifluoromethane	1.0	U	0.31	1.0
Ethylbenzene	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.24	1.0
Diisopropyl ether	10	U	1.5	10

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR947.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0009			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0009				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	0.54	J	0.24	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.12	1.0
Isopropylbenzene	1.0	U	0.13	1.0
n-Propylbenzene	1.0	U	0.14	1.0
2-Butanone	10	U	0.57	10
4-Methyl-2-pentanone	10	U	0.32	10
sec-Butylbenzene	1.0	U	0.13	1.0
Methyl tert-butyl ether	5.0	U	0.17	5.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.067	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.14	1.0
Styrene	1.0	U	0.11	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.11	5.0
tert-Butylbenzene	1.0	U	0.13	1.0
Tetrachloroethene	1.0	U	0.29	1.0
Toluene	1.0	U	0.13	1.0
trans-1,2-Dichloroethene	1.0	U	0.19	1.0
trans-1,3-Dichloropropene	1.0	U	0.19	1.0
Trichloroethene	1.0	U	0.17	1.0
Trichlorofluoromethane	1.0	U	0.21	1.0
Vinyl acetate	2.0	U	0.19	2.0
Vinyl chloride	1.0	U	0.22	1.0
tert-Butyl alcohol	50	U	3.9	50
Xylenes, Total	2.0	U	0.28	2.0
Dibromochloromethane	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		63 - 129
4-Bromofluorobenzene (Surr)	83		66 - 117
Toluene-d8 (Surr)	84		74 - 115
Dibromofluoromethane (Surr)	107		75 - 121

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR947.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0009			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0009				

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
	Tentatively Identified Compound		None	

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **TB-082112**

Lab Sample ID: 240-14408-1TB
Client Matrix: Water

Date Sampled: 08/21/2012 0000
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR944.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2302			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2302				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.23	1.0
1,1,1-Trichloroethane	1.0	U	0.22	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.28	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
1,1-Dichloroethene	1.0	U	0.19	1.0
1,1-Dichloropropene	1.0	U	0.13	1.0
1,2,3-Trichlorobenzene	1.0	U	0.17	1.0
1,2,3-Trichloropropane	1.0	U	0.43	1.0
1,2,3-Trimethylbenzene	5.0	U	0.0059	5.0
1,2,4-Trichlorobenzene	1.0	U	0.15	1.0
1,2,4-Trimethylbenzene	1.0	U	0.12	1.0
1,2-Dibromo-3-Chloropropane	2.0	U	0.67	2.0
1,2-Dichlorobenzene	1.0	U	0.13	1.0
1,2-Dichloroethane	1.0	U	0.22	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
1,3-Dichlorobenzene	1.0	U	0.14	1.0
1,3-Dichloropropane	1.0	U	0.16	1.0
1,4-Dichlorobenzene	1.0	U	0.13	1.0
2,2-Dichloropropane	1.0	U	0.13	1.0
2-Chloroethyl vinyl ether	10	U	0.99	10
2-Chlorotoluene	1.0	U	0.11	1.0
2-Hexanone	10	U	0.41	10
Bromobenzene	1.0	U	0.13	1.0
Bromochloromethane	1.0	U	0.29	1.0
4-Chlorotoluene	1.0	U	0.18	1.0
p-Isopropyltoluene	1.0	U	0.12	1.0
Acetone	10	U	1.1	10
Benzene	1.0	U	0.13	1.0
Bromoform	1.0	U	0.64	1.0
Bromomethane	1.0	U	0.41	1.0
Carbon disulfide	1.0	U	0.13	1.0
Carbon tetrachloride	1.0	U	0.13	1.0
Chlorobenzene	1.0	U	0.15	1.0
Chloroethane	1.0	U	0.29	1.0
Chloroform	1.0	U	0.16	1.0
Chloromethane	1.0	U	0.30	1.0
cis-1,2-Dichloroethene	1.0	U	0.17	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
Hexachlorobutadiene	1.0	U	0.30	1.0
Dibromomethane	1.0	U	0.28	1.0
Bromodichloromethane	1.0	U	0.15	1.0
Dichlorodifluoromethane	1.0	U	0.31	1.0
Ethylbenzene	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.24	1.0
Diisopropyl ether	10	U	1.5	10

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **TB-082112**

Lab Sample ID: 240-14408-1TB

Client Matrix: Water

Date Sampled: 08/21/2012 0000

Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR944.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2302			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2302				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	1.0	U	0.24	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.12	1.0
Isopropylbenzene	1.0	U	0.13	1.0
n-Propylbenzene	1.0	U	0.14	1.0
2-Butanone	10	U	0.57	10
4-Methyl-2-pentanone	10	U	0.32	10
sec-Butylbenzene	1.0	U	0.13	1.0
Methyl tert-butyl ether	5.0	U	0.17	5.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.067	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.14	1.0
Styrene	1.0	U	0.11	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.11	5.0
tert-Butylbenzene	1.0	U	0.13	1.0
Tetrachloroethene	1.0	U	0.29	1.0
Toluene	1.0	U	0.13	1.0
trans-1,2-Dichloroethene	1.0	U	0.19	1.0
trans-1,3-Dichloropropene	1.0	U	0.19	1.0
Trichloroethene	1.0	U	0.17	1.0
Trichlorofluoromethane	1.0	U	0.21	1.0
Vinyl acetate	2.0	U	0.19	2.0
Vinyl chloride	1.0	U	0.22	1.0
tert-Butyl alcohol	50	U	3.9	50
Xylenes, Total	2.0	U	0.28	2.0
Dibromochloromethane	1.0	U	0.18	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		63 - 129
4-Bromofluorobenzene (Surr)	82		66 - 117
Toluene-d8 (Surr)	84		74 - 115
Dibromofluoromethane (Surr)	102		75 - 121

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **TB-082112**

Lab Sample ID: 240-14408-1TB
Client Matrix: Water

Date Sampled: 08/21/2012 0000
Date Received: 08/22/2012 0805

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	UXR944.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2302			Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2302				

Tentatively Identified Compounds **Number TIC's Found:** **1**

Cas Number	Analyte	RT	Est. Result (ug/L)	Qualifier
1066-40-6	Silanol, trimethyl-	4.68	1.0	T J N

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Prep Method:	3520C	Prep Batch:	240-55629	Lab File ID:	20906024.D
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Analysis Date:	09/06/2012 1852			Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	0.95	U	0.76	0.95
1,4-Dioxane	0.95	U	0.47	0.95
2,4,6-Trichlorophenol	4.8	U	0.76	4.8
2,4,5-Trichlorophenol	4.8	U	0.29	4.8
2,4-Dichlorophenol	1.9	U	0.76	1.9
2,4-Dimethylphenol	1.9	U	0.76	1.9
2,4-Dinitrophenol	4.8	U	2.3	4.8
2,4-Dinitrotoluene	4.8	U	0.26	4.8
2-Chloronaphthalene	0.95	U	0.095	0.95
2-Chlorophenol	0.95	U	0.28	0.95
2-Methylnaphthalene	0.19	U	0.095	0.19
2-Methylphenol	0.95	U	0.76	0.95
2-Nitroaniline	1.9	U	0.76	1.9
2-Nitrophenol	1.9	U	0.27	1.9
3 & 4 Methylphenol	1.9	U	0.71	1.9
3,3'-Dichlorobenzidine	4.8	U	0.35	4.8
3-Nitroaniline	1.9	U	0.27	1.9
4,6-Dinitro-2-methylphenol	4.8	U	2.3	4.8
4-Bromophenyl phenyl ether	1.9	U	0.76	1.9
4-Chloro-3-methylphenol	1.9	U	0.76	1.9
4-Chloroaniline	1.9	U	0.76	1.9
4-Chlorophenyl phenyl ether	1.9	U	0.29	1.9
4-Nitroaniline	1.9	U	0.76	1.9
Acenaphthene	0.19	U	0.095	0.19
Acenaphthylene	0.19	U	0.095	0.19
Acetophenone	0.95	U	0.32	0.95
Anthracene	0.19	U	0.095	0.19
Atrazine	0.95	U	0.32	0.95
Benzaldehyde	0.95	U *	0.37	0.95
Benzo[a]anthracene	0.19	U	0.095	0.19
Benzo[a]pyrene	0.19	U	0.095	0.19
Benzo[b]fluoranthene	0.19	U	0.095	0.19
Benzo[g,h,i]perylene	0.19	U	0.095	0.19
Benzo[k]fluoranthene	0.19	U	0.095	0.19
Bis(2-chloroethoxy)methane	0.95	U	0.30	0.95
Bis(2-chloroethyl)ether	0.95	U	0.095	0.95
Bis(2-ethylhexyl) phthalate	1.5	J	0.76	1.9
Butyl benzyl phthalate	0.95	U	0.76	0.95
Caprolactam	1.7	J	0.76	4.8
Carbazole	0.95	U	0.27	0.95
Chrysene	0.19	U	0.095	0.19
Di-n-butyl phthalate	0.95	U	0.64	0.95
Di-n-octyl phthalate	0.95	U	0.76	0.95
Dibenzo(a,h)anthracene	0.19	U	0.095	0.19
Dibenzofuran	0.95	U	0.095	0.95
Diethyl phthalate	0.95	U	0.57	0.95

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Prep Method:	3520C	Prep Batch:	240-55629	Lab File ID:	20906024.D
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Analysis Date:	09/06/2012 1852			Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dimethyl phthalate	0.95	U	0.28	0.95
Fluoranthene	0.19	U	0.095	0.19
Fluorene	0.19	U	0.095	0.19
Hexachlorobenzene	0.19	U	0.095	0.19
Hexachlorobutadiene	0.95	U	0.26	0.95
Hexachlorocyclopentadiene	9.5	U	0.76	9.5
Hexachloroethane	0.95	U	0.76	0.95
Indeno[1,2,3-cd]pyrene	0.19	U	0.095	0.19
Isophorone	0.95	U	0.26	0.95
N-Nitrosodi-n-propylamine	0.95	U	0.76	0.95
N-Nitrosodimethylamine	0.95	U	0.30	0.95
N-Nitrosodiphenylamine	0.95	U	0.30	0.95
Naphthalene	0.19	U	0.095	0.19
Nitrobenzene	0.95	U	0.038	0.95
Pentachlorophenol	4.8	U	2.3	4.8
Phenanthrene	0.19	U	0.095	0.19
Phenol	0.95	U	0.57	0.95
Pyrene	0.19	U	0.095	0.19
2,2'-oxybis[1-chloropropane]	0.95	U	0.38	0.95
2,6-Dinitrotoluene	4.8	U	0.76	4.8
4-Nitrophenol	4.8	U	2.3	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (Surr)	44		24 - 110
Phenol-d5 (Surr)	74		21 - 110
Nitrobenzene-d5 (Surr)	66		21 - 110
2-Fluorophenol (Surr)	71		10 - 110
2-Fluorobiphenyl (Surr)	66		20 - 110
2,4,6-Tribromophenol (Surr)	86		21 - 110

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Prep Method:	3520C	Prep Batch:	240-55629	Lab File ID:	20906025.D
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Analysis Date:	09/06/2012 1911			Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	0.95	U	0.76	0.95
1,4-Dioxane	0.95	U	0.47	0.95
2,4,6-Trichlorophenol	4.8	U	0.76	4.8
2,4,5-Trichlorophenol	4.8	U	0.29	4.8
2,4-Dichlorophenol	1.9	U	0.76	1.9
2,4-Dimethylphenol	1.9	U	0.76	1.9
2,4-Dinitrophenol	4.8	U	2.3	4.8
2,4-Dinitrotoluene	4.8	U	0.26	4.8
2-Chloronaphthalene	0.95	U	0.095	0.95
2-Chlorophenol	0.95	U	0.28	0.95
2-Methylnaphthalene	0.19	U	0.095	0.19
2-Methylphenol	0.95	U	0.76	0.95
2-Nitroaniline	1.9	U	0.76	1.9
2-Nitrophenol	1.9	U	0.27	1.9
3 & 4 Methylphenol	1.9	U	0.71	1.9
3,3'-Dichlorobenzidine	4.8	U	0.35	4.8
3-Nitroaniline	1.9	U	0.27	1.9
4,6-Dinitro-2-methylphenol	4.8	U	2.3	4.8
4-Bromophenyl phenyl ether	1.9	U	0.76	1.9
4-Chloro-3-methylphenol	1.9	U	0.76	1.9
4-Chloroaniline	1.9	U	0.76	1.9
4-Chlorophenyl phenyl ether	1.9	U	0.29	1.9
4-Nitroaniline	1.9	U	0.76	1.9
Acenaphthene	0.19	U	0.095	0.19
Acenaphthylene	0.19	U	0.095	0.19
Acetophenone	0.95	U	0.32	0.95
Anthracene	0.19	U	0.095	0.19
Atrazine	0.95	U	0.32	0.95
Benzaldehyde	0.95	U *	0.37	0.95
Benzo[a]anthracene	0.19	U	0.095	0.19
Benzo[a]pyrene	0.19	U	0.095	0.19
Benzo[b]fluoranthene	0.19	U	0.095	0.19
Benzo[g,h,i]perylene	0.19	U	0.095	0.19
Benzo[k]fluoranthene	0.19	U	0.095	0.19
Bis(2-chloroethoxy)methane	0.95	U	0.30	0.95
Bis(2-chloroethyl)ether	0.95	U	0.095	0.95
Bis(2-ethylhexyl) phthalate	1.5	J	0.76	1.9
Butyl benzyl phthalate	0.95	U	0.76	0.95
Caprolactam	4.8	U	0.76	4.8
Carbazole	0.95	U	0.27	0.95
Chrysene	0.19	U	0.095	0.19
Di-n-butyl phthalate	0.95	U	0.64	0.95
Di-n-octyl phthalate	0.95	U	0.76	0.95
Dibenzo(a,h)anthracene	0.19	U	0.095	0.19
Dibenzofuran	0.95	U	0.095	0.95
Diethyl phthalate	0.95	U	0.57	0.95

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Prep Method:	3520C	Prep Batch:	240-55629	Lab File ID:	20906025.D
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Analysis Date:	09/06/2012 1911			Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dimethyl phthalate	0.95	U	0.28	0.95
Fluoranthene	0.19	U	0.095	0.19
Fluorene	0.19	U	0.095	0.19
Hexachlorobenzene	0.19	U	0.095	0.19
Hexachlorobutadiene	0.95	U	0.26	0.95
Hexachlorocyclopentadiene	9.5	U	0.76	9.5
Hexachloroethane	0.95	U	0.76	0.95
Indeno[1,2,3-cd]pyrene	0.19	U	0.095	0.19
Isophorone	0.95	U	0.26	0.95
N-Nitrosodi-n-propylamine	0.95	U	0.76	0.95
N-Nitrosodimethylamine	0.95	U	0.30	0.95
N-Nitrosodiphenylamine	0.95	U	0.30	0.95
Naphthalene	0.19	U	0.095	0.19
Nitrobenzene	0.95	U	0.038	0.95
Pentachlorophenol	4.8	U	2.3	4.8
Phenanthrene	0.19	U	0.095	0.19
Phenol	0.95	U	0.57	0.95
Pyrene	0.19	U	0.095	0.19
2,2'-oxybis[1-chloropropane]	0.95	U	0.38	0.95
2,6-Dinitrotoluene	4.8	U	0.76	4.8
4-Nitrophenol	4.8	U	2.3	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (Surr)	63		24 - 110
Phenol-d5 (Surr)	75		21 - 110
Nitrobenzene-d5 (Surr)	68		21 - 110
2-Fluorophenol (Surr)	77		10 - 110
2-Fluorobiphenyl (Surr)	68		20 - 110
2,4,6-Tribromophenol (Surr)	78		21 - 110

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Prep Method:	3520C	Prep Batch:	240-55629	Lab File ID:	20906026.D
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Analysis Date:	09/06/2012 1931			Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1'-Biphenyl	0.95	U	0.76	0.95
1,4-Dioxane	0.95	U	0.47	0.95
2,4,6-Trichlorophenol	4.8	U	0.76	4.8
2,4,5-Trichlorophenol	4.8	U	0.29	4.8
2,4-Dichlorophenol	1.9	U	0.76	1.9
2,4-Dimethylphenol	1.9	U	0.76	1.9
2,4-Dinitrophenol	4.8	U	2.3	4.8
2,4-Dinitrotoluene	4.8	U	0.26	4.8
2-Chloronaphthalene	0.95	U	0.095	0.95
2-Chlorophenol	0.95	U	0.28	0.95
2-Methylnaphthalene	0.19	U	0.095	0.19
2-Methylphenol	0.95	U	0.76	0.95
2-Nitroaniline	1.9	U	0.76	1.9
2-Nitrophenol	1.9	U	0.27	1.9
3 & 4 Methylphenol	1.9	U	0.71	1.9
3,3'-Dichlorobenzidine	4.8	U	0.35	4.8
3-Nitroaniline	1.9	U	0.27	1.9
4,6-Dinitro-2-methylphenol	4.8	U	2.3	4.8
4-Bromophenyl phenyl ether	1.9	U	0.76	1.9
4-Chloro-3-methylphenol	1.9	U	0.76	1.9
4-Chloroaniline	1.9	U	0.76	1.9
4-Chlorophenyl phenyl ether	1.9	U	0.29	1.9
4-Nitroaniline	1.9	U	0.76	1.9
Acenaphthene	0.19	U	0.095	0.19
Acenaphthylene	0.19	U	0.095	0.19
Acetophenone	0.95	U	0.32	0.95
Anthracene	0.19	U	0.095	0.19
Atrazine	0.95	U	0.32	0.95
Benzaldehyde	0.95	U *	0.37	0.95
Benzo[a]anthracene	0.19	U	0.095	0.19
Benzo[a]pyrene	0.19	U	0.095	0.19
Benzo[b]fluoranthene	0.19	U	0.095	0.19
Benzo[g,h,i]perylene	0.19	U	0.095	0.19
Benzo[k]fluoranthene	0.19	U	0.095	0.19
Bis(2-chloroethoxy)methane	0.95	U	0.30	0.95
Bis(2-chloroethyl)ether	0.95	U	0.095	0.95
Bis(2-ethylhexyl) phthalate	1.1	J	0.76	1.9
Butyl benzyl phthalate	0.95	U	0.76	0.95
Caprolactam	4.8	U	0.76	4.8
Carbazole	0.95	U	0.27	0.95
Chrysene	0.19	U	0.095	0.19
Di-n-butyl phthalate	0.95	U	0.64	0.95
Di-n-octyl phthalate	0.95	U	0.76	0.95
Dibenzo(a,h)anthracene	0.19	U	0.095	0.19
Dibenzofuran	0.95	U	0.095	0.95
Diethyl phthalate	0.95	U	0.57	0.95

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

8270D Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270D	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Prep Method:	3520C	Prep Batch:	240-55629	Lab File ID:	20906026.D
Dilution:	1.0			Initial Weight/Volume:	1050 mL
Analysis Date:	09/06/2012 1931			Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Dimethyl phthalate	0.95	U	0.28	0.95
Fluoranthene	0.19	U	0.095	0.19
Fluorene	0.19	U	0.095	0.19
Hexachlorobenzene	0.19	U	0.095	0.19
Hexachlorobutadiene	0.95	U	0.26	0.95
Hexachlorocyclopentadiene	9.5	U	0.76	9.5
Hexachloroethane	0.95	U	0.76	0.95
Indeno[1,2,3-cd]pyrene	0.19	U	0.095	0.19
Isophorone	0.95	U	0.26	0.95
N-Nitrosodi-n-propylamine	0.95	U	0.76	0.95
N-Nitrosodimethylamine	0.95	U	0.30	0.95
N-Nitrosodiphenylamine	0.95	U	0.30	0.95
Naphthalene	0.19	U	0.095	0.19
Nitrobenzene	0.95	U	0.038	0.95
Pentachlorophenol	4.8	U	2.3	4.8
Phenanthrene	0.19	U	0.095	0.19
Phenol	0.95	U	0.57	0.95
Pyrene	0.19	U	0.095	0.19
2,2'-oxybis[1-chloropropane]	0.95	U	0.38	0.95
2,6-Dinitrotoluene	4.8	U	0.76	4.8
4-Nitrophenol	4.8	U	2.3	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (Surr)	72		24 - 110
Phenol-d5 (Surr)	54		21 - 110
Nitrobenzene-d5 (Surr)	50		21 - 110
2-Fluorophenol (Surr)	55		10 - 110
2-Fluorobiphenyl (Surr)	54		20 - 110
2,4,6-Tribromophenol (Surr)	70		21 - 110

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

8015C Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analysis Method:	8015C	Analysis Batch:	240-55708	Instrument ID:	YPID
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	08/26/2012 2114			Injection Volume:	
Prep Date:	08/26/2012 2114			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Total Petroleum Hydrocarbons (C6-C10)	56	J B	25	100

Surrogate	%Rec	Qualifier	Acceptance Limits
Trifluorotoluene (Surr)	91		10 - 150

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

8015C Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analysis Method:	8015C	Analysis Batch:	240-55708	Instrument ID:	YPID
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	08/26/2012 2153			Injection Volume:	
Prep Date:	08/26/2012 2153			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Total Petroleum Hydrocarbons (C6-C10)	61	J B	25	100

Surrogate	%Rec	Qualifier	Acceptance Limits
Trifluorotoluene (Surr)	92		10 - 150

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

8015C Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analysis Method:	8015C	Analysis Batch:	240-55708	Instrument ID:	YPID
Prep Method:	5030B		N/A	Initial Weight/Volume:	5 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	08/26/2012 2234			Injection Volume:	
Prep Date:	08/26/2012 2234			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Total Petroleum Hydrocarbons (C6-C10)	64	J B	25	100

Surrogate	%Rec	Qualifier	Acceptance Limits
Trifluorotoluene (Surr)	92		10 - 150

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

8015C Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analysis Method:	8015C	Analysis Batch:	240-55969	Instrument ID:	A2HP6F
Prep Method:	3520C	Prep Batch:	240-55631	Initial Weight/Volume:	1020 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	08/28/2012 1433			Injection Volume:	1 uL
Prep Date:	08/24/2012 1118			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Total Petroleum Hydrocarbons (C10-C32)	470	J B	230	490

Surrogate	%Rec	Qualifier	Acceptance Limits
n-Nonane	53		10 - 110

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

8015C Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analysis Method:	8015C	Analysis Batch:	240-55969	Instrument ID:	A2HP6F
Prep Method:	3520C	Prep Batch:	240-55631	Initial Weight/Volume:	1050 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	08/28/2012 1504			Injection Volume:	1 uL
Prep Date:	08/24/2012 1118			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Total Petroleum Hydrocarbons (C10-C32)	410	J B	230	480

Surrogate	%Rec	Qualifier	Acceptance Limits
n-Nonane	59		10 - 110

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

8015C Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analysis Method:	8015C	Analysis Batch:	240-55969	Instrument ID:	A2HP6F
Prep Method:	3520C	Prep Batch:	240-55631	Initial Weight/Volume:	1050 mL
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	08/28/2012 1535			Injection Volume:	1 uL
Prep Date:	08/24/2012 1118			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Total Petroleum Hydrocarbons (C10-C32)	240	J B	230	480

Surrogate	%Rec	Qualifier	Acceptance Limits
n-Nonane	59		10 - 110

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	240-57039	Instrument ID:	I8
Prep Method:	3005A	Prep Batch:	240-56218	Lab File ID:	I8090612A.csv
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/06/2012 1116			Final Weight/Volume:	50 mL
Prep Date:	08/30/2012 0745				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	1.9	J	0.13	2.0
Arsenic	0.60	J	0.40	5.0
Barium	59	B	0.19	5.0
Beryllium	1.8		0.20	1.0
Cadmium	1.0	U	0.13	1.0
Chromium	1.8	J	0.71	2.0
Cobalt	7.6		0.058	1.0
Copper	2.2	B	0.29	2.0
Lead	0.79	J	0.18	1.0
Molybdenum	1.9	J B	0.093	10
Nickel	12		0.20	2.0
Selenium	0.62	J	0.57	5.0
Silver	1.0	U	0.080	1.0
Thallium	0.57	J B	0.14	2.0
Vanadium	0.84	J	0.44	20
Zinc	43	B	2.3	20

6020A Metals (ICP/MS)-Dissolved

Analysis Method:	6020A	Analysis Batch:	240-57039	Instrument ID:	I8
Prep Method:	3005A	Prep Batch:	240-56218	Lab File ID:	I8090612A.csv
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/06/2012 1145			Final Weight/Volume:	50 mL
Prep Date:	08/30/2012 0745				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	3.0		0.13	2.0
Arsenic	0.52	J	0.40	5.0
Barium	47	B	0.19	5.0
Beryllium	1.7		0.20	1.0
Cadmium	1.0	U	0.13	1.0
Chromium	2.0	U	0.71	2.0
Cobalt	7.5		0.058	1.0
Copper	0.41	J B	0.29	2.0
Lead	1.0	U	0.18	1.0
Molybdenum	2.5	J B	0.093	10
Nickel	12		0.20	2.0
Selenium	5.0	U	0.57	5.0
Silver	1.0	U	0.080	1.0
Thallium	0.44	J B	0.14	2.0
Vanadium	20	U	0.44	20
Zinc	43	B	2.3	20

7470A Mercury (CVAA)

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW09S-082112**

Lab Sample ID: 240-14408-2
Client Matrix: Water

Date Sampled: 08/21/2012 1330
Date Received: 08/22/2012 0805

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-56469	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-56220	Lab File ID:	083112A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2012 0939			Final Weight/Volume:	100 mL
Prep Date:	08/30/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-56469	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-56220	Lab File ID:	083112A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2012 0940			Final Weight/Volume:	100 mL
Prep Date:	08/30/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	240-57039	Instrument ID:	I8
Prep Method:	3005A	Prep Batch:	240-56218	Lab File ID:	I8090612A.csv
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/06/2012 1151			Final Weight/Volume:	50 mL
Prep Date:	08/30/2012 0745				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	1.3	J	0.13	2.0
Arsenic	1.2	J	0.40	5.0
Barium	120	B	0.19	5.0
Beryllium	0.44	J	0.20	1.0
Cadmium	1.0	U	0.13	1.0
Chromium	21		0.71	2.0
Cobalt	86		0.058	1.0
Copper	2.8	B	0.29	2.0
Lead	0.76	J	0.18	1.0
Molybdenum	3.9	J B	0.093	10
Nickel	140		0.20	2.0
Selenium	5.0	U	0.57	5.0
Silver	1.0	U	0.080	1.0
Thallium	0.37	J B	0.14	2.0
Vanadium	2.6	J	0.44	20
Zinc	160	B	2.3	20

6020A Metals (ICP/MS)-Dissolved

Analysis Method:	6020A	Analysis Batch:	240-57039	Instrument ID:	I8
Prep Method:	3005A	Prep Batch:	240-56218	Lab File ID:	I8090612A.csv
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/06/2012 1157			Final Weight/Volume:	50 mL
Prep Date:	08/30/2012 0745				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	1.1	J	0.13	2.0
Arsenic	0.74	J	0.40	5.0
Barium	110	B	0.19	5.0
Beryllium	1.0	U	0.20	1.0
Cadmium	1.0	U	0.13	1.0
Chromium	2.0	U	0.71	2.0
Cobalt	54		0.058	1.0
Copper	0.39	J B	0.29	2.0
Lead	1.0	U	0.18	1.0
Molybdenum	4.2	J B	0.093	10
Nickel	83		0.20	2.0
Selenium	5.0	U	0.57	5.0
Silver	1.0	U	0.080	1.0
Thallium	0.30	J B	0.14	2.0
Vanadium	0.89	J	0.44	20
Zinc	11	J B	2.3	20

7470A Mercury (CVAA)

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW11S-082112**

Lab Sample ID: 240-14408-3
Client Matrix: Water

Date Sampled: 08/21/2012 1105
Date Received: 08/22/2012 0805

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-56469	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-56220	Lab File ID:	083112A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2012 0942			Final Weight/Volume:	100 mL
Prep Date:	08/30/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-56469	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-56220	Lab File ID:	083112A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2012 0944			Final Weight/Volume:	100 mL
Prep Date:	08/30/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

6020A Metals (ICP/MS)-Total Recoverable

Analysis Method:	6020A	Analysis Batch:	240-57039	Instrument ID:	I8
Prep Method:	3005A	Prep Batch:	240-56218	Lab File ID:	I8090612A.csv
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/06/2012 1215			Final Weight/Volume:	50 mL
Prep Date:	08/30/2012 0745				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.49	J	0.13	2.0
Arsenic	0.75	J	0.40	5.0
Barium	100	B	0.19	5.0
Beryllium	4.9		0.20	1.0
Cadmium	0.75	J	0.13	1.0
Chromium	1.2	J	0.71	2.0
Cobalt	390		0.058	1.0
Copper	12	B	0.29	2.0
Lead	0.54	J	0.18	1.0
Molybdenum	1.2	J B	0.093	10
Nickel	690		0.20	2.0
Selenium	0.79	J	0.57	5.0
Silver	1.0	U	0.080	1.0
Thallium	0.38	J B	0.14	2.0
Vanadium	0.87	J	0.44	20
Zinc	670	B	2.3	20

6020A Metals (ICP/MS)-Dissolved

Analysis Method:	6020A	Analysis Batch:	240-57039	Instrument ID:	I8
Prep Method:	3005A	Prep Batch:	240-56218	Lab File ID:	I8090612A.csv
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	09/06/2012 1220			Final Weight/Volume:	50 mL
Prep Date:	08/30/2012 0745				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Antimony	0.28	J	0.13	2.0
Arsenic	5.0	U	0.40	5.0
Barium	110	B	0.19	5.0
Beryllium	1.9		0.20	1.0
Cadmium	0.42	J	0.13	1.0
Chromium	2.0	U	0.71	2.0
Cobalt	400		0.058	1.0
Copper	0.31	J B	0.29	2.0
Lead	1.0	U	0.18	1.0
Molybdenum	0.97	J B	0.093	10
Nickel	680		0.20	2.0
Selenium	5.0	U	0.57	5.0
Silver	1.0	U	0.080	1.0
Thallium	0.33	J B	0.14	2.0
Vanadium	20	U	0.44	20
Zinc	580	B	2.3	20

7470A Mercury (CVAA)

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Client Sample ID: **MT-MW12S-082112**

Lab Sample ID: 240-14408-4
Client Matrix: Water

Date Sampled: 08/21/2012 1505
Date Received: 08/22/2012 0805

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	240-56469	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-56220	Lab File ID:	083112A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2012 0945			Final Weight/Volume:	100 mL
Prep Date:	08/30/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.12	J	0.12	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-56469	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-56220	Lab File ID:	083112A-HG1.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	08/31/2012 0947			Final Weight/Volume:	100 mL
Prep Date:	08/30/2012 1400				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Appendix C

Support Documentation

HOLDTIME

SDG 240-14408-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HG	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HG	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
HG	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HG	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
HG	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
M	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
M	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
M	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
M	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
M	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
M	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
HGF	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HGF	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
HGF	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HGF	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
HGF	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HGF	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
MF	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
MF	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
MF	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
MF	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
MF	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
MF	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
OS	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/24/2012	9/6/2012	3	13	16
OS	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/24/2012	9/6/2012	2	13	15
OS	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/24/2012	9/6/2012	3	13	16
OS	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/24/2012	9/6/2012	3	13	16
OS	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/24/2012	9/6/2012	2	13	15
OS	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/24/2012	9/6/2012	2	13	15
OV	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	9/1/2012	9/1/2012	11	0	11
OV	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/31/2012	8/31/2012	10	0	10
OV	UG/L	TB-082112	240-14408-1	NM	8/21/2012	8/31/2012	8/31/2012	10	0	10

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	9/4/2012	9/4/2012	13	0	13
OV	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	9/4/2012	9/4/2012	13	0	13
OV	UG/L	TB-082212	240-14454-1	NM	8/22/2012	9/4/2012	9/4/2012	13	0	13
OV	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	9/4/2012	9/4/2012	13	0	13
OV	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/31/2012	8/31/2012	10	0	10
DRO	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/24/2012	8/28/2012	2	4	6
DRO	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/24/2012	8/29/2012	2	5	7
DRO	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/24/2012	8/28/2012	3	4	7
DRO	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/24/2012	8/28/2012	2	4	6
DRO	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/24/2012	8/28/2012	3	4	7
DRO	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/24/2012	8/28/2012	3	4	7
GRO	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/26/2012	8/26/2012	5	0	5
GRO	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/28/2012	8/28/2012	6	0	6
GRO	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/28/2012	8/28/2012	6	0	6
GRO	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/26/2012	8/26/2012	5	0	5
GRO	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/26/2012	8/26/2012	5	0	5
GRO	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/28/2012	8/28/2012	6	0	6

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-14408-1

Job Description: MSA Main Terminal Groundwater Sampling

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Patrick O'Meara

Approved for release
Patrick J O'Meara
Project Manager II
9/7/2012 7:44 PM

Patrick J O'Meara
Project Manager II
patrick.omeara@testamericainc.com
09/07/2012

cc: Samantha Brenner
Ms. Kelly Carper
Vanessa Good
Ms. Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MSA Main Terminal Groundwater Sampling

Report Number: 240-14408-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client

RECEIPT

The samples were received on 08/22/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8 and 3.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TB-082112 (240-14408-1), MT-MW09S-082112 (240-14408-2), MT-MW11S-082112 (240-14408-3) and MT-MW12S-082112 (240-14408-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/31/2012 and 09/01/2012.

1,2,3-Trichlorobenzene was detected in method blank MB 240-56479/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

2-Chloroethyl vinyl ether and tert-Butyl alcohol failed the recovery criteria low for the MS/MSD of sample 240-14497-10 in batch 240-56479.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-MW09S-082112 (240-14408-2), MT-MW11S-082112 (240-14408-3) and MT-MW12S-082112 (240-14408-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/24/2012 and analyzed on 09/06/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

The laboratory control sample (LCS) for batch 55629 exceeded control limits for benzaldehyde. This analytes recovery was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55629.

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples MT-MW09S-082112 (240-14408-2), MT-MW11S-082112 (240-14408-3) and MT-MW12S-082112 (240-14408-4) were analyzed

for gasoline range organics (GRO) in accordance with SW-846 Method 8015C. The samples were analyzed on 08/26/2012.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-55708/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the GRO analyses. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)

Samples MT-MW09S-082112 (240-14408-2), MT-MW11S-082112 (240-14408-3) and MT-MW12S-082112 (240-14408-4) were analyzed for diesel range organics (DRO) in accordance with EPA-SW-846 Method 8015C - DRO. The samples were prepared on 08/24/2012 and analyzed on 08/28/2012.

Total Petroleum Hydrocarbons (C10-C32) was detected in method blank MB 240-55631/7-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55631. 3520C 8015C_DRO

No other difficulties were encountered during the DRO analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples MT-MW09S-082112 (240-14408-2), MT-MW11S-082112 (240-14408-3) and MT-MW12S-082112 (240-14408-4) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/30/2012 and analyzed on 09/06/2012.

No difficulties were encountered during the metals analyses. All quality control parameters were within the acceptance limits.

METALS (ICPMS)

Samples MT-MW09S-082112 (240-14408-2), MT-MW11S-082112 (240-14408-3) and MT-MW12S-082112 (240-14408-4) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 08/30/2012 and analyzed on 09/06/2012.

Several analytes were detected in method blank MB 240-56218/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY

Samples MT-MW09S-082112 (240-14408-2), MT-MW11S-082112 (240-14408-3) and MT-MW12S-082112 (240-14408-4) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/30/2012 and analyzed on 08/31/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples MT-MW09S-082112 (240-14408-2), MT-MW11S-082112 (240-14408-3) and MT-MW12S-082112 (240-14408-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/30/2012 and analyzed on 08/31/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-14408-1TB	TB-082112	Water	08/21/2012 0000	08/22/2012 0805
240-14408-2	MT-MW09S-082112	Water	08/21/2012 1330	08/22/2012 0805
240-14408-3	MT-MW11S-082112	Water	08/21/2012 1105	08/22/2012 0805
240-14408-4	MT-MW12S-082112	Water	08/21/2012 1505	08/22/2012 0805

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Purge and Trap	TAL NC		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270D	
Liquid-Liquid Extraction (Continuous)	TAL NC		SW846 3520C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL NC	SW846 8015C	
Purge and Trap	TAL NC		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL NC	SW846 8015C	
Liquid-Liquid Extraction (Continuous)	TAL NC		SW846 3520C
Metals (ICP/MS)	TAL NC	SW846 6020A	
Preparation, Total Recoverable or Dissolved Metals	TAL NC		SW846 3005A
Metals (ICP/MS)	TAL NC	SW846 6020A	
Preparation, Total Recoverable or Dissolved Metals	TAL NC		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL NC	SW846 7470A	
Preparation, Mercury	TAL NC		SW846 7470A
Mercury (CVAA)	TAL NC	SW846 7470A	
Preparation, Mercury	TAL NC		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD

Lab References:

TAL NC = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Method	Analyst	Analyst ID
SW846 8260B	Quayle, Rick	RQ
SW846 8270D	Ulman, Mark	MU
SW846 8015C	Bosworth, Heather M	HMB
SW846 8015C	Bolgrin, Deborah	DB
SW846 6020A	Davies, Brian	BD
SW846 7470A	Davies, Brian	BD

DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Lab Section	Qualifier	Description
GC/MS VOA		
	J	Indicates an Estimated Value for TICs
	U	Indicates the analyte was analyzed for but not detected.
	F	MS or MSD exceeds the control limits
	T	Result is a tentatively identified compound (TIC) and an estimated value.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	N	This flag indicates the presumptive evidence of a compound.
GC/MS Semi VOA		
	U	Indicates the analyte was analyzed for but not detected.
	*	LCS or LCSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC VOA		
	B	Compound was found in the blank and sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals		
	B	Compound was found in the blank and sample.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Stuart Cameron	Date:	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No. 112IC04054 - 05
Germantown, MD 20874	Calendar (C) or Work Days (W)			
Phone: (301) 528-3021	TAT if different from Below 21 days			
Fax: (301) 528-3000	☐ 2 weeks			SDG No.
Project Name: Main Terminal Groundwater Sampling	☐ 1 week			
Site: Main Terminal, Martin State Airport	☐ 2 days			
P O #	☐ 1 day			Sampler: S. Cameron

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	SVOCs / 1,4-Dioxane	TPH-GRO	TPH-DRO	Total Metals	Dissolved Metals	Sample Specific Notes:
TB-082112	–	–	GW	Water	2		x						
MT-MW09S-082112	8-21-12	1330	GW	Water	12	1	X	X	X	X	X	X	
MT-MW11S-082112	↓	1105	GW	Water	12	1	X	X	X	X	X	X	
MT-MW12S-082112	↓	1505	GW	Water	12	1	X	X	X	X	X	X	
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant.* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: **DISSOLVED METALS FILTERED IN FIELD**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8-21-12/1545	[signature]	TAcanton	22 Aug 2012 0805

Form No. CA-C-WI-002, Rev. 2, dated 03/06/201

TestAmerica Canton Sample Receipt Form/Narrative Login # : 14408

Client TETRA TECH Site Name MAIN TERMINAL By: Matthew Jemp

Cooler Received on 22 AUG 2012 Opened on 22 AUG 2012 (Signature)

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

TestAmerica Cooler # (RAC) Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF 0°C)	Observed Sample Temp. ____ °C	Corrected Sample Temp. ____ °C
IR GUN# 4G	(CF –1°C)	Observed Sample Temp. ____ °C	Corrected Sample Temp. ____ °C
IR GUN# 5G	(CF –1°C)	Observed Sample Temp. ____ °C	Corrected Sample Temp. ____ °C
IR GUN# 8	(CF 0°C)	Observed Sample Temp. ____ °C	Corrected Sample Temp. ____ °C

X Multiple on Back

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2	Yes No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No NA
-Were custody seals on the bottle(s)?	Yes No
3. Shippers' packing slip attached to the cooler(s)?	Yes No
4. Did custody papers accompany the sample(s)?	Yes No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes No
6. Did all bottles arrive in good condition (Unbroken)?	Yes No
7. Could all bottle labels be reconciled with the COC?	Yes No
8. Were correct bottle(s) used for the test(s) indicated?	Yes No
9. Sufficient quantity received to perform indicated analyses?	Yes No
10. Were sample(s) at the correct pH upon receipt?	Yes No NA
11. Were VOAs on the COC?	Yes No
12. Were air bubbles >6 mm in any VOA vials?	Yes No NA
13. Was a trip blank present in the cooler(s)?	Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s): Nitric Acid Lot# 031512-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
9S	22	22 Aug 12	[illegible]
11S	22		
12S	22		

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
CLIENT	2.8	2.8	1	WET ICE
	3.6	3.4		

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
240-14408-1	TB-082112	102	88	84	82
240-14408-2	MT-MW09S-082112	103	89	84	82
240-14408-3	MT-MW11S-082112	112	97	91	90
240-14408-4	MT-MW12S-082112	107	92	84	83
MB 240-56479/5		101	88	85	84
LCS 240-56479/4		106	89	88	90
240-14497-E-10 MS		103	86	86	89
240-14497-F-10 MSD		105	88	88	90

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab File ID: UXR943.D Lab Sample ID: MB 240-56479/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX17 Date Analyzed: 08/31/2012 22:40

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-56479/4	UXR942.D	08/31/2012 22:18
TB-082112	240-14408-1	UXR944.D	08/31/2012 23:02
MT-MW09S-082112	240-14408-2	UXR945.D	08/31/2012 23:25
MT-MW11S-082112	240-14408-3	UXR946.D	08/31/2012 23:47
MT-MW12S-082112	240-14408-4	UXR947.D	09/01/2012 00:09
	240-14497-E-10 MS	UXR964.D	09/01/2012 06:29
	240-14497-F-10 MSD	UXR965.D	09/01/2012 06:51

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Method Blank - Batch: 240-56479

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 240-56479/5	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR943.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2240	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2240				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1,2-Tetrachloroethane	1.0	U	0.23	1.0
1,1,1-Trichloroethane	1.0	U	0.22	1.0
1,1,2,2-Tetrachloroethane	1.0	U	0.18	1.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	0.28	1.0
1,1-Dichloroethane	1.0	U	0.15	1.0
1,1-Dichloroethene	1.0	U	0.19	1.0
1,1-Dichloropropene	1.0	U	0.13	1.0
1,2,3-Trichlorobenzene	0.177	J	0.17	1.0
1,2,3-Trichloropropane	1.0	U	0.43	1.0
1,2,3-Trimethylbenzene	5.0	U	0.0059	5.0
1,2,4-Trichlorobenzene	1.0	U	0.15	1.0
1,2,4-Trimethylbenzene	1.0	U	0.12	1.0
1,2-Dibromo-3-Chloropropane	2.0	U	0.67	2.0
1,2-Dichlorobenzene	1.0	U	0.13	1.0
1,2-Dichloroethane	1.0	U	0.22	1.0
1,2-Dichloropropane	1.0	U	0.18	1.0
1,3-Dichlorobenzene	1.0	U	0.14	1.0
1,3-Dichloropropane	1.0	U	0.16	1.0
1,4-Dichlorobenzene	1.0	U	0.13	1.0
2,2-Dichloropropane	1.0	U	0.13	1.0
2-Chloroethyl vinyl ether	10	U	0.99	10
2-Chlorotoluene	1.0	U	0.11	1.0
2-Hexanone	10	U	0.41	10
Bromobenzene	1.0	U	0.13	1.0
Bromochloromethane	1.0	U	0.29	1.0
4-Chlorotoluene	1.0	U	0.18	1.0
p-Isopropyltoluene	1.0	U	0.12	1.0
Acetone	10	U	1.1	10
Benzene	1.0	U	0.13	1.0
Bromoform	1.0	U	0.64	1.0
Bromomethane	1.0	U	0.41	1.0
Carbon disulfide	1.0	U	0.13	1.0
Carbon tetrachloride	1.0	U	0.13	1.0
Chlorobenzene	1.0	U	0.15	1.0
Chloroethane	1.0	U	0.29	1.0
Chloroform	1.0	U	0.16	1.0
Chloromethane	1.0	U	0.30	1.0
cis-1,2-Dichloroethene	1.0	U	0.17	1.0
cis-1,3-Dichloropropene	1.0	U	0.14	1.0
Hexachlorobutadiene	1.0	U	0.30	1.0
Dibromomethane	1.0	U	0.28	1.0
Bromodichloromethane	1.0	U	0.15	1.0
Dichlorodifluoromethane	1.0	U	0.31	1.0
Ethylbenzene	1.0	U	0.17	1.0
1,2-Dibromoethane	1.0	U	0.24	1.0

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Method Blank - Batch: 240-56479

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 240-56479/5	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR943.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2240	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2240				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Diisopropyl ether	10	U	1.5	10
Naphthalene	1.0	U	0.24	1.0
m-Xylene & p-Xylene	2.0	U	0.24	2.0
n-Butylbenzene	1.0	U	0.12	1.0
Isopropylbenzene	1.0	U	0.13	1.0
n-Propylbenzene	1.0	U	0.14	1.0
2-Butanone	10	U	0.57	10
4-Methyl-2-pentanone	10	U	0.32	10
sec-Butylbenzene	1.0	U	0.13	1.0
Methyl tert-butyl ether	5.0	U	0.17	5.0
Tert-amyl-methyl ether (TAME)	5.0	U	0.067	5.0
Methylene Chloride	1.0	U	0.33	1.0
o-Xylene	1.0	U	0.14	1.0
Styrene	1.0	U	0.11	1.0
Ethyl-t-butyl ether (ETBE)	5.0	U	0.11	5.0
tert-Butylbenzene	1.0	U	0.13	1.0
Tetrachloroethene	1.0	U	0.29	1.0
Toluene	1.0	U	0.13	1.0
trans-1,2-Dichloroethene	1.0	U	0.19	1.0
trans-1,3-Dichloropropene	1.0	U	0.19	1.0
Trichloroethene	1.0	U	0.17	1.0
Trichlorofluoromethane	1.0	U	0.21	1.0
Vinyl acetate	2.0	U	0.19	2.0
Vinyl chloride	1.0	U	0.22	1.0
tert-Butyl alcohol	50	U	3.9	50
Xylenes, Total	2.0	U	0.28	2.0
Dibromochloromethane	1.0	U	0.18	1.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88	63 - 129
4-Bromofluorobenzene (Surr)	84	66 - 117
Toluene-d8 (Surr)	85	74 - 115
Dibromofluoromethane (Surr)	101	75 - 121

Method Blank TICs- Batch: 240-56479

Cas Number	Analyte	RT	Est. Result	Qual
	Tentatively Identified Compound		None	

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Lab Control Sample - Batch: 240-56479

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 240-56479/4	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR942.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2218	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2218				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1,2-Tetrachloroethane	10.0	9.57	96	72 - 116	
1,1,1-Trichloroethane	10.0	11.0	110	74 - 118	
1,1,2,2-Tetrachloroethane	10.0	7.89	79	68 - 118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	12.4	124	74 - 151	
1,1-Dichloroethane	10.0	9.75	98	82 - 115	
1,1-Dichloroethene	10.0	10.8	108	78 - 131	
1,1-Dichloropropene	10.0	9.50	95	83 - 114	
1,2,3-Trichlorobenzene	10.0	7.14	71	54 - 126	
1,2,3-Trichloropropane	10.0	8.61	86	73 - 129	
1,2,3-Trimethylbenzene	10.0	7.65	77	70 - 130	
1,2,4-Trichlorobenzene	10.0	7.78	78	48 - 135	
1,2,4-Trimethylbenzene	10.0	8.76	88	76 - 120	
1,2-Dibromo-3-Chloropropane	10.0	7.28	73	42 - 136	
1,2-Dichlorobenzene	10.0	9.18	92	81 - 110	
1,2-Dichloroethane	10.0	9.65	97	71 - 127	
1,2-Dichloropropane	10.0	9.49	95	81 - 115	
1,3-Dichlorobenzene	10.0	9.21	92	80 - 110	
1,3-Dichloropropane	10.0	8.82	88	79 - 116	
1,4-Dichlorobenzene	10.0	9.11	91	82 - 110	
2,2-Dichloropropane	10.0	8.62	86	50 - 129	
2-Chloroethyl vinyl ether	10.0	8.08	81	52 - 131	J
2-Chlorotoluene	10.0	9.14	91	76 - 116	
2-Hexanone	20.0	11.9	59	55 - 133	
Bromobenzene	10.0	9.26	93	76 - 115	
Bromochloromethane	10.0	11.0	110	77 - 120	
4-Chlorotoluene	10.0	9.16	92	77 - 115	
p-Isopropyltoluene	10.0	8.97	90	74 - 120	
Acetone	20.0	14.0	70	43 - 136	
Benzene	10.0	10.1	101	83 - 112	
Bromoform	10.0	7.59	76	40 - 131	
Bromomethane	10.0	11.5	115	11 - 185	
Carbon disulfide	10.0	10.0	100	62 - 142	
Carbon tetrachloride	10.0	11.4	114	66 - 128	
Chlorobenzene	10.0	9.42	94	85 - 110	
Chloroethane	10.0	6.72	67	25 - 153	
Chloroform	10.0	10.3	103	79 - 117	
Chloromethane	10.0	7.39	74	44 - 126	
cis-1,2-Dichloroethene	10.0	10.7	107	80 - 113	
cis-1,3-Dichloropropene	10.0	8.14	81	61 - 115	
Hexachlorobutadiene	10.0	7.26	73	36 - 134	
Dibromomethane	10.0	11.0	110	81 - 120	
Bromodichloromethane	10.0	10.3	103	72 - 121	
Dichlorodifluoromethane	10.0	6.88	69	19 - 129	
Ethylbenzene	10.0	9.31	93	83 - 112	
1,2-Dibromoethane	10.0	9.35	94	79 - 113	
Diisopropyl ether	10.0	8.95	90	77 - 118	J

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Lab Control Sample - Batch: 240-56479

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 240-56479/4	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR942.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/31/2012 2218	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/31/2012 2218				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Naphthalene	10.0	7.15	72	32 - 141	
m-Xylene & p-Xylene	20.0	18.9	94	83 - 113	
n-Butylbenzene	10.0	8.20	82	66 - 125	
Isopropylbenzene	10.0	8.96	90	75 - 114	
n-Propylbenzene	10.0	9.20	92	74 - 121	
2-Butanone	20.0	13.1	66	60 - 126	
4-Methyl-2-pentanone	20.0	13.7	69	63 - 128	
sec-Butylbenzene	10.0	8.51	85	70 - 117	
Methyl tert-butyl ether	10.0	8.81	88	52 - 144	
Methylene Chloride	10.0	10.2	102	66 - 131	
o-Xylene	10.0	9.19	92	83 - 113	
Styrene	10.0	9.50	95	79 - 114	
tert-Butylbenzene	10.0	8.36	84	71 - 115	
Tetrachloroethene	10.0	9.53	95	79 - 114	
Toluene	10.0	9.00	90	84 - 111	
trans-1,2-Dichloroethene	10.0	11.1	111	83 - 117	
trans-1,3-Dichloropropene	10.0	6.90	69	58 - 117	
Trichloroethene	10.0	10.9	109	76 - 117	
Trichlorofluoromethane	10.0	11.9	119	49 - 157	
Vinyl acetate	10.0	7.65	77	46 - 161	
Vinyl chloride	10.0	8.53	85	53 - 127	
tert-Butyl alcohol	200	143	72	70 - 130	
Xylenes, Total	30.0	28.1	94	83 - 112	
Dibromochloromethane	10.0	9.38	94	64 - 119	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89	63 - 129
4-Bromofluorobenzene (Surr)	90	66 - 117
Toluene-d8 (Surr)	88	74 - 115
Dibromofluoromethane (Surr)	106	75 - 121

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-56479

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	240-14497-E-10 MS	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR964.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0629			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0629				
Leach Date:	N/A				

MSD Lab Sample ID:	240-14497-F-10 MSD	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR965.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0651			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0651				
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1,1,2-Tetrachloroethane	93	93	64 - 118	0	30		
1,1,1-Trichloroethane	107	109	68 - 121	2	30		
1,1,2,2-Tetrachloroethane	79	78	63 - 122	1	30		
1,1,2-Trichloro-1,2,2-trichfluoroethane	109	113	70 - 152	4	30		
1,1-Dichloroethane	94	97	79 - 116	2	30		
1,1-Dichloroethene	108	109	74 - 135	1	30		
1,1-Dichloropropene	93	96	80 - 114	3	30		
1,2,3-Trichlorobenzene	68	70	45 - 129	3	30		
1,2,3-Trichloropropane	84	80	67 - 132	5	30		
1,2,3-Trimethylbenzene	75	74	70 - 130	1	30		
1,2,4-Trichlorobenzene	71	75	38 - 138	5	30		
1,2,4-Trimethylbenzene	85	84	67 - 124	1	30		
1,2-Dibromo-3-Chloropropane	71	70	32 - 139	2	30		
1,2-Dichlorobenzene	90	90	75 - 111	0	30		
1,2-Dichloroethane	94	94	68 - 129	0	30		
1,2-Dichloropropane	91	92	78 - 115	1	30		
1,3-Dichlorobenzene	92	90	73 - 110	2	30		
1,3-Dichloropropane	85	86	74 - 118	0	30		
1,4-Dichlorobenzene	89	89	75 - 110	1	30		
2,2-Dichloropropane	74	77	38 - 127	5	30		
2-Chloroethyl vinyl ether	0	0	10 - 150	NC	30	U F	U F
2-Chlorotoluene	90	89	69 - 117	1	30		
2-Hexanone	58	59	47 - 139	2	30		
Bromobenzene	90	90	71 - 116	0	30		
Bromochloromethane	107	108	73 - 121	1	30		
4-Chlorotoluene	92	90	71 - 116	2	30		
p-Isopropyltoluene	88	89	64 - 122	1	30		
Acetone	65	68	33 - 145	4	30		
Benzene	98	99	72 - 121	1	30		
Bromoform	74	71	32 - 128	5	30		
Bromomethane	97	107	10 - 186	10	30		
Carbon disulfide	98	101	57 - 147	2	30		
Carbon tetrachloride	110	116	59 - 129	5	30		

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-56479

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	240-14497-E-10 MS	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR964.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0629			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0629				
Leach Date:	N/A				

MSD Lab Sample ID:	240-14497-F-10 MSD	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR965.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0651			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0651				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chlorobenzene	93	94	80 - 110	1	30		
Chloroethane	60	63	21 - 165	5	30		
Chloroform	99	101	76 - 118	2	30		
Chloromethane	70	71	33 - 132	1	30		
cis-1,2-Dichloroethene	106	107	70 - 120	1	30		
cis-1,3-Dichloropropene	70	72	51 - 110	3	30		
Hexachlorobutadiene	67	70	27 - 132	4	30		
Dibromomethane	105	107	77 - 121	2	30		
Bromodichloromethane	99	99	67 - 120	0	30		
Dichlorodifluoromethane	61	63	17 - 128	3	30		
Ethylbenzene	92	93	75 - 116	1	30		
1,2-Dibromoethane	90	90	74 - 113	0	30		
Diisopropyl ether	86	87	73 - 118	1	30	J	J
Naphthalene	68	70	15 - 158	3	30		
m-Xylene & p-Xylene	94	93	75 - 117	1	30		
n-Butylbenzene	78	80	56 - 127	2	30		
Isopropylbenzene	89	91	68 - 116	2	30		
n-Propylbenzene	90	92	64 - 124	2	30		
2-Butanone	63	64	54 - 129	2	30		
4-Methyl-2-pentanone	65	66	56 - 131	2	30		
sec-Butylbenzene	83	85	60 - 119	2	30		
Methyl tert-butyl ether	83	85	46 - 144	2	30		
Methylene Chloride	92	92	63 - 128	0	30		
o-Xylene	90	91	76 - 116	1	30		
Styrene	85	82	71 - 117	3	30		
tert-Butylbenzene	83	84	61 - 119	1	30		
Tetrachloroethene	95	96	70 - 117	1	30		
Toluene	88	89	78 - 114	0	30		
trans-1,2-Dichloroethene	109	111	80 - 119	2	30		
trans-1,3-Dichloropropene	63	64	46 - 116	2	30		
Trichloroethene	107	106	66 - 120	1	30		
Trichlorofluoromethane	110	113	46 - 157	3	30		
Vinyl acetate	62	61	43 - 157	2	30		

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-56479

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	240-14497-E-10 MS	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR964.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0629			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0629				
Leach Date:	N/A				

MSD Lab Sample ID:	240-14497-F-10 MSD	Analysis Batch:	240-56479	Instrument ID:	A3UX17
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	UXR965.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/01/2012 0651			Final Weight/Volume:	5 mL
Prep Date:	09/01/2012 0651				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Vinyl chloride	82	83	49 - 130	2	30		
tert-Butyl alcohol	67	72	70 - 130	7	30	F	
Xylenes, Total	92	92	76 - 116	0	30		
Dibromochloromethane	89	89	56 - 118	0	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86	88	63 - 129
4-Bromofluorobenzene (Surr)	89	90	66 - 117
Toluene-d8 (Surr)	86	88	74 - 115
Dibromofluoromethane (Surr)	103	105	75 - 121

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-56479

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	240-14497-E-10 MS	Units:	ug/L	MSD Lab Sample ID:	240-14497-F-10 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	09/01/2012 0629			Analysis Date:	09/01/2012 0651
Prep Date:	09/01/2012 0629			Prep Date:	09/01/2012 0651
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
1,1,1,2-Tetrachloroethane	1.0	U	10.0	10.0	9.32		9.35	
1,1,1-Trichloroethane	0.34	J	10.0	10.0	11.0		11.3	
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.0	7.86		7.77	
1,1,2-Trichloro-1,2,2-trichfluoroethane	1.0	U	10.0	10.0	10.9		11.3	
1,1-Dichloroethane	0.84	J	10.0	10.0	10.3		10.5	
1,1-Dichloroethene	1.0	U	10.0	10.0	10.8		10.9	
1,1-Dichloropropene	1.0	U	10.0	10.0	9.34		9.58	
1,2,3-Trichlorobenzene	1.0	U	10.0	10.0	6.79		6.99	
1,2,3-Trichloropropane	1.0	U	10.0	10.0	8.41		8.03	
1,2,3-Trimethylbenzene	5.0	U	10.0	10.0	7.51		7.43	
1,2,4-Trichlorobenzene	1.0	U	10.0	10.0	7.13		7.46	
1,2,4-Trimethylbenzene	1.0	U	10.0	10.0	8.49		8.39	
1,2-Dibromo-3-Chloropropane	2.0	U	10.0	10.0	7.15		6.98	
1,2-Dichlorobenzene	1.0	U	10.0	10.0	8.97		8.96	
1,2-Dichloroethane	1.0	U	10.0	10.0	9.37		9.39	
1,2-Dichloropropane	1.0	U	10.0	10.0	9.11		9.24	
1,3-Dichlorobenzene	1.0	U	10.0	10.0	9.20		9.02	
1,3-Dichloropropane	1.0	U	10.0	10.0	8.52		8.55	
1,4-Dichlorobenzene	1.0	U	10.0	10.0	8.87		8.92	
2,2-Dichloropropane	1.0	U	10.0	10.0	7.35		7.69	
2-Chloroethyl vinyl ether	10	U	10.0	10.0	10	U F	10	U F
2-Chlorotoluene	1.0	U	10.0	10.0	9.00		8.92	
2-Hexanone	10	U	20.0	20.0	11.5		11.7	
Bromobenzene	1.0	U	10.0	10.0	9.03		9.01	
Bromochloromethane	1.0	U	10.0	10.0	10.7		10.8	
4-Chlorotoluene	1.0	U	10.0	10.0	9.19		9.01	
p-Isopropyltoluene	1.0	U	10.0	10.0	8.84		8.93	
Acetone	10	U	20.0	20.0	13.0		13.6	
Benzene	1.0	U	10.0	10.0	9.76		9.86	
Bromoform	1.0	U	10.0	10.0	7.44		7.09	
Bromomethane	1.0	U	10.0	10.0	9.72		10.7	
Carbon disulfide	1.0	U	10.0	10.0	9.81		10.1	
Carbon tetrachloride	1.0	U	10.0	10.0	11.0		11.6	
Chlorobenzene	1.0	U	10.0	10.0	9.25		9.36	
Chloroethane	1.0	U	10.0	10.0	6.00		6.27	
Chloroform	1.0	U	10.0	10.0	9.95		10.1	
Chloromethane	1.0	U	10.0	10.0	6.99		7.07	
cis-1,2-Dichloroethene	1.0	U	10.0	10.0	10.6		10.7	
cis-1,3-Dichloropropene	1.0	U	10.0	10.0	7.02		7.22	
Hexachlorobutadiene	1.0	U	10.0	10.0	6.71		6.99	
Dibromomethane	1.0	U	10.0	10.0	10.5		10.7	
Bromodichloromethane	1.0	U	10.0	10.0	9.85		9.86	
Dichlorodifluoromethane	1.0	U	10.0	10.0	6.09		6.25	

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-56479

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	240-14497-E-10 MS	Units:	ug/L
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	09/01/2012 0629		
Prep Date:	09/01/2012 0629		
Leach Date:	N/A		

MSD Lab Sample ID:	240-14497-F-10 MSD
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	09/01/2012 0651
Prep Date:	09/01/2012 0651
Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Ethylbenzene	1.0	U	10.0	10.0	9.17		9.31	
1,2-Dibromoethane	1.0	U	10.0	10.0	8.98		8.96	
Diisopropyl ether	10	U	10.0	10.0	8.57	J	8.69	J
Naphthalene	1.0	U	10.0	10.0	6.76		6.98	
m-Xylene & p-Xylene	2.0	U	20.0	20.0	18.7		18.6	
n-Butylbenzene	1.0	U	10.0	10.0	7.85		7.99	
Isopropylbenzene	1.0	U	10.0	10.0	8.89		9.05	
n-Propylbenzene	1.0	U	10.0	10.0	8.98		9.16	
2-Butanone	10	U	20.0	20.0	12.6		12.8	
4-Methyl-2-pentanone	10	U	20.0	20.0	12.9		13.2	
sec-Butylbenzene	1.0	U	10.0	10.0	8.29		8.46	
Methyl tert-butyl ether	5.0	U	10.0	10.0	8.32		8.52	
Methylene Chloride	1.0	U	10.0	10.0	9.19		9.17	
o-Xylene	1.0	U	10.0	10.0	8.99		9.08	
Styrene	1.0	U	10.0	10.0	8.50		8.22	
tert-Butylbenzene	1.0	U	10.0	10.0	8.31		8.41	
Tetrachloroethene	1.0	U	10.0	10.0	9.55		9.64	
Toluene	1.0	U	10.0	10.0	8.83		8.86	
trans-1,2-Dichloroethene	1.0	U	10.0	10.0	10.9		11.1	
trans-1,3-Dichloropropene	1.0	U	10.0	10.0	6.27		6.38	
Trichloroethene	1.0	U	10.0	10.0	10.7		10.6	
Trichlorofluoromethane	1.0	U	10.0	10.0	11.0		11.3	
Vinyl acetate	2.0	U	10.0	10.0	6.21		6.10	
Vinyl chloride	1.0	U	10.0	10.0	8.18		8.33	
tert-Butyl alcohol	50	U	200	200	133	F	143	
Xylenes, Total	2.0	U	30.0	30.0	27.7		27.7	
Dibromochloromethane	1.0	U	10.0	10.0	8.90		8.93	

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab File ID: BFB0004.D BFB Injection Date: 07/19/2012

Instrument ID: A3UX17 BFB Injection Time: 12:10

Analysis Batch No.: 51327

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.9	
75	30.0 - 60.0 % of mass 95	52.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.7	(1.1)1
174	50.0 - 120.00 % of mass 95	65.5	
175	5.0 - 9.0 % of mass 174	4.7	(7.1)1
176	95.0 - 101.0 % of mass 174	62.3	(95.1)1
177	5.0 - 9.0 % of mass 176	3.7	(6.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STDA9 240-51327/8	UXR0018.D	07/19/2012	14:58
	STDA9 240-51327/9	UXR0019.D	07/19/2012	15:22
	STDA9 240-51327/10	UXR0020.D	07/19/2012	15:46
	STDA9 240-51327/11	UXR0021.D	07/19/2012	16:10
	STDA9 240-51327/12	UXR0022.D	07/19/2012	16:34
	STDA9 240-51327/13	UXR0023.D	07/19/2012	16:58

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 51327

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2012 14:58 Calibration End Date: 07/19/2012 16:58 Calibration ID: 10211

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-51327/13	UXR0023.D
Level 2	STDA9 240-51327/12	UXR0022.D
Level 3	STDA9 240-51327/11	UXR0021.D
Level 4	STDA9 240-51327/10	UXR0020.D
Level 5	STDA9 240-51327/9	UXR0019.D
Level 6	STDA9 240-51327/8	UXR0018.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4522 0.4855	0.4820	0.5023	0.4681	0.5006	Ave		0.4818				4.0		15.0			
Ethyl ether	0.3353 0.3254	0.3097	0.3366	0.3169	0.3361	Ave		0.3267				3.5		15.0			
3-Chloro-1-propene	0.1640 0.1830	0.1600	0.1821	0.1760	0.1895	Ave		0.1758				6.6		15.0			
Diisopropyl ether	0.2614 0.2855	0.2537	0.2837	0.2734	0.2936	Ave		0.2752				5.6		15.0			
2-Chloro-1,3-butadiene	0.5093 0.5961	0.5185	0.5838	0.5625	0.6109	Ave		0.5635				7.4		15.0			
Ethyl-t-butyl ether (ETBE)	1.1140 1.2158	1.0770	1.2149	1.1662	1.2362	Ave		1.1707				5.4		15.0			
Ethyl acetate	0.3348 0.3460	0.3125	0.3272	0.3133	0.3513	Ave		0.3309				4.9		15.0			
Propionitrile	0.0495 0.0524	0.0467	0.0488	0.0478	0.0539	Ave		0.0498				5.5		15.0			
Methacrylonitrile	0.2228 0.2572	0.2111	0.2622	0.2455	0.2663	Ave		0.2442				9.2		15.0			
Isobutyl alcohol	0.0164 0.0180	0.0180	0.0180	0.0179	0.0198	Ave		0.0180				6.1		15.0			
Tert-amyl-methyl ether (TAME)	0.8847 1.0258	0.9011	0.9988	0.9612	1.0423	Ave		0.9690				6.7		15.0			
n-Heptane	0.0600 0.0793	0.0685	0.0782	0.0662	0.0803	Ave		0.0721				12.0		15.0			
n-Butanol	0.0142 0.0139	0.0169	0.0151	0.0148	0.0168	Ave		0.0153				8.4		15.0			
Methyl methacrylate	0.2738 0.3295	0.2619	0.3020	0.2931	0.3318	Ave		0.2987				9.5		15.0			
2-Nitropropane	0.0742 0.0855	0.0945	0.0821	0.0760	0.0842	Ave		0.0828				8.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 51327

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2012 14:58 Calibration End Date: 07/19/2012 16:58 Calibration ID: 10211

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0334 0.0267	0.0337	0.0270	0.0283	0.0318	Ave		0.0302				11.0		15.0			
1,2,3-Trimethylbenzene	3.0328 3.6170	2.9827	3.4248	3.3489	3.6166	Ave		3.3371				8.3		15.0			
2-Methylnaphthalene	1.3072 1.6905	1.3493	1.5557	1.6507	1.7715	Ave		1.5541				12.0		15.0			
n-Butyl acetate	0.3008 0.3477	0.2791	0.3271	0.3132	0.3549	Ave		0.3205				9.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 51327

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2012 14:58 Calibration End Date: 07/19/2012 16:58 Calibration ID: 10211

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-51327/13	UXR0023.D
Level 2	STDA9 240-51327/12	UXR0022.D
Level 3	STDA9 240-51327/11	UXR0021.D
Level 4	STDA9 240-51327/10	UXR0020.D
Level 5	STDA9 240-51327/9	UXR0019.D
Level 6	STDA9 240-51327/8	UXR0018.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	31741 2768308	68515	345317	658367	1418335	0.500 40.0	1.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	23534 1855355	44016	231356	445686	952323	0.500 40.0	1.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	11511 1043528	22743	125151	247584	537047	0.500 40.0	1.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	91737 8138005	180308	975100	1922232	4159508	2.50 200	5.00	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	35746 3398744	73703	401337	791098	1731105	0.500 40.0	1.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	78190 6932215	153083	835128	1640112	3502743	0.500 40.0	1.00	5.00	10.0	20.0
Ethyl acetate	FB	Ave	47001 3945083	88836	449831	881314	1990986	1.00 80.0	2.00	10.0	20.0	40.0
Propionitrile	FB	Ave	6944 597108	13275	67091	134524	305301	1.00 80.0	2.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	15638 1466512	30011	180236	345254	754472	0.500 40.0	1.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Ave	14767 1313808	32275	158085	316481	700996	10.0 800	20.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	62098 5848884	128078	686593	1351794	2953327	0.500 40.0	1.00	5.00	10.0	20.0
n-Heptane	FB	Ave	4210 452301	9736	53739	93156	227435	0.500 40.0	1.00	5.00	10.0	20.0
n-Butanol	CBZ	Ave	12818 1015645	30335	133223	262567	593341	10.0 800	20.0	100	200	400
Methyl methacrylate	FB	Ave	19217 1878887	37226	207629	412219	940260	0.500 40.0	1.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	10413 975258	26861	112891	213780	477353	1.00 80.0	2.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	7857 517121	15749	62844	134395	304891	5.00 400	10.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 51327

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/19/2012 14:58 Calibration End Date: 07/19/2012 16:58 Calibration ID: 10211

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	71412 7018435	139202	796502	1587802	3465285	0.500 40.0	1.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Ave	61560 6560468	125944	723600	1565226	3394721	1.00 80.0	2.00	10.0	20.0	40.0
n-Butyl acetate	CBZ	Ave	27079 2544750	50066	287669	554660	1254012	1.00 80.0	2.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-14408-1 | Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 | Calibration End Date: 07/30/2012 18:22 | Calibration ID: 10345

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-52548/7	UXR0221.D
Level 2	STD8260 240-52548/6	UXR0220.D
Level 3	STD8260 240-52548/5	UXR0219.D
Level 4	STD8260 240-52548/4	UXR0218.D
Level 5	STD8260 240-52548/3	UXR0217.D
Level 6	STD8260 240-52548/2	UXR0216.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2422 0.2741	0.2357	0.2381	0.2681	0.2598	Ave		0.2530				6.5		15.0			
Chloromethane	0.4364 0.4223	0.4205	0.3960	0.4290	0.4124	Ave		0.4194			0.1000	3.3		15.0			
Vinyl chloride	0.3459 0.3658	0.3436	0.3453	0.3668	0.3575	Ave		0.3542				3.0		15.0			
Bromomethane	0.1440 0.0916	0.1232	0.0955	0.1112	0.1089	Lin1	0.0263	0.0976							0.9920		0.9900
Chloroethane	0.2108 0.1675	0.2114	0.1681	0.1863	0.1837	Ave		0.1880				10.0		15.0			
Trichlorofluoromethane	0.2331 0.2388	0.2312	0.2281	0.2497	0.2448	Ave		0.2376				3.5		15.0			
Acrolein	0.0650 0.0389	0.0338	0.0373	0.0419	0.0389	Lin1	0.0692	0.0387							0.9970		0.9900
1,1-Dichloroethene	0.2151 0.2234	0.2190	0.2115	0.2361	0.2139	Ave		0.2198				4.1		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1495 0.1523	0.1426	0.1416	0.1605	0.1489	Ave		0.1492				4.6		15.0			
Acetone	0.2863 0.0908	0.1555	0.1019	0.1078	0.0931	Lin1	0.1766	0.0896							0.9970		0.9900
Iodomethane	0.3091 0.2934	0.3066	0.2915	0.3323	0.3025	Ave		0.3059				4.8		15.0			
Carbon disulfide	0.7408 0.8232	0.7192	0.7179	0.8344	0.7761	Ave		0.7686				6.7		15.0			
Acetonitrile	0.0851 0.0404	0.0386	0.0405	0.0447	0.0411	Lin1	0.1443	0.0403							0.9950		0.9900
Methyl acetate	0.4276 0.2707	0.2636	0.2624	0.2920	0.2676	Lin1	0.1002	0.2692							0.9980		0.9900
Methylene Chloride	1.0843 0.2761	0.6794	0.3293	0.3299	0.2795	Lin1	0.4098	0.2659							0.9980		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0214 0.0231	0.0226	0.0222	0.0251	0.0234	Ave		0.0230				5.6		15.0			
Acrylonitrile	0.2141 0.1228	0.1071	0.1187	0.1338	0.1227	Lin1	0.0504	0.1224							0.9960		0.9900
Methyl tert-butyl ether	0.8142 0.8440	0.8123	0.7960	0.8929	0.8145	Ave		0.8290				4.2		15.0			
trans-1,2-Dichloroethene	0.2598 0.2459	0.2389	0.2392	0.2660	0.2412	Ave		0.2485				4.7		15.0			
Hexane	0.0788 0.0735	0.0701	0.0635	0.0743	0.0693	Ave		0.0716				7.3		15.0			
1,1-Dichloroethane	0.5208 0.5088	0.5056	0.4848	0.5347	0.4907	Ave		0.5076			0.1000	3.7		15.0			
Vinyl acetate	0.0638 0.0481	0.0381	0.0408	0.0455	0.0467	Lin1	0.0006	0.0468							0.9970		0.9900
2,2-Dichloropropane	0.2281 0.2415	0.2127	0.2231	0.2564	0.2374	Ave		0.2332				6.6		15.0			
cis-1,2-Dichloroethene	0.2883 0.2691	0.2656	0.2651	0.2926	0.2666	Ave		0.2746				4.5		15.0			
2-Butanone	0.2851 0.1429	0.1400	0.1428	0.1534	0.1427	Lin1	0.0939	0.1414							0.9970		0.9900
Bromochloromethane	0.1195 0.1156	0.1173	0.1097	0.1243	0.1136	Ave		0.1167				4.3		15.0			
Tetrahydrofuran	0.1276 0.0965	0.1203	0.0943	0.1053	0.0950	Ave		0.1065				13.0		15.0			
Chloroform	0.4303 0.4367	0.4226	0.4185	0.4603	0.4253	Ave		0.4323				3.5		15.0			
1,1,1-Trichloroethane	0.2828 0.3027	0.2855	0.2882	0.3236	0.3006	Ave		0.2972				5.1		15.0			
Cyclohexane	0.5679 0.5899	0.5384	0.5166	0.5873	0.5563	Ave		0.5594				5.1		15.0			
1,1-Dichloropropene	0.3820 0.3778	0.3670	0.3551	0.3939	0.3639	Ave		0.3733				3.8		15.0			
Carbon tetrachloride	0.2142 0.2609	0.2241	0.2237	0.2635	0.2475	Ave		0.2390				8.8		15.0			
Benzene	1.2466 1.1756	1.1889	1.1018	1.2243	1.1267	Ave		1.1773				4.7		15.0			
1,2-Dichloroethane	0.3650 0.3639	0.3671	0.3533	0.3888	0.3513	Ave		0.3649				3.7		15.0			
Trichloroethene	0.2556 0.2450	0.2397	0.2379	0.2585	0.2379	Ave		0.2458				3.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.4926 0.5124	0.4624	0.4411	0.5115	0.4793	Ave		0.4832				5.8		15.0			
1,2-Dichloropropane	0.2922 0.2948	0.2815	0.2794	0.3073	0.2847	Ave		0.2900				3.6		15.0			
1,4-Dioxane	0.0029 0.0022	0.0037	0.0028	0.0031	0.0029	Qua	-0.039	0.0035	0						0.9990		0.9900
Dibromomethane	0.1333 0.1355	0.1242	0.1259	0.1457	0.1334	Ave		0.1330				5.8		15.0			
Bromodichloromethane	0.2548 0.3075	0.2542	0.2669	0.3073	0.2893	Ave		0.2800				8.8		15.0			
2-Chloroethyl vinyl ether	0.2607 0.1714	0.1363	0.1542	0.1697	0.1669	Lin1	0.0311	0.1678							0.9970		0.9900
cis-1,3-Dichloropropene	0.2988 0.4391	0.3141	0.3579	0.4157	0.4095	Lin1	-0.099	0.4282							0.9980		0.9900
4-Methyl-2-pentanone	0.4926 0.2989	0.2579	0.2723	0.3097	0.2983	Lin1	0.0929	0.2955							0.9970		0.9900
Toluene	1.7117 1.7823	1.7255	1.6542	1.8171	1.6762	Ave		1.7278				3.6		15.0			
trans-1,3-Dichloropropene	0.3545 0.5553	0.3639	0.4327	0.5149	0.5058	Lin1	-0.146	0.5367							0.9970		0.9900
Ethyl methacrylate	0.4354 0.5676	0.4127	0.4814	0.5550	0.5387	Ave		0.4985				13.0		15.0			
1,1,2-Trichloroethane	0.2863 0.3051	0.2967	0.2913	0.3185	0.2962	Ave		0.2990				3.8		15.0			
Tetrachloroethene	0.3126 0.2837	0.2880	0.2762	0.2967	0.2765	Ave		0.2889				4.8		15.0			
1,3-Dichloropropane	0.6163 0.6261	0.5954	0.5973	0.6503	0.6033	Ave		0.6148				3.4		15.0			
2-Hexanone	0.4857 0.2905	0.2427	0.2861	0.3118	0.2948	Lin1	0.0984	0.2909							0.9970		0.9900
Dibromochloromethane	0.2093 0.2930	0.2198	0.2315	0.2737	0.2711	Ave		0.2497				14.0		15.0			
1,2-Dibromoethane	0.2622 0.2939	0.2720	0.2790	0.3067	0.2866	Ave		0.2834				5.6		15.0			
Chlorobenzene	1.0785 1.0362	1.0213	0.9800	1.0834	1.0008	Ave		1.0334			0.3000	4.0		15.0			
1,1,1,2-Tetrachloroethane	0.2730 0.3207	0.2833	0.2846	0.3335	0.3103	Ave		0.3009				8.0		15.0			
Ethylbenzene	0.5571 0.5695	0.5195	0.5396	0.5925	0.5510	Ave		0.5548				4.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.6762 0.7239	0.6781	0.6729	0.7566	0.6967	Ave		0.7007				4.8		15.0			
o-Xylene	0.6789 0.7013	0.6480	0.6724	0.7454	0.6824	Ave		0.6881				4.8		15.0			
Styrene	0.9631 1.1993	0.9561	1.0389	1.1967	1.1347	Ave		1.0815				10.0		15.0			
Bromoform	0.0953 0.1761	0.1151	0.1331	0.1589	0.1592	Lin1	-0.053	0.1695			0.1000				0.9960		0.9900
Isopropylbenzene	1.7096 1.9142	1.7196	1.7241	1.9578	1.8184	Ave		1.8073				6.0		15.0			
1,1,2,2-Tetrachloroethane	0.7799 0.8094	0.7561	0.7828	0.8787	0.7929	Ave		0.8000			0.3000	5.3		15.0			
Bromobenzene	0.7223 0.7515	0.7379	0.7294	0.7849	0.7251	Ave		0.7418				3.2		15.0			
1,2,3-Trichloropropane	0.2491 0.2309	0.2346	0.2227	0.2455	0.2294	Ave		0.2354				4.3		15.0			
trans-1,4-Dichloro-2-butene	0.1439 0.2361	0.1772	0.1761	0.2066	0.2092	Lin1	-0.059	0.2245							0.9940		0.9900
n-Propylbenzene	0.8210 0.9219	0.8469	0.8208	0.9230	0.8769	Ave		0.8684				5.4		15.0			
2-Chlorotoluene	0.7297 0.7582	0.7449	0.7313	0.8035	0.7364	Ave		0.7507				3.7		15.0			
1,3,5-Trimethylbenzene	2.4708 3.0742	2.6945	2.6484	3.0456	2.8855	Ave		2.8032				8.5		15.0			
4-Chlorotoluene	0.7461 0.7909	0.7506	0.7416	0.8288	0.7713	Ave		0.7715				4.4		15.0			
tert-Butylbenzene	2.4931 2.5977	2.2810	2.3682	2.6709	2.5002	Ave		2.4852				5.8		15.0			
1,2,4-Trimethylbenzene	2.6971 3.0401	2.6978	2.7496	3.0736	2.9285	Ave		2.8644				6.0		15.0			
sec-Butylbenzene	3.3837 3.8010	3.4360	3.4009	3.8584	3.6580	Ave		3.5897				5.9		15.0			
1,3-Dichlorobenzene	1.5180 1.5042	1.4890	1.4510	1.6100	1.4819	Ave		1.5090				3.6		15.0			
p-Isopropyltoluene	2.5926 3.1400	2.7397	2.7852	3.2216	3.0378	Ave		2.9195				8.5		15.0			
1,4-Dichlorobenzene	1.5500 1.5450	1.5939	1.5013	1.6238	1.5027	Ave		1.5528				3.1		15.0			
n-Butylbenzene	2.7966 3.0515	2.6782	2.6837	3.0549	2.9238	Ave		2.8648				6.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.4489 1.4055	1.4922	1.4083	1.5715	1.4178	Ave		1.4574				4.4		15.0			
1,2-Dibromo-3-Chloropropane	0.0716 0.1095	0.1061	0.1032	0.1288	0.1218	Lin1	-0.016	0.1158							0.9940		0.9900
1,3,5-Trichlorobenzene	1.3126 1.0256	1.2530	1.1827	1.3234	1.1545	Ave		1.2086				9.3		15.0			
1,2,4-Trichlorobenzene	1.1632 0.8882	1.1699	1.0796	1.2286	1.0670	Ave		1.0994				11.0		15.0			
Hexachlorobutadiene	0.6156 0.4112	0.5876	0.5444	0.6118	0.5175	Ave		0.5480				14.0		15.0			
Naphthalene	2.3007 2.0375	2.4094	2.5005	2.9061	2.4442	Ave		2.4331				12.0		15.0			
1,2,3-Trichlorobenzene	1.0979 0.7028	1.0852	1.0060	1.1221	0.8987	Qua	-0.002	1.1444	-0.011						0.9980		0.9900
Dibromofluoromethane (Surr)	0.2015 0.1979	0.1798	0.1887	0.2105	0.1942	Ave		0.1954				5.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3198 0.2946	0.2977	0.2897	0.3154	0.2849	Ave		0.3003				4.7		15.0			
Toluene-d8 (Surr)	1.4995 1.4544	1.3871	1.3772	1.5160	1.4038	Ave		1.4397				4.1		15.0			
4-Bromofluorobenzene (Surr)	0.5849 0.5190	0.5175	0.5198	0.5463	0.5154	Ave		0.5338				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab File ID: BFB013.D BFB Injection Date: 07/30/2012

Instrument ID: A3UX17 BFB Injection Time: 15:49

Analysis Batch No.: 52548

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.4	
75	30.0 - 60.0 % of mass 95	49.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.6	(1.0)1
174	50.0 - 120.00 % of mass 95	68.2	
175	5.0 - 9.0 % of mass 174	4.9	(7.2)1
176	95.0 - 101.0 % of mass 174	67.3	(98.7)1
177	5.0 - 9.0 % of mass 176	4.1	(6.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-52548/2	UXR0216.D	07/30/2012	16:22
	STD8260 240-52548/3	UXR0217.D	07/30/2012	16:46
	STD8260 240-52548/4	UXR0218.D	07/30/2012	17:10
	STD8260 240-52548/5	UXR0219.D	07/30/2012	17:34
	STD8260 240-52548/6	UXR0220.D	07/30/2012	17:58
	STD8260 240-52548/7	UXR0221.D	07/30/2012	18:22
	ICV 240-52548/8	UXR0222.D	07/30/2012	18:46

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-52548/7	UXR0221.D
Level 2	STD8260 240-52548/6	UXR0220.D
Level 3	STD8260 240-52548/5	UXR0219.D
Level 4	STD8260 240-52548/4	UXR0218.D
Level 5	STD8260 240-52548/3	UXR0217.D
Level 6	STD8260 240-52548/2	UXR0216.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	21058 1872641	40699	208003	429915	881092	0.500 40.0	1.00	5.00	10.0	20.0
Chloromethane	FB	Ave	37936 2885180	72617	346009	688012	1398318	0.500 40.0	1.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	30068 2499167	59340	301717	588291	1212110	0.500 40.0	1.00	5.00	10.0	20.0
Bromomethane	FB	Lin1	12518 625664	21272	83457	178404	369132	0.500 40.0	1.00	5.00	10.0	20.0
Chloroethane	FB	Ave	18324 1144512	36506	146827	298755	622959	0.500 40.0	1.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	20261 1631042	39915	199258	400505	830262	0.500 40.0	1.00	5.00	10.0	20.0
Acrolein	FB	Lin1	56460 2654131	58292	326132	672049	1318334	5.00 400	10.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	18698 1525863	37816	184788	378667	725286	0.500 40.0	1.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	12993 1040556	24621	123717	257420	504990	0.500 40.0	1.00	5.00	10.0	20.0
Acetone	FB	Lin1	49773 1240858	53713	178001	345768	631520	1.00 80.0	2.00	10.0	20.0	40.0
Iodomethane	FB	Ave	26865 2004647	52936	254670	532980	1025743	0.500 40.0	1.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	64392 5623587	124182	627236	1338252	2631627	0.500 40.0	1.00	5.00	10.0	20.0
Acetonitrile	FB	Lin1	73964 2761254	66737	354269	716455	1393237	5.00 400	10.0	50.0	100	200
Methyl acetate	FB	Lin1	74347 3698937	91046	458518	936615	1815170	1.00 80.0	2.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	94257 1885972	117310	287666	529019	947840	0.500 40.0	1.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	37136 3156745	78131	387353	805185	1590154	10.0 800	20.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Lin1	37231 1678240	36998	207426	429264	831980	1.00 80.0	2.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	70779 5765990	140267	695472	1432013	2761773	0.500 40.0	1.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	22586 1679760	41252	208940	426563	817890	0.500 40.0	1.00	5.00	10.0	20.0
Hexane	FB	Ave	6846 501783	12103	55507	119160	234927	0.500 40.0	1.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	45273 3475549	87310	423534	857483	1663912	0.500 40.0	1.00	5.00	10.0	20.0
Vinyl acetate	FB	Lin1	5545 328575	6575	35677	73010	158335	0.500 40.0	1.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	19832 1649887	36731	194933	411171	805089	0.500 40.0	1.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	25062 1838668	45865	231642	469236	904091	0.500 40.0	1.00	5.00	10.0	20.0
2-Butanone	FB	Lin1	49561 1952052	48366	249469	491887	967869	1.00 80.0	2.00	10.0	20.0	40.0
Bromochloromethane	FB	Ave	10386 789697	20263	95837	199374	385246	0.500 40.0	1.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	11096 659122	20774	82399	168807	322173	0.500 40.0	1.00	5.00	10.0	20.0
Chloroform	FB	Ave	37404 2983549	72980	365605	738267	1442283	0.500 40.0	1.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	24583 2068162	49301	251787	518983	1019280	0.500 40.0	1.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	49362 4029780	92968	451365	941984	1886272	0.500 40.0	1.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	33210 2580801	63372	310206	631723	1233893	0.500 40.0	1.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	18622 1782604	38694	195462	422530	839161	0.500 40.0	1.00	5.00	10.0	20.0
Benzene	FB	Ave	108361 8030871	205298	962632	1963556	3820479	0.500 40.0	1.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	31730 2485698	63383	308649	623518	1191101	0.500 40.0	1.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	22220 1673445	41394	207883	414611	806605	0.500 40.0	1.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	42823 3500566	79837	385380	820339	1625314	0.500 40.0	1.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	25399 2014190	48611	244143	492824	965491	0.500 40.0	1.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,4-Dioxane	FB	Qua	12669 744859	32306	123686	247969	489008	25.0 2000	50.0	250	500	1000
Dibromomethane	FB	Ave	11586 925886	21445	110009	233637	452393	0.500 40.0	1.00	5.00	10.0	20.0
Bromodichloromethane	FB	Ave	22151 2100697	43900	233178	492907	981136	0.500 40.0	1.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Lin1	45318 2341929	47088	269476	544467	1132146	1.00 80.0	2.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Lin1	25974 2999483	54239	312710	666712	1388601	0.500 40.0	1.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Lin1	85644 4083250	89066	475781	993462	2023005	1.00 80.0	2.00	10.0	20.0	40.0
Toluene	CBZ	Ave	96207 8085759	196413	951268	1921958	3788821	0.500 40.0	1.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Lin1	19926 2519266	41420	248798	544654	1143264	0.500 40.0	1.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Ave	24474 2574875	46975	276839	587013	1217655	0.500 40.0	1.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	16094 1384232	33776	167534	336855	669573	0.500 40.0	1.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	17569 1287179	32779	158805	313798	625074	0.500 40.0	1.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	34639 2840471	67767	343454	687771	1363568	0.500 40.0	1.00	5.00	10.0	20.0
2-Hexanone	CBZ	Lin1	54601 2636087	55253	328992	659608	1332621	1.00 80.0	2.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	11765 1329341	25014	133111	289486	612814	0.500 40.0	1.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	14737 1333384	30956	160412	324439	647841	0.500 40.0	1.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	60618 4700774	116256	563529	1145960	2262186	0.500 40.0	1.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	15342 1455062	32243	163630	352747	701327	0.500 40.0	1.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	31312 2583623	59128	310285	626658	1245342	0.500 40.0	1.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	76016 6568663	154368	773871	1600512	3149577	1.00 80.0	2.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	38159 3181633	73762	386659	788412	1542434	0.500 40.0	1.00	5.00	10.0	20.0
Styrene	CBZ	Ave	54133 5441012	108826	597399	1265757	2564787	0.500 40.0	1.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Lin1	5358 798991	13097	76512	168026	359800	0.500 40.0	1.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	96092 8684238	195741	991418	2070782	4110135	0.500 40.0	1.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	24022 1926872	46212	243803	505797	953611	0.500 40.0	1.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	22248 1789008	45097	227191	451826	872072	0.500 40.0	1.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	7674 549675	14337	69373	141291	275928	0.500 40.0	1.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Lin1	4433 562093	10830	54853	118904	251658	0.500 40.0	1.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	25288 2194817	51760	255666	531307	1054672	0.500 40.0	1.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	22476 1805108	45528	227777	462505	885709	0.500 40.0	1.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	76105 7318929	164678	824892	1753118	3470407	0.500 40.0	1.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	22980 1882973	45871	230995	477077	927657	0.500 40.0	1.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	76791 6184354	139403	737611	1537419	3006986	0.500 40.0	1.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	83076 7237779	164878	856408	1769207	3522065	0.500 40.0	1.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	104224 9049152	209994	1059260	2220954	4399540	0.500 40.0	1.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	46758 3581143	91000	451932	926743	1782260	0.500 40.0	1.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	79858 7475452	167440	867500	1854407	3653525	0.500 40.0	1.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	47744 3678255	97415	467607	934690	1807300	0.500 40.0	1.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	86139 7264816	163679	835884	1758481	3516496	0.500 40.0	1.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	44629 3346021	91199	438638	904615	1705224	0.500 40.0	1.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Lin1	2204 260736	6485	32128	74165	146536	0.500 40.0	1.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	40431 2441758	76579	368371	761767	1388519	0.500 40.0	1.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	35830 2114502	71499	336265	707204	1283296	0.500 40.0	1.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52548

SDG No.:

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 16:22 Calibration End Date: 07/30/2012 18:22 Calibration ID: 10345

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Ave	18962 978879	35914	169574	352152	622410	0.500 40.0	1.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	70865 4850757	147255	778815	1672838	2939683	0.500 40.0	1.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Qua	33818 1673193	66325	313324	645920	1080912	0.500 40.0	1.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	17520 1351829	31047	164848	337558	658505	0.500 40.0	1.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	27797 2012809	51402	253121	505778	965921	0.500 40.0	1.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	84284 6598465	157884	791931	1603513	3173035	0.500 40.0	1.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	32878 2354693	58907	298889	577813	1164948	0.500 40.0	1.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-52548/8 Calibration Date: 07/30/2012 18:46

Instrument ID: A3UX17 Calib Start Date: 07/19/2012 14:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/19/2012 16:58

Lab File ID: UXR0222.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.3267	0.2838		8.69	10.0	-13.1	50.0
Diisopropyl ether	Ave	0.2752	0.2513		9.13	10.0	-8.7	50.0
Isobutyl alcohol	Ave	0.0180	0.0129		359	500	-28.2	50.0
Cyclohexanone	Ave	0.0302	0.0243		161	200	-19.6	50.0
1,2,3-Trimethylbenzene	Ave	3.337	2.998		8.98	10.0	-10.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-52548/8 Calibration Date: 07/30/2012 18:46

Instrument ID: A3UX17 Calib Start Date: 07/30/2012 16:22

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/30/2012 18:22

Lab File ID: UXR0222.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2530	0.2440		9.64	10.0	-3.6	50.0
Chloromethane	Ave	0.4194	0.4212	0.1000	10.0	10.0	0.4	50.0
Vinyl chloride	Ave	0.3542	0.3647		10.3	10.0	3.0	20.0
Bromomethane	Lin1		0.1058		10.6	10.0	5.7	50.0
Chloroethane	Ave	0.1880	0.1845		9.82	10.0	-1.8	50.0
Trichlorofluoromethane	Ave	0.2376	0.2696		11.3	10.0	13.5	50.0
Acrolein	Lin1		0.0451		33.2	30.0	10.5	50.0
1,1-Dichloroethene	Ave	0.2198	0.2370		10.8	10.0	7.8	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1492	0.1712		11.5	10.0	14.7	50.0
Acetone	Lin1		0.0898		18.1	20.0	-9.6	50.0
Iodomethane	Ave	0.3059	0.3275		10.7	10.0	7.1	50.0
Carbon disulfide	Ave	0.7686	0.7789		10.1	10.0	1.3	50.0
Acetonitrile	Lin1		0.0400		26.2	30.0	-12.6	50.0
Methyl acetate	Lin1		0.2816		10.1	10.0	0.9	50.0
Methylene Chloride	Lin1		0.3114		10.2	10.0	1.7	50.0
tert-Butyl alcohol	Ave	0.0230	0.0222		193	200	-3.4	50.0
Acrylonitrile	Lin1		0.1194		28.8	30.0	-3.8	50.0
Methyl tert-butyl ether	Ave	0.8290	0.8411		10.1	10.0	1.5	50.0
trans-1,2-Dichloroethene	Ave	0.2485	0.2600		10.5	10.0	4.6	50.0
Hexane	Ave	0.0716	0.0767		10.7	10.0	7.1	20.0
1,1-Dichloroethane	Ave	0.5076	0.5305	0.1000	10.5	10.0	4.5	50.0
Vinyl acetate	Lin1		0.0442		9.43	10.0	-5.7	50.0
2,2-Dichloropropane	Ave	0.2332	0.2350		10.1	10.0	0.8	50.0
cis-1,2-Dichloroethene	Ave	0.2746	0.2833		10.3	10.0	3.2	50.0
2-Butanone	Lin1		0.1337		18.2	20.0	-8.8	50.0
Bromochloromethane	Ave	0.1167	0.1180		10.1	10.0	1.1	50.0
Tetrahydrofuran	Ave	0.1065	0.0966		9.07	10.0	-9.3	50.0
Chloroform	Ave	0.4323	0.4407		10.2	10.0	1.9	20.0
1,1,1-Trichloroethane	Ave	0.2972	0.3107		10.5	10.0	4.5	50.0
Cyclohexane	Ave	0.5594	0.5589		9.99	10.0	-0.1	50.0
1,1-Dichloropropene	Ave	0.3733	0.3795		10.2	10.0	1.7	50.0
Carbon tetrachloride	Ave	0.2390	0.2561		10.7	10.0	7.1	50.0
Benzene	Ave	1.177	1.187		10.1	10.0	0.9	50.0
1,2-Dichloroethane	Ave	0.3649	0.3721		10.2	10.0	2.0	50.0
Trichloroethene	Ave	0.2458	0.2501		10.2	10.0	1.8	50.0
Methylcyclohexane	Ave	0.4832	0.4842		10.0	10.0	0.2	50.0
1,2-Dichloropropane	Ave	0.2900	0.2986		10.3	10.0	3.0	20.0
Dibromomethane	Ave	0.1330	0.1395		10.5	10.0	4.9	50.0
Bromodichloromethane	Ave	0.2800	0.2887		10.3	10.0	3.1	50.0
2-Chloroethyl vinyl ether	Lin1		0.1582		9.24	10.0	-7.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-52548/8 Calibration Date: 07/30/2012 18:46

Instrument ID: A3UX17 Calib Start Date: 07/30/2012 16:22

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/30/2012 18:22

Lab File ID: UXR0222.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Lin1		0.3715		8.91	10.0	-10.9	50.0
4-Methyl-2-pentanone	Lin1		0.2801		18.6	20.0	-6.8	50.0
Toluene	Ave	1.728	1.684		9.75	10.0	-2.5	20.0
trans-1,3-Dichloropropene	Lin1		0.4602		8.85	10.0	-11.5	50.0
1,1,2-Trichloroethane	Ave	0.2990	0.3107		10.4	10.0	3.9	50.0
Tetrachloroethene	Ave	0.2889	0.2815		9.74	10.0	-2.6	50.0
1,3-Dichloropropane	Ave	0.6148	0.6149		10.0	10.0	0.0	50.0
2-Hexanone	Lin1		0.2684		18.1	20.0	-9.4	50.0
Dibromochloromethane	Ave	0.2497	0.2463		9.86	10.0	-1.4	50.0
1,2-Dibromoethane	Ave	0.2834	0.2847		10.0	10.0	0.5	50.0
Chlorobenzene	Ave	1.033	1.019	0.3000	9.86	10.0	-1.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3009	0.2997		9.96	10.0	-0.4	50.0
Ethylbenzene	Ave	0.5548	0.5577		10.1	10.0	0.5	20.0
m-Xylene & p-Xylene	Ave	0.7007	0.7055		20.1	20.0	0.7	50.0
o-Xylene	Ave	0.6881	0.7015		10.2	10.0	1.9	50.0
Styrene	Ave	1.081	1.115		10.3	10.0	3.1	50.0
Bromoform	Lin1		0.1406	0.1000	8.61	10.0	-13.9	50.0
Isopropylbenzene	Ave	1.807	1.819		10.1	10.0	0.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8000	0.7867	0.3000	9.83	10.0	-1.7	50.0
Bromobenzene	Ave	0.7418	0.7422		10.0	10.0	0.0	50.0
1,2,3-Trichloropropane	Ave	0.2354	0.2306		9.80	10.0	-2.0	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1937		17.5	20.0	-12.4	50.0
n-Propylbenzene	Ave	0.8684	0.8907		10.3	10.0	2.6	50.0
2-Chlorotoluene	Ave	0.7507	0.7484		9.97	10.0	-0.3	50.0
1,3,5-Trimethylbenzene	Ave	2.803	2.876		10.3	10.0	2.6	50.0
4-Chlorotoluene	Ave	0.7715	0.7672		9.94	10.0	-0.6	50.0
tert-Butylbenzene	Ave	2.485	2.481		9.98	10.0	-0.2	50.0
1,2,4-Trimethylbenzene	Ave	2.864	2.931		10.2	10.0	2.3	50.0
sec-Butylbenzene	Ave	3.590	3.603		10.0	10.0	0.4	50.0
1,3-Dichlorobenzene	Ave	1.509	1.516		10.0	10.0	0.5	50.0
p-Isopropyltoluene	Ave	2.919	3.102		10.6	10.0	6.2	50.0
1,4-Dichlorobenzene	Ave	1.553	1.528		9.84	10.0	-1.6	50.0
n-Butylbenzene	Ave	2.865	2.940		10.3	10.0	2.6	50.0
1,2-Dichlorobenzene	Ave	1.457	1.452		9.96	10.0	-0.4	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1102		9.65	10.0	-3.5	50.0
1,2,4-Trichlorobenzene	Ave	1.099	1.094		9.95	10.0	-0.5	50.0
Hexachlorobutadiene	Ave	0.5480	0.5417		9.88	10.0	-1.2	50.0
Naphthalene	Ave	2.433	2.539		10.4	10.0	4.3	50.0
1,2,3-Trichlorobenzene	Qua		1.027		9.93	10.0	-0.7	50.0
Dibromofluoromethane (Surr)	Ave	0.1954	0.1899		8.66	8.91	-2.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3003	0.2822		8.37	8.91	-6.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-52548/8 Calibration Date: 07/30/2012 18:46

Instrument ID: A3UX17 Calib Start Date: 07/30/2012 16:22

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/30/2012 18:22

Lab File ID: UXR0222.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.440	1.345		8.32	8.91	-6.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5338	0.4962		8.28	8.91	-7.0	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab File ID: BFB048.D BFB Injection Date: 08/31/2012

Instrument ID: A3UX17 BFB Injection Time: 21:12

Analysis Batch No.: 56479

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.3	
75	30.0 - 60.0 % of mass 95	47.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.4	(0.6)1
174	50.0 - 120.00 % of mass 95	76.8	
175	5.0 - 9.0 % of mass 174	5.2	(6.8)1
176	95.0 - 101.0 % of mass 174	74.0	(96.4)1
177	5.0 - 9.0 % of mass 176	4.6	(6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-56479/2	UXR940.D	08/31/2012	21:33
	CCV 240-56479/3	UXR941.D	08/31/2012	21:56
	LCS 240-56479/4	UXR942.D	08/31/2012	22:18
	MB 240-56479/5	UXR943.D	08/31/2012	22:40
TB-082112	240-14408-1	UXR944.D	08/31/2012	23:02
MT-MW09S-082112	240-14408-2	UXR945.D	08/31/2012	23:25
MT-MW11S-082112	240-14408-3	UXR946.D	08/31/2012	23:47
MT-MW12S-082112	240-14408-4	UXR947.D	09/01/2012	00:09
	240-14497-E-10 MS	UXR964.D	09/01/2012	06:29
	240-14497-F-10 MSD	UXR965.D	09/01/2012	06:51

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCVIS 240-56479/2 Calibration Date: 08/31/2012 21:33

Instrument ID: A3UX17 Calib Start Date: 07/30/2012 16:22

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/30/2012 18:22

Lab File ID: UXR940.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2530	0.2379		9.40	10.0	-6.0	50.0
Chloromethane	Ave	0.4194	0.3558	0.1000	8.48	10.0	-15.2	50.0
Vinyl chloride	Ave	0.3542	0.3592		10.1	10.0	1.4	20.0
Bromomethane	Lin1		0.1313		13.2	10.0	31.8	50.0
Chloroethane	Ave	0.1880	0.1430		7.61	10.0	-23.9	50.0
Trichlorofluoromethane	Ave	0.2376	0.3063		12.9	10.0	28.9	50.0
Acrolein	Lin1		0.0263		66.1	100	-33.9	50.0
1,1-Dichloroethene	Ave	0.2198	0.2450		11.1	10.0	11.4	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1492	0.1809		12.1	10.0	21.2	50.0
Acetone	Lin1		0.0812		16.2	20.0	-19.1	50.0
Iodomethane	Ave	0.3059	0.3909		12.8	10.0	27.8	50.0
Carbon disulfide	Ave	0.7686	0.8304		10.8	10.0	8.0	50.0
Acetonitrile	Lin1		0.0367		87.6	100	-12.4	50.0
Methyl acetate	Lin1		0.2229		16.2	20.0	-19.1	50.0
Methylene Chloride	Lin1		0.3402		11.3	10.0	12.5	50.0
tert-Butyl alcohol	Ave	0.0230	0.0176		153	200	-23.6	50.0
Acrylonitrile	Lin1		0.1080		17.2	20.0	-13.8	50.0
Methyl tert-butyl ether	Ave	0.8290	0.7856		9.48	10.0	-5.2	50.0
trans-1,2-Dichloroethene	Ave	0.2485	0.2878		11.6	10.0	15.8	50.0
Hexane	Ave	0.0716	0.0709		9.90	10.0	-1.0	20.0
1,1-Dichloroethane	Ave	0.5076	0.5102	0.1000	10.1	10.0	0.5	50.0
Vinyl acetate	Lin1		0.0316		6.74	10.0	-32.6	50.0
2,2-Dichloropropane	Ave	0.2332	0.2108		9.04	10.0	-9.6	50.0
cis-1,2-Dichloroethene	Ave	0.2746	0.3092		11.3	10.0	12.6	50.0
2-Butanone	Lin1		0.1113		15.1	20.0	-24.6	50.0
Bromochloromethane	Ave	0.1167	0.1399		12.0	10.0	19.9	50.0
Tetrahydrofuran	Ave	0.1065	0.0739		6.94	10.0	-30.6	50.0
Chloroform	Ave	0.4323	0.4806		11.1	10.0	11.2	20.0
1,1,1-Trichloroethane	Ave	0.2972	0.3392		11.4	10.0	14.1	50.0
Cyclohexane	Ave	0.5594	0.4890		8.74	10.0	-12.6	50.0
1,1-Dichloropropene	Ave	0.3733	0.3697		9.90	10.0	-1.0	50.0
Carbon tetrachloride	Ave	0.2390	0.2820		11.8	10.0	18.0	50.0
Benzene	Ave	1.177	1.207		10.3	10.0	2.5	50.0
1,2-Dichloroethane	Ave	0.3649	0.3733		10.2	10.0	2.3	50.0
Trichloroethene	Ave	0.2458	0.2667		10.9	10.0	8.5	50.0
Methylcyclohexane	Ave	0.4832	0.4863		10.1	10.0	0.6	50.0
1,2-Dichloropropane	Ave	0.2900	0.2810		9.69	10.0	-3.1	20.0
1,4-Dioxane	Qua		0.0028		451	500	-9.9	50.0
Dibromomethane	Ave	0.1330	0.1516		11.4	10.0	14.0	50.0
Bromodichloromethane	Ave	0.2800	0.2973		10.6	10.0	6.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCVIS 240-56479/2 Calibration Date: 08/31/2012 21:33

Instrument ID: A3UX17 Calib Start Date: 07/30/2012 16:22

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/30/2012 18:22

Lab File ID: UXR940.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Lin1		0.1516		17.9	20.0	-10.6	50.0
cis-1,3-Dichloropropene	Lin1		0.3624		8.69	10.0	-13.1	50.0
4-Methyl-2-pentanone	Lin1		0.2263		15.0	20.0	-25.0	50.0
Toluene	Ave	1.728	1.632		9.44	10.0	-5.6	20.0
trans-1,3-Dichloropropene	Lin1		0.3746		7.25	10.0	-27.5	50.0
Ethyl methacrylate	Ave	0.4985	0.4406		8.84	10.0	-11.6	50.0
1,1,2-Trichloroethane	Ave	0.2990	0.3035		10.1	10.0	1.5	50.0
Tetrachloroethene	Ave	0.2889	0.2789		9.65	10.0	-3.5	50.0
1,3-Dichloropropane	Ave	0.6148	0.5762		9.37	10.0	-6.3	50.0
2-Hexanone	Lin1		0.1968		13.2	20.0	-34.0	50.0
Dibromochloromethane	Ave	0.2497	0.2519		10.1	10.0	0.9	50.0
1,2-Dibromoethane	Ave	0.2834	0.2842		10.0	10.0	0.3	50.0
Chlorobenzene	Ave	1.033	1.004	0.3000	9.72	10.0	-2.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3009	0.3029		10.1	10.0	0.7	50.0
Ethylbenzene	Ave	0.5548	0.5221		9.41	10.0	-5.9	20.0
m-Xylene & p-Xylene	Ave	0.7007	0.6743		19.2	20.0	-3.8	50.0
o-Xylene	Ave	0.6881	0.6526		9.48	10.0	-5.2	50.0
Styrene	Ave	1.081	1.069		9.89	10.0	-1.1	50.0
Bromoform	Lin1		0.1306	0.1000	8.02	10.0	-19.8	50.0
Isopropylbenzene	Ave	1.807	1.653		9.15	10.0	-8.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8000	0.7161	0.3000	8.95	10.0	-10.5	50.0
Bromobenzene	Ave	0.7418	0.7111		9.59	10.0	-4.1	50.0
1,2,3-Trichloropropane	Ave	0.2354	0.2215		9.41	10.0	-5.9	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1142		5.35	10.0	-46.5	50.0
n-Propylbenzene	Ave	0.8684	0.7883		9.08	10.0	-9.2	50.0
2-Chlorotoluene	Ave	0.7507	0.6884		9.17	10.0	-8.3	50.0
1,3,5-Trimethylbenzene	Ave	2.803	2.502		8.93	10.0	-10.7	50.0
4-Chlorotoluene	Ave	0.7715	0.7334		9.51	10.0	-4.9	50.0
tert-Butylbenzene	Ave	2.485	2.134		8.59	10.0	-14.1	50.0
1,2,4-Trimethylbenzene	Ave	2.864	2.552		8.91	10.0	-10.9	50.0
sec-Butylbenzene	Ave	3.590	3.103		8.64	10.0	-13.6	50.0
1,3-Dichlorobenzene	Ave	1.509	1.430		9.48	10.0	-5.2	50.0
p-Isopropyltoluene	Ave	2.919	2.588		8.87	10.0	-11.3	50.0
1,4-Dichlorobenzene	Ave	1.553	1.458		9.39	10.0	-6.1	50.0
n-Butylbenzene	Ave	2.865	2.381		8.31	10.0	-16.9	50.0
1,2-Dichlorobenzene	Ave	1.457	1.384		9.49	10.0	-5.1	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0895		7.87	10.0	-21.3	50.0
1,3,5-Trichlorobenzene	Ave	1.209	1.024		8.48	10.0	-15.2	50.0
1,2,4-Trichlorobenzene	Ave	1.099	0.8955		8.15	10.0	-18.5	50.0
Hexachlorobutadiene	Ave	0.5480	0.4190		7.65	10.0	-23.5	50.0
Naphthalene	Ave	2.433	1.866		7.67	10.0	-23.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCVIS 240-56479/2 Calibration Date: 08/31/2012 21:33

Instrument ID: A3UX17 Calib Start Date: 07/30/2012 16:22

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/30/2012 18:22

Lab File ID: UXR940.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Qua		0.7788		7.33	10.0	-26.7	50.0
Dibromofluoromethane (Surr)	Ave	0.1954	0.2190		9.98	8.91	12.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3003	0.2863		8.49	8.91	-4.7	50.0
Toluene-d8 (Surr)	Ave	1.440	1.353		8.37	8.91	-6.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5338	0.5063		8.45	8.91	-5.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-56479/3 Calibration Date: 08/31/2012 21:56

Instrument ID: A3UX17 Calib Start Date: 07/19/2012 14:58

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/19/2012 16:58

Lab File ID: UXR941.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.4818	0.3889		8.07	10.0	-19.3	50.0
Ethyl ether	Ave	0.3267	0.2278		6.97	10.0	-30.3	50.0
3-Chloro-1-propene	Ave	0.1758	0.1271		7.23	10.0	-27.7	50.0
Diisopropyl ether	Ave	0.2752	0.2432		44.2	50.0	-11.6	50.0
2-Chloro-1,3-butadiene	Ave	0.5635	0.3896		6.91	10.0	-30.9	50.0
Ethyl-t-butyl ether (ETBE)	Ave	1.171	0.7458		6.37	10.0	-36.3	50.0
Ethyl acetate	Ave	0.3309	0.1948		11.8	20.0	-41.1	50.0
Propionitrile	Ave	0.0498	0.0331		13.3	20.0	-33.6	50.0
Methacrylonitrile	Ave	0.2442	0.1382		5.66	10.0	-43.4	50.0
Isobutyl alcohol	Ave	0.0180	0.0085		94.8	200	-52.6*	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.9690	0.6504		6.71	10.0	-32.9	50.0
n-Heptane	Ave	0.0721	0.0679		9.42	10.0	-5.8	50.0
n-Butanol	Ave	0.0153	0.0067		87.5	200	-56.2*	50.0
Methyl methacrylate	Ave	0.2987	0.1777		5.95	10.0	-40.5	50.0
2-Nitropropane	Ave	0.0828	0.0353		8.54	20.0	-57.3*	50.0
Cyclohexanone	Ave	0.0302	0.0538		178	100	78.5*	50.0
1,2,3-Trimethylbenzene	Ave	3.337	2.430		7.28	10.0	-27.2	50.0
2-Methylnaphthalene	Ave	1.554	0.8491		10.9	20.0	-45.4	50.0

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Sample No.: STD8260 240-52548/4 Date Analyzed: 07/30/2012 17:10

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR0218.D Heated Purge: (Y/N) N

Calibration ID: 10345

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1603791	5.76	1057699	8.48	575622	10.72
UPPER LIMIT		3207582	6.26	2115398	8.98	1151244	11.22
LOWER LIMIT		801896	5.26	528850	7.98	287811	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-52548/8		1668303	5.76	1130873	8.47	606714	10.72
CCVIS 240-56479/2		1702660	5.76	1296820	8.47	730804	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Sample No.: CCVIS 240-56479/2 Date Analyzed: 08/31/2012 21:33

Instrument ID: A3UX17 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXR940.D Heated Purge: (Y/N) N

Calibration ID: 10345

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1702660	5.76	1296820	8.47	730804	10.72
UPPER LIMIT		3405320	6.26	2593640	8.97	1461608	11.22
LOWER LIMIT		851330	5.26	648410	7.97	365402	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-56479/3		1876641	5.76	1372537	8.48	728236	10.72
LCS 240-56479/4		1801874	5.76	1373158	8.48	771338	10.72
MB 240-56479/5		1824509	5.76	1355289	8.48	717015	10.72
240-14408-1	TB-082112	1852075	5.76	1380782	8.48	727674	10.72
240-14408-2	MT-MW09S-082112	1791879	5.76	1330630	8.48	709474	10.72
240-14408-3	MT-MW11S-082112	1670181	5.76	1256479	8.48	685690	10.72
240-14408-4	MT-MW12S-082112	1803830	5.76	1365445	8.48	719052	10.72
240-14497-E-10 MS		1842850	5.76	1387382	8.47	784575	10.72
240-14497-F-10 MSD		1811109	5.76	1379740	8.48	782658	10.72

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

SDG 240-14408-1

SAMPLE ID MT-MW09S-082112

SAMPLE CALC

IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Volume (ML)	AVE RRF	CONCENTRATION ug/L
1791879	1	395807	10	5	0.7686	2.87
				Sample Volume (ML)		
				5		

Carbon disulfide = 2.87 ug/L

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\NCCHROM\ChromData\A3UX17\20120831-12880.b\UXR945.D
Lims ID: 240-14408-A-2 Client ID: MT-MW09S-082112
Inject. Date: 31-Aug-2012 23:25:30 Dil. Factor: 1.0000
Sample Type: Client
Sample ID: 240-0012880-007
Misc. Info.:
Operator: Instrument ID: A3UX17
Vol. Injected: 1.0000 ALS Bottle#: 35
Lims Batch ID: 56479 Lims Sample ID: 7
Detector: MS SCAN

Method: \\NCCHROM\ChromData\A3UX17\20120831-12880.b\8260_17.m
Last Update: 04-Sep-2012 11:07:01 Calib Date: 30-Jul-2012 18:22:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCCHROM\ChromData\A3UX17\20120730-11939.b\UXR0221.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Process Host: XAWRK037

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.763	5.763	0.0	99	1791879	10.0	
* 2 Chlorobenzene-d5	117	8.479	8.479	0.0	84	1330630	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.720	10.720	0.0	95	709474	10.0	
$ 6 Dibromofluoromethane (Surr)	113	5.194	5.182	0.012	58	321806	9.19	
$ 7 1,2-Dichloroethane-d4 (Surr)	65	5.490	5.479	0.011	0	426249	7.92	
$ 8 Toluene-d8 (Surr)	98	7.151	7.139	0.012	93	1427325	7.45	
$ 9 4-Bromofluorobenzene (Surr)	95	9.582	9.582	0.0	88	519792	7.32	
14 Dichlorodifluoromethane	85		1.648					
15 Chloromethane	50	1.826	1.826	0.0	79	19060	0.2536	
17 Vinyl chloride	62		1.957					9
18 Bromomethane	94	2.324	2.313	0.011	26	6518	0.1035	
19 Chloroethane	64		2.431					
21 Trichlorofluoromethane	101		2.668					
25 1,1-Dichloroethene	96		3.178					
26 1,1,2-Trichloro-1,2,2-trifluoroe	151		3.202					
27 Acetone	43	3.237	3.238	-0.001	95	61553	1.86	
29 Carbon disulfide	76	3.391	3.392	-0.001	98	395807	2.87	
33 Methylene Chloride	84		3.641					
34 2-Methyl-2-propanol	59	3.747	3.747	0.0	77	6083	1.48	
35 Methyl tert-butyl ether	73		3.878					
37 trans-1,2-Dichloroethene	96		3.890					
39 1,1-Dichloroethane	63		4.269					
41 Isopropyl ether	87		4.305					
40 Vinyl acetate	86		4.305					
43 Tert-butyl ethyl ether	59		4.625					9
44 2,2-Dichloropropane	77		4.779					9
45 cis-1,2-Dichloroethene	96		4.779					
46 2-Butanone (MEK)	43		4.791					
50 Chlorobromomethane	128		4.993					
52 Chloroform	83		5.052					9
53 1,1,1-Trichloroethane	97		5.206					
55 Carbon tetrachloride	117		5.348					
56 1,1-Dichloropropene	75		5.348					9

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Surrogate Recovery Report

8270D Semivolatile Organic Compounds (GC/MS)

Client Matrix: Water

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
240-14408-2	MT-MW09S-082112	71	74	66	66	86	44
240-14408-3	MT-MW11S-082112	77	75	68	68	78	63
240-14408-4	MT-MW12S-082112	55	54	50	54	70	72
MB 240-55629/14-A		76	74	71	71	68	88
LCS 240-55629/15-A		94	93	91	86	100	100

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	21-110
NBZ = Nitrobenzene-d5 (Surr)	21-110
FBP = 2-Fluorobiphenyl (Surr)	20-110
TBP = 2,4,6-Tribromophenol (Surr)	21-110
TPH = Terphenyl-d14 (Surr)	24-110

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab File ID: 20906021.D Lab Sample ID: MB 240-55629/14-A

Matrix: Water Date Extracted: 08/24/2012 11:11

Instrument ID: A4HP9 Date Analyzed: 09/06/2012 17:53

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-55629/15-A	20906022.D	09/06/2012 18:13
MT-MW09S-082112	240-14408-2	20906024.D	09/06/2012 18:52
MT-MW11S-082112	240-14408-3	20906025.D	09/06/2012 19:11
MT-MW12S-082112	240-14408-4	20906026.D	09/06/2012 19:31

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Method Blank - Batch: 240-55629

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 240-55629/14-A	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Client Matrix:	Water	Prep Batch:	240-55629	Lab File ID:	20906021.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/06/2012 1753	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1'-Biphenyl	1.0	U	0.80	1.0
1,4-Dioxane	1.0	U	0.49	1.0
2,4,6-Trichlorophenol	5.0	U	0.80	5.0
2,4,5-Trichlorophenol	5.0	U	0.30	5.0
2,4-Dichlorophenol	2.0	U	0.80	2.0
2,4-Dimethylphenol	2.0	U	0.80	2.0
2,4-Dinitrophenol	5.0	U	2.4	5.0
2,4-Dinitrotoluene	5.0	U	0.27	5.0
2-Chloronaphthalene	1.0	U	0.10	1.0
2-Chlorophenol	1.0	U	0.29	1.0
2-Methylnaphthalene	0.20	U	0.10	0.20
2-Methylphenol	1.0	U	0.80	1.0
2-Nitroaniline	2.0	U	0.80	2.0
2-Nitrophenol	2.0	U	0.28	2.0
3 & 4 Methylphenol	2.0	U	0.75	2.0
3,3'-Dichlorobenzidine	5.0	U	0.37	5.0
3-Nitroaniline	2.0	U	0.28	2.0
4,6-Dinitro-2-methylphenol	5.0	U	2.4	5.0
4-Bromophenyl phenyl ether	2.0	U	0.80	2.0
4-Chloro-3-methylphenol	2.0	U	0.80	2.0
4-Chloroaniline	2.0	U	0.80	2.0
4-Chlorophenyl phenyl ether	2.0	U	0.30	2.0
4-Nitroaniline	2.0	U	0.80	2.0
Acenaphthene	0.20	U	0.10	0.20
Acenaphthylene	0.20	U	0.10	0.20
Acetophenone	1.0	U	0.34	1.0
Anthracene	0.20	U	0.10	0.20
Atrazine	1.0	U	0.34	1.0
Benzaldehyde	1.0	U	0.39	1.0
Benzo[a]anthracene	0.20	U	0.10	0.20
Benzo[a]pyrene	0.20	U	0.10	0.20
Benzo[b]fluoranthene	0.20	U	0.10	0.20
Benzo[g,h,i]perylene	0.20	U	0.10	0.20
Benzo[k]fluoranthene	0.20	U	0.10	0.20
Bis(2-chloroethoxy)methane	1.0	U	0.32	1.0
Bis(2-chloroethyl)ether	1.0	U	0.10	1.0
Bis(2-ethylhexyl) phthalate	2.0	U	0.80	2.0
Butyl benzyl phthalate	1.0	U	0.80	1.0
Caprolactam	5.0	U	0.80	5.0
Carbazole	1.0	U	0.28	1.0
Chrysene	0.20	U	0.10	0.20
Di-n-butyl phthalate	1.0	U	0.67	1.0
Di-n-octyl phthalate	1.0	U	0.80	1.0
Dibenzo(a,h)anthracene	0.20	U	0.10	0.20
Dibenzofuran	1.0	U	0.10	1.0

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Method Blank - Batch: 240-55629

Method: 8270D
Preparation: 3520C

Lab Sample ID:	MB 240-55629/14-A	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Client Matrix:	Water	Prep Batch:	240-55629	Lab File ID:	20906021.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/06/2012 1753	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Diethyl phthalate	1.0	U	0.60	1.0
Dimethyl phthalate	1.0	U	0.29	1.0
Fluoranthene	0.20	U	0.10	0.20
Fluorene	0.20	U	0.10	0.20
Hexachlorobenzene	0.20	U	0.10	0.20
Hexachlorobutadiene	1.0	U	0.27	1.0
Hexachlorocyclopentadiene	10	U	0.80	10
Hexachloroethane	1.0	U	0.80	1.0
Indeno[1,2,3-cd]pyrene	0.20	U	0.10	0.20
Isophorone	1.0	U	0.27	1.0
N-Nitrosodi-n-propylamine	1.0	U	0.80	1.0
N-Nitrosodimethylamine	1.0	U	0.31	1.0
N-Nitrosodiphenylamine	1.0	U	0.31	1.0
Naphthalene	0.20	U	0.10	0.20
Nitrobenzene	1.0	U	0.040	1.0
Pentachlorophenol	5.0	U	2.4	5.0
Phenanthrene	0.20	U	0.10	0.20
Phenol	1.0	U	0.60	1.0
Pyrene	0.20	U	0.10	0.20
2,2'-oxybis[1-chloropropane]	1.0	U	0.40	1.0
2,6-Dinitrotoluene	5.0	U	0.80	5.0
4-Nitrophenol	5.0	U	2.4	5.0

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (Surr)	88	24 - 110
Phenol-d5 (Surr)	74	21 - 110
Nitrobenzene-d5 (Surr)	71	21 - 110
2-Fluorophenol (Surr)	76	10 - 110
2-Fluorobiphenyl (Surr)	71	20 - 110
2,4,6-Tribromophenol (Surr)	68	21 - 110

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Lab Control Sample - Batch: 240-55629

Method: 8270D
Preparation: 3520C

Lab Sample ID:	LCS 240-55629/15-A	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Client Matrix:	Water	Prep Batch:	240-55629	Lab File ID:	20906022.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/06/2012 1813	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1'-Biphenyl	20.0	19.1	95	43 - 110	
1,4-Dioxane	20.0	17.4	87	27 - 110	
2,4,6-Trichlorophenol	20.0	19.3	97	45 - 110	
2,4,5-Trichlorophenol	20.0	20.4	102	48 - 110	
2,4-Dichlorophenol	20.0	19.1	95	41 - 110	
2,4-Dimethylphenol	20.0	14.1	71	32 - 110	
2,4-Dinitrophenol	20.0	17.5	87	10 - 110	
2,4-Dinitrotoluene	20.0	20.4	102	53 - 110	
2-Chloronaphthalene	20.0	18.4	92	43 - 110	
2-Chlorophenol	20.0	19.1	96	29 - 110	
2-Methylnaphthalene	20.0	18.5	93	45 - 110	
2-Methylphenol	20.0	18.7	93	42 - 110	
2-Nitroaniline	20.0	20.1	101	54 - 110	
2-Nitrophenol	20.0	18.9	95	40 - 110	
3 & 4 Methylphenol	40.0	38.3	96	44 - 110	
3,3'-Dichlorobenzidine	20.0	10.1	50	22 - 110	
3-Nitroaniline	20.0	19.1	95	53 - 110	
4,6-Dinitro-2-methylphenol	20.0	20.1	101	31 - 110	
4-Bromophenyl phenyl ether	20.0	18.9	95	45 - 110	
4-Chloro-3-methylphenol	20.0	19.5	97	52 - 110	
4-Chloroaniline	20.0	16.9	84	44 - 110	
4-Chlorophenyl phenyl ether	20.0	19.2	96	47 - 110	
4-Nitroaniline	20.0	20.0	100	54 - 110	
Acenaphthene	20.0	18.9	94	47 - 110	
Acenaphthylene	20.0	18.8	94	49 - 110	
Acetophenone	20.0	19.6	98	46 - 110	
Anthracene	20.0	19.3	96	52 - 110	
Atrazine	20.0	24.5	123	66 - 126	
Benzaldehyde	20.0	26.7	134	38 - 110	*
Benzo[a]anthracene	20.0	18.3	92	52 - 110	
Benzo[a]pyrene	20.0	16.4	82	44 - 110	
Benzo[b]fluoranthene	20.0	19.7	99	48 - 110	
Benzo[g,h,i]perylene	20.0	19.1	96	50 - 110	
Benzo[k]fluoranthene	20.0	17.7	89	49 - 110	
Bis(2-chloroethoxy)methane	20.0	18.7	94	43 - 110	
Bis(2-chloroethyl)ether	20.0	19.0	95	40 - 110	
Bis(2-ethylhexyl) phthalate	20.0	20.1	100	39 - 116	
Butyl benzyl phthalate	20.0	19.8	99	55 - 110	
Caprolactam	20.0	21.0	105	45 - 111	
Carbazole	20.0	19.6	98	55 - 110	
Chrysene	20.0	20.8	104	55 - 110	
Di-n-butyl phthalate	20.0	20.8	104	57 - 110	
Di-n-octyl phthalate	20.0	18.0	90	40 - 110	
Dibenzo(a,h)anthracene	20.0	19.2	96	49 - 110	
Dibenzofuran	20.0	18.9	94	51 - 110	
Diethyl phthalate	20.0	20.2	101	58 - 110	

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Lab Control Sample - Batch: 240-55629

Method: 8270D
Preparation: 3520C

Lab Sample ID:	LCS 240-55629/15-A	Analysis Batch:	240-56877	Instrument ID:	A4HP9
Client Matrix:	Water	Prep Batch:	240-55629	Lab File ID:	20906022.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	09/06/2012 1813	Units:	ug/L	Final Weight/Volume:	2 mL
Prep Date:	08/24/2012 1111			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Dimethyl phthalate	20.0	20.0	100	57 - 110	
Fluoranthene	20.0	20.2	101	54 - 110	
Fluorene	20.0	19.4	97	52 - 110	
Hexachlorobenzene	20.0	19.6	98	50 - 110	
Hexachlorobutadiene	20.0	16.1	80	33 - 110	
Hexachlorocyclopentadiene	20.0	7.36	37	10 - 110	J
Hexachloroethane	20.0	16.9	84	35 - 110	
Indeno[1,2,3-cd]pyrene	20.0	19.1	95	50 - 110	
Isophorone	20.0	20.1	101	49 - 110	
N-Nitrosodi-n-propylamine	20.0	20.1	100	47 - 110	
N-Nitrosodimethylamine	20.0	19.5	97	40 - 110	
N-Nitrosodiphenylamine	20.0	19.1	96	50 - 110	
Naphthalene	20.0	18.5	93	44 - 110	
Nitrobenzene	20.0	18.6	93	42 - 110	
Pentachlorophenol	20.0	20.4	102	18 - 110	
Phenanthrene	20.0	19.8	99	53 - 110	
Phenol	20.0	19.1	95	33 - 110	
Pyrene	20.0	18.7	94	52 - 110	
2,2'-oxybis[1-chloropropane]	20.0	19.5	98	37 - 110	
2,6-Dinitrotoluene	20.0	20.3	102	54 - 110	
4-Nitrophenol	20.0	17.7	88	33 - 112	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (Surr)	100	24 - 110
Phenol-d5 (Surr)	93	21 - 110
Nitrobenzene-d5 (Surr)	91	21 - 110
2-Fluorophenol (Surr)	94	10 - 110
2-Fluorobiphenyl (Surr)	86	20 - 110
2,4,6-Tribromophenol (Surr)	100	21 - 110

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab File ID: 20906001.D DFTPP Injection Date: 09/06/2012

Instrument ID: A4HP9 DFTPP Injection Time: 10:52

Analysis Batch No.: 56877

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	31.4	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	51.1	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	25.0 - 75.0% of mass 198	45.5	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	25.5	
365	Greater than 0.75% of mass 198	2.6	
441	Present, but less than mass 443	12.7	
442	40.0 - 110.0% of mass 198	73.4	
443	15.0 - 24.0% of mass 442	14.2	(19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-56877/2	20906002.D	09/06/2012	11:13
	STD4 240-56877/3	20906003.D	09/06/2012	11:32
	STD3 240-56877/4	20906004.D	09/06/2012	11:52
	STD2 240-56877/5	20906005.D	09/06/2012	12:11
	STD1 240-56877/6	20906006.D	09/06/2012	12:31
	STD9 240-56877/7	20906007.D	09/06/2012	12:50
	STD8 240-56877/8	20906008.D	09/06/2012	13:10
	STD7 240-56877/9	20906009.D	09/06/2012	13:29
	STD6 240-56877/10	20906010.D	09/06/2012	13:49
	ICV 240-56877/11	20906011.D	09/06/2012	14:36
	MB 240-55629/14-A	20906021.D	09/06/2012	17:53
	LCS 240-55629/15-A	20906022.D	09/06/2012	18:13
MT-MW09S-082112	240-14408-2	20906024.D	09/06/2012	18:52
MT-MW11S-082112	240-14408-3	20906025.D	09/06/2012	19:11
MT-MW12S-082112	240-14408-4	20906026.D	09/06/2012	19:31

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-56877/6	20906006.D
Level 2	STD2 240-56877/5	20906005.D
Level 3	STD3 240-56877/4	20906004.D
Level 4	STD4 240-56877/3	20906003.D
Level 5	STD5 240-56877/2	20906002.D
Level 6	STD6 240-56877/10	20906010.D
Level 7	STD7 240-56877/9	20906009.D
Level 8	STD8 240-56877/8	20906008.D
Level 9	STD9 240-56877/7	20906007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.7770	0.8194 0.7672	0.7786 0.8078	0.7911 0.8221	0.8122	Ave		0.7969				2.7		20.0			
N-Nitrosodimethylamine	1.4062	1.3955 1.4081	1.3529 1.4634	1.4640 1.4420	1.4980	Ave		1.4288				3.3		20.0			
Pyridine	2.1574	2.1450 2.1301	2.1507 2.2912	2.1711 2.2623	2.2960	Ave		2.2005				3.2		20.0			
Ethyl methacrylate	1.8927	2.0414 1.8571	1.9733 1.9275	2.0070 1.9360	2.0121	Ave		1.9559				3.3		20.0			
3-Chloropropionitrile	0.8685	0.9281 0.8610	0.9072 0.8986	0.9189 0.8882	0.9164	Ave		0.8984				2.7		20.0			
Malononitrile	2.3806	2.4456 2.3982	2.5171 2.4840	2.5915 2.4204	2.5867	Ave		2.4780				3.3		20.0			
Benzaldehyde	1.8305 1.2726	1.8884 1.1371	1.8274 1.1518	1.8506 +++++	1.6699	Qua	0.5657	1.3843	-0.014		0.0100				0.9930		0.9900
Benzoic acid	0.2161	+++++ 0.2372	+++++ 0.2364	0.1202 0.2403	0.1970	Qua	-0.539	0.2491	0						1.0000		0.9900
Phenol	2.1831	2.2650 2.2133	2.2272 2.3370	2.2872 2.2810	2.3340	Ave		2.2660			0.8000	2.4		20.0			
Aniline	2.7922	2.8756 2.8271	2.7843 2.9373	2.9065 3.0288	2.9320	Ave		2.8855				2.9		20.0			
Bis(2-chloroethyl)ether	1.7299	1.9191 1.7441	1.8698 1.9679	1.8758 1.8264	1.8977	Ave		1.8538			0.7000	4.5		20.0			
2-Chlorophenol	1.3413	1.4108 1.3461	1.3627 1.4556	1.4643 1.3949	1.4099	Ave		1.3982			0.8000	3.3		20.0			
1,3-Dichlorobenzene	1.5141	1.6399 1.5063	1.5071 1.6001	1.5760 1.5616	1.5843	Ave		1.5612				3.1		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	1.4984	1.6394 1.5116	1.5510 1.6118	1.5613 1.5573	1.5600	Ave		1.5614				3.0		20.0			
Benzyl alcohol	1.0600	1.0680 1.0867	1.0479 1.1709	1.1153 1.1307	1.1296	Ave		1.1011				3.9		20.0			
1,2-Dichlorobenzene	1.4245	1.4669 1.4241	1.4269 1.5422	1.4548 1.4891	1.5079	Ave		1.4671				3.0		20.0			
2-Methylphenol	1.4906	1.5154 1.5167	1.5165 1.6011	1.5600 1.5824	1.5778	Ave		1.5451			0.7000	2.6		20.0			
2,2'-oxybis[1-chloropropane]	1.7599	1.9165 1.7338	1.8129 1.8844	1.8430 1.8161	1.8303	Ave		1.8246				3.3		20.0			
3 & 4 Methylphenol	1.6022	1.5855 1.6231	1.5189 1.7083	1.6372 1.6706	1.6846	Ave		1.6288				3.7		20.0			
N-Nitrosodi-n-propylamine	1.5016	1.5858 1.5038	1.5113 1.5961	1.5888 1.5422	1.5965	Ave		1.5533			0.5000	2.8		20.0			
Acetophenone	2.2429	2.3540 2.2681	2.2066 2.4082	2.3531 2.3353	2.3425	Ave		2.3138			0.0100	2.9		20.0			
2,4-Toluene diamine	0.2024	0.3267 0.1645	0.3264 +++++	0.3584 +++++	0.2965	Qua	0.0653	0.3123	-0.010						0.9910		0.9900
Hexachloroethane	0.6096	0.6244 0.6122	0.6243 0.6601	0.6479 0.6501	0.6374	Ave		0.6332			0.3000	2.9		20.0			
Nitrobenzene	0.5422	0.5732 0.5427	0.5493 0.5708	0.5780 0.5569	0.5743	Ave		0.5609			0.2000	2.7		20.0			
Isophorone	0.9513	0.9949 0.9596	0.9390 0.9989	1.0137 0.9555	0.9989	Ave		0.9765			0.4000	2.9		20.0			
2-Nitrophenol	0.1897	0.1741 0.1922	0.1780 0.2006	0.1938 0.1939	0.1978	Ave		0.1900			0.1000	4.9		20.0			
2,4-Dimethylphenol	0.4360	0.4498 0.4383	0.4369 0.4562	0.4627 0.4406	0.4592	Ave		0.4474			0.2000	2.4		20.0			
1,3,5-Trichlorobenzene	0.3265	0.3449 0.3308	0.3286 0.3505	0.3417 0.3387	0.3324	Ave		0.3368				2.5		20.0			
Bis(2-chloroethoxy)methane	0.5110	0.5540 0.5096	0.5096 0.5382	0.5515 0.5183	0.5389	Ave		0.5289			0.3000	3.6		20.0			
2,4-Dichlorophenol	0.2834	0.2836 0.2875	0.2798 0.3008	0.2999 0.2910	0.2946	Ave		0.2901			0.2000	2.7		20.0			
1,2,4-Trichlorobenzene	0.3172	0.3320 0.3233	0.3192 0.3419	0.3336 0.3317	0.3278	Ave		0.3283				2.5		20.0			
Naphthalene	1.0364 1.0399	1.0701 1.0401	1.0123 1.0851	1.0632 1.0572	1.0672	Ave		1.0524			0.7000	2.1		20.0			
4-Chloroaniline	0.4424	0.4617 0.4420	0.4320 0.4475	0.4555 0.4314	0.4773	Ave		0.4487			0.0100	3.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1845	0.1859 0.1882	0.1799 0.1971	0.1884 0.1897	0.1870	Ave		0.1876			0.0100	2.6		20.0			
1,2,3-Trichlorobenzene	0.2987	0.3025 0.2978	0.2954 0.3207	0.3057 0.3065	0.3097	Ave		0.3046				2.7		20.0			
Caprolactam	0.1371	0.1238 0.1387	0.1231 0.1457	0.1370 0.1355	0.1411	Ave		0.1352			0.0100	5.9		20.0			
4-Chloro-3-methylphenol	0.3793	0.3742 0.3853	0.3670 0.4040	0.3980 0.3855	0.3954	Ave		0.3861			0.2000	3.2		20.0			
2-Methylnaphthalene	0.6787 0.6695	0.6794 0.6763	0.6518 0.7080	0.6905 0.6786	0.6877	Ave		0.6801			0.4000	2.3		20.0			
2,4-Dinitrophenol	0.2069	+++++ 0.2158	0.1151 0.2240	0.1484 0.2241	0.1908	Qua	-0.256	0.2163	0.0003		0.0100				1.0000		0.9900
1-Methylnaphthalene	0.6420 0.6440	0.6491 0.6497	0.6455 0.6817	0.6666 0.6482	0.6468	Ave		0.6526				2.0		20.0			
1,2,3,5-Tetrachlorobenzene	0.5360	0.5422 0.5461	0.5091 0.5900	0.5439 0.5764	0.5475	Ave		0.5489				4.5		20.0			
Hexachlorocyclopentadiene	0.3661	0.3316 0.3773	0.3355 0.4150	0.3680 0.4053	0.3894	Ave		0.3735			0.0500	8.0		20.0			
2,3,5,6-Tetrachlorophenol	0.3108	+++++ 0.3197	0.2752 0.3455	0.2906 0.3333	0.3186	Ave		0.3134				7.7		20.0			
2,4,6-Trichlorophenol	0.3442	0.3436 0.3583	0.3159 0.3616	0.3346 0.3506	0.3621	Ave		0.3464			0.2000	4.5		20.0			
2,4,5-Trichlorophenol	0.3525	0.3454 0.3469	0.3664 0.3876	0.3655 0.3779	0.3697	Ave		0.3640			0.2000	4.1		20.0			
1,1'-Biphenyl	1.3930 1.3244	1.4253 1.3544	1.3331 1.4494	1.3964 1.4102	1.3817	Ave		1.3853			0.0100	3.0		20.0			
1,2,3,4 -Tetrachlorobenzene	0.5143	0.5272 0.5221	0.5058 0.5597	0.5133 0.5449	0.5219	Ave		0.5262				3.4		20.0			
2-Chloronaphthalene	1.0551 1.0332	1.0847 1.0490	1.0524 1.1144	1.0623 1.0915	1.0716	Ave		1.0683			0.8000	2.3		20.0			
4,6-Dinitro-2-methylphenol	0.1454	+++++ 0.1538	0.1098 0.1654	0.1360 0.1596	0.1556	Ave		0.1465			0.0100	13.0		20.0			
2-Nitroaniline	0.4464	0.4590 0.4592	0.4387 0.4800	0.4617 0.4664	0.4711	Ave		0.4603			0.0100	2.9		20.0			
Dimethyl phthalate	1.2151	1.2629 1.2333	1.2008 1.3017	1.2429 1.2557	1.2581	Ave		1.2463			0.0100	2.5		20.0			
2,6-Dinitrotoluene	0.2890	0.2623 0.2970	0.2557 0.3105	0.2863 0.3009	0.2921	Ave		0.2867				6.5		20.0			
1,2-Dinitrobenzene	0.1436	0.1296 0.1489	0.1350 0.1587	0.1434 0.1528	0.1513	Ave		0.1454				6.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Acenaphthylene	1.7235 1.7378	1.7604 1.7622	1.7275 1.8694	1.7818 1.8176	1.7961	Ave		1.7751			0.9000	2.7		20.0			
3-Nitroaniline	0.3104	0.2914 0.3198	0.2960 0.3355	0.3295 0.3224	0.3264	Ave		0.3164			0.0100	5.0		20.0			
Acenaphthene	1.0332 1.0663	1.1306 1.0773	1.0582 1.1366	1.0880 1.1112	1.1001	Ave		1.0891			0.9000	3.1		20.0			
4-Nitrophenol	0.1967	0.1797 0.2028	0.1983 0.2201	0.2114 0.2116	0.2207	Ave		0.2052				6.7		20.0			
2,4-Dinitrotoluene	0.3906	0.3575 0.4018	0.3610 0.4228	0.3793 0.4065	0.4051	Ave		0.3906			0.2000	5.9		20.0			
Dibenzofuran	1.5449 1.5030	1.5896 1.5289	1.4721 1.6194	1.5459 1.5648	1.5463	Ave		1.5461			0.8000	2.8		20.0			
Diethyl phthalate	1.2067	1.2252 1.2304	1.1808 1.2923	1.2092 1.2547	1.2488	Ave		1.2310			0.0100	2.8		20.0			
4-Chlorophenyl phenyl ether	0.6088	0.6094 0.6302	0.5835 0.6705	0.6069 0.6406	0.6257	Ave		0.6219			0.4000	4.2		20.0			
4-Nitroaniline	0.3341	0.3053 0.3414	0.3186 0.3607	0.3358 0.3548	0.3429	Ave		0.3367			0.0100	5.4		20.0			
Fluorene	1.2316 1.2752	1.2973 1.2906	1.2430 1.3482	1.2928 1.3148	1.3010	Ave		1.2883			0.9000	2.7		20.0			
N-Nitrosodiphenylamine	0.5541	0.5704 0.5614	0.5369 0.6040	0.5604 0.5794	0.5580	Ave		0.5656			0.0100	3.5		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.0698	1.1610 1.0794	1.1131 1.1655	1.1582 1.1239	1.1605	Ave		1.1298				3.4		20.0			
Azobenzene	1.0697	1.1610 1.0796	1.1191 1.1653	1.1589 1.1239	1.1609	Ave		1.1298				3.4		20.0			
4-Bromophenyl phenyl ether	0.2041	0.2049 0.2083	0.1918 0.2267	0.2119 0.2183	0.2120	Ave		0.2097			0.1000	4.9		20.0			
Hexachlorobenzene	0.1842 0.1949	0.1925 0.1992	0.1776 0.2146	0.1947 0.2070	0.1957	Ave		0.1956			0.1000	5.6		20.0			
Atrazine	0.1866	0.1900 0.1892	0.1905 0.2022	0.1998 0.1921	0.1983	Ave		0.1936			0.0100	2.9		20.0			
Pentachlorophenol	0.1420	0.0821 0.1550	0.1129 0.1651	0.1226 0.1638	0.1459	Qua	-0.077	0.1437	0.0005		0.0500				0.9990		0.9900
Phenanthrene	1.1287 1.0872	1.1364 1.1056	1.0823 1.2020	1.1378 1.1429	1.1427	Ave		1.1295			0.7000	3.2		20.0			
Anthracene	1.1220 1.1358	1.1466 1.1605	1.1059 1.2591	1.1849 1.2065	1.2007	Ave		1.1691			0.7000	4.1		20.0			
Carbazole	1.0228	1.0499 1.0453	1.0116 1.1263	1.0637 1.0704	1.0702	Ave		1.0575			0.0100	3.3		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Di-n-butyl phthalate	1.2419	1.2257 1.2696	1.1933 1.3724	1.2509 1.3001	1.3093	Ave		1.2704			0.0100	4.4		20.0			
Fluoranthene	1.1671 1.2132	1.1856 1.2423	1.1611 1.3355	1.2455 1.2759	1.2508	Ave		1.2308			0.6000	4.5		20.0			
Benzidine	0.6272	0.5812 0.6329	0.5986 0.6778	0.6959 0.6249	0.6737	Ave		0.6390				6.3		20.0			
Pyrene	1.1815 1.2015	1.2343 1.2168	1.1800 1.3155	1.2883 1.2702	1.2449	Ave		1.2370			0.6000	3.8		20.0			
Butyl benzyl phthalate	0.5283	0.4943 0.5316	0.5101 0.5682	0.5630 0.5563	0.5652	Ave		0.5396			0.0100	5.2		20.0			
3,3'-Dimethoxybenzidine	0.3030	0.2364 0.3177	0.2653 0.3446	0.2985 0.3288	0.3157	Ave		0.3013				12.0		20.0			
Bis(2-ethylhexyl) phthalate	0.7367	0.6946 0.7378	0.7032 0.7934	0.7640 0.7666	0.7832	Ave		0.7474			0.0100	4.8		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.2360	0.2062 0.2363	0.2142 0.2537	0.2428 0.2481	0.2421	Ave		0.2349				7.0		20.0			
3,3'-Dichlorobenzidine	0.4302	0.3958 0.4418	0.4017 0.4762	0.4363 0.4551	0.4401	Ave		0.4346			0.0100	6.1		20.0			
Benzo[a]anthracene	1.2266 1.1816	1.2278 1.2032	1.1825 1.2515	1.2066 1.3113	1.2040	Ave		1.2217			0.8000	3.3		20.0			
Chrysene	1.1139 1.0455	1.0817 1.0817	1.0149 1.1675	1.1252 1.0869	1.0888	Ave		1.0896			0.7000	4.0		20.0			
Di-n-octyl phthalate	1.5078	1.2290 1.5557	1.3472 1.6864	1.5435 1.6102	1.6198	Ave		1.5125			0.0100	10.0		20.0			
Benzo[b]fluoranthene	1.2742 1.4608	1.3257 1.4867	1.3918 1.6178	1.5448 1.6134	1.5525	Ave		1.4742			0.7000	8.3		20.0			
Benzo[k]fluoranthene	1.1829 1.2610	1.2504 1.2859	1.2154 1.4163	1.2595 1.2914	1.2321	Ave		1.2661			0.7000	5.2		20.0			
Benzo[a]pyrene	1.0940 1.2360	1.1280 1.2535	1.1518 1.3695	1.2210 1.3066	1.2588	Ave		1.2244			0.7000	7.2		20.0			
Indeno[1,2,3-cd]pyrene	0.9961 1.3067	1.1845 1.3344	1.1810 1.4604	1.3412 1.3864	1.3460	Ave		1.2818			0.5000	11.0		20.0			
Dibenzo(a,h)anthracene	0.8304 1.0908	0.9400 1.1158	0.9706 1.2233	1.1051 1.1749	1.1277	Ave		1.0643			0.4000	12.0		20.0			
Benzo[g,h,i]perylene	0.8819 1.0850	0.9962 1.1068	0.9868 1.2069	1.1059 1.1401	1.1126	Ave		1.0691			0.5000	9.1		20.0			
2-Fluorophenol (Surr)	1.4461	1.4516 1.4338	1.4294 1.4982	1.4997 1.5189	1.5020	Ave		1.4725				2.4		20.0			
Phenol-d5 (Surr)	2.0014	2.0648 2.0209	2.0036 2.1738	2.0977 2.0976	2.1208	Ave		2.0726				3.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Nitrobenzene-d5 (Surr)	0.5522 0.5547	0.5735 0.5523	0.5654 0.5821	0.5931 0.5674	0.5863	Ave		0.5697				2.7		20.0			
2-Fluorobiphenyl (Surr)	1.2071 1.2289	1.2660 1.2563	1.2386 1.3309	1.2676 1.2950	1.2859	Ave		1.2641				2.9		20.0			
2,4,6-Tribromophenol (Surr)	 0.1405	0.1283 0.1472	0.1183 0.1584	0.1357 0.1530	0.1398	Ave		0.1402				9.3		20.0			
Terphenyl-d14 (Surr)	0.7040 0.7718	0.7537 0.7852	0.7248 0.8464	0.8040 0.8282	0.7931	Ave		0.7790				5.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-56877/6	20906006.D
Level 2	STD2 240-56877/5	20906005.D
Level 3	STD3 240-56877/4	20906004.D
Level 4	STD4 240-56877/3	20906003.D
Level 5	STD5 240-56877/2	20906002.D
Level 6	STD6 240-56877/10	20906010.D
Level 7	STD7 240-56877/9	20906009.D
Level 8	STD8 240-56877/8	20906008.D
Level 9	STD9 240-56877/7	20906007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	419572	23279 624649	43143 665000	79042 874342	203634	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	759364	39649 1146388	74963 1204727	146273 1533621	375585	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	1165046	60941 1734234	119165 1886251	216921 2406079	575659	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Ethyl methacrylate	DCB	Ave	1022071	57998 1511956	109335 1586832	200523 2059043	504480	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Chloropropionitrile	DCB	Ave	468974	26367 701007	50268 739746	91813 944605	229776	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Malononitrile	DCB	Ave	1285532	69483 1952520	139469 2044990	258920 2574291	648551	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Qua	10194 687232	53652 925789	101255 948213	184900 +++++	418701	0.100 10.0	0.500 15.0	1.00 20.0	2.00 +++++	5.00
Benzoic acid	NPT	Qua	921836	+++++ 1533572	+++++ 1569232	92647 2068363	391841	20.0	+++++ 30.0	+++++ 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	1178928	64352 1802014	123406 1923988	228522 2426029	585186	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1507807	81700 2301680	154273 2418127	290394 3221370	735140	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	934152	54523 1419998	103603 1620086	187413 1942486	475810	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	724318	40081 1095968	75506 1198349	146302 1483567	353504	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	817629	46591 1226397	83505 1317284	157461 1660809	397239	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	809166	46577 1230715	85940 1326892	155995 1656271	391136	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzyl alcohol	DCB	Ave		30342	58062	111433	283233		0.500	1.00	2.00	5.00
			572404	884771	963944	1202604		10.0	15.0	20.0	25.0	
1,2-Dichlorobenzene	DCB	Ave		41675	79063	145354	378084		0.500	1.00	2.00	5.00
			769260	1159466	1269639	1583783		10.0	15.0	20.0	25.0	
2-Methylphenol	DCB	Ave		43055	84029	155868	395591		0.500	1.00	2.00	5.00
			804956	1234796	1318154	1682962		10.0	15.0	20.0	25.0	
2,2'-oxybis[1-chloropropane]	DCB	Ave		54449	100452	184136	458907		0.500	1.00	2.00	5.00
			950387	1411579	1551358	1931561		10.0	15.0	20.0	25.0	
3 & 4 Methylphenol	DCB	Ave		45045	84157	163575	422377		0.500	1.00	2.00	5.00
			865215	1321453	1406386	1776736		10.0	15.0	20.0	25.0	
N-Nitrosodi-n-propylamine	DCB	Ave		45054	83740	158736	400298		0.500	1.00	2.00	5.00
			810906	1224348	1313993	1640229		10.0	15.0	20.0	25.0	
Acetophenone	DCB	Ave		66880	122264	235103	587327		0.500	1.00	2.00	5.00
			1211181	1846624	1982559	2483748		10.0	15.0	20.0	25.0	
2,4-Toluene diamine	NPT	Qua		36448	70317	138171	294823		0.500	1.00	2.00	5.00
			431732	531706	+++++	+++++		10.0	15.0	+++++	+++++	
Hexachloroethane	DCB	Ave		17740	34591	64736	159819		0.500	1.00	2.00	5.00
			329194	498404	543446	691370		10.0	15.0	20.0	25.0	
Nitrobenzene	NPT	Ave		63944	118340	222827	571100		0.500	1.00	2.00	5.00
			1156382	1754184	1894368	2396856		10.0	15.0	20.0	25.0	
Isophorone	NPT	Ave		110989	202304	390829	993340		0.500	1.00	2.00	5.00
			2028904	3101555	3315248	4112791		10.0	15.0	20.0	25.0	
2-Nitrophenol	NPT	Ave		19425	38344	74733	196662		0.500	1.00	2.00	5.00
			404532	621321	665598	834630		10.0	15.0	20.0	25.0	
2,4-Dimethylphenol	NPT	Ave		50176	94113	178401	456619		0.500	1.00	2.00	5.00
			929826	1416590	1513991	1896430		10.0	15.0	20.0	25.0	
1,3,5-Trichlorobenzene	NPT	Ave		38472	70791	131748	330520		0.500	1.00	2.00	5.00
			696336	1069280	1163328	1458011		10.0	15.0	20.0	25.0	
Bis(2-chloroethoxy)methane	NPT	Ave		61804	109785	212611	535927		0.500	1.00	2.00	5.00
			1089864	1646903	1786324	2230829		10.0	15.0	20.0	25.0	
2,4-Dichlorophenol	NPT	Ave		31633	60278	115613	292933		0.500	1.00	2.00	5.00
			604444	929127	998423	1252370		10.0	15.0	20.0	25.0	
1,2,4-Trichlorobenzene	NPT	Ave		37040	68774	128603	326017		0.500	1.00	2.00	5.00
			676502	1044855	1134734	1427887		10.0	15.0	20.0	25.0	
Naphthalene	NPT	Ave	22367	119379	218082	409892	1061263	0.100	0.500	1.00	2.00	5.00
			2217873	3361803	3601342	4550327		10.0	15.0	20.0	25.0	
4-Chloroaniline	NPT	Ave		51502	93066	175594	474629		0.500	1.00	2.00	5.00
			943605	1428568	1485266	1856939		10.0	15.0	20.0	25.0	
Hexachlorobutadiene	NPT	Ave		20740	38749	72650	185952		0.500	1.00	2.00	5.00
			393538	608233	654253	816318		10.0	15.0	20.0	25.0	
1,2,3-Trichlorobenzene	NPT	Ave		33742	63633	117850	307946		0.500	1.00	2.00	5.00
			637086	962604	1064314	1319198		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Caprolactam	NPT	Ave		13809	26513	52819	140341		0.500	1.00	2.00	5.00
			292310	448314	483480	583001		10.0	15.0	20.0	25.0	
4-Chloro-3-methylphenol	NPT	Ave		41749	79063	153451	393201		0.500	1.00	2.00	5.00
			809051	1245384	1340682	1659155		10.0	15.0	20.0	25.0	
2-Methylnaphthalene	NPT	Ave	14647	75789	140415	266212	683935	0.100	0.500	1.00	2.00	5.00
			1427904	2185853	2349774	2920803		10.0	15.0	20.0	25.0	
2,4-Dinitrophenol	ANT	Qua		+++++	30248	71049	231644		+++++	2.00	4.00	10.0
			546934	865338	907114	1158684		20.0	30.0	40.0	50.0	
1-Methylnaphthalene	NPT	Ave	13855	72406	139071	257000	643242	0.100	0.500	1.00	2.00	5.00
			1373426	2099855	2262323	2789959		10.0	15.0	20.0	25.0	
1,2,3,5-Tetrachlorobenzene	ANT	Ave		36641	66886	130217	332332		0.500	1.00	2.00	5.00
			708492	1095094	1194459	1489897		10.0	15.0	20.0	25.0	
Hexachlorocyclopentadiene	ANT	Ave		22404	44083	88114	236379		0.500	1.00	2.00	5.00
			483983	756591	840124	1047509		10.0	15.0	20.0	25.0	
2,3,5,6-Tetrachlorophenol	ANT	Ave		+++++	36157	69590	193360		+++++	1.00	2.00	5.00
			410843	641192	699443	861565		10.0	15.0	20.0	25.0	
2,4,6-Trichlorophenol	ANT	Ave		23219	41510	80123	219772		0.500	1.00	2.00	5.00
			455026	718602	732011	906326		10.0	15.0	20.0	25.0	
2,4,5-Trichlorophenol	ANT	Ave		23339	48144	87512	224386		0.500	1.00	2.00	5.00
			465979	695713	784698	976766		10.0	15.0	20.0	25.0	
1,1'-Biphenyl	ANT	Ave	18070	96312	175164	334344	838645	0.100	0.500	1.00	2.00	5.00
			1750793	2716043	2934076	3644981		10.0	15.0	20.0	25.0	
1,2,3,4 -Tetrachlorobenzene	ANT	Ave		35627	66457	122896	316757		0.500	1.00	2.00	5.00
			679897	1046976	1133117	1408401		10.0	15.0	20.0	25.0	
2-Chloronaphthalene	ANT	Ave	13686	73296	138278	254359	650437	0.100	0.500	1.00	2.00	5.00
			1365864	2103673	2255902	2821336		10.0	15.0	20.0	25.0	
4,6-Dinitro-2-methylphenol	PHN	Ave		+++++	23767	52416	152772		+++++	1.00	2.00	5.00
			320207	516332	548422	682713		10.0	15.0	20.0	25.0	
2-Nitroaniline	ANT	Ave		31015	57638	110559	285959		0.500	1.00	2.00	5.00
			590097	920772	971673	1205601		10.0	15.0	20.0	25.0	
Dimethyl phthalate	ANT	Ave		85341	157778	297585	763626		0.500	1.00	2.00	5.00
			1606215	2473182	2635126	3245655		10.0	15.0	20.0	25.0	
2,6-Dinitrotoluene	ANT	Ave		17725	33598	68542	177265		0.500	1.00	2.00	5.00
			382091	595541	628574	777738		10.0	15.0	20.0	25.0	
1,2-Dinitrobenzene	ANT	Ave		8757	17741	34336	91841		0.500	1.00	2.00	5.00
			189879	298615	321167	395054		10.0	15.0	20.0	25.0	
Acenaphthylene	ANT	Ave	22357	118955	226976	426626	1090167	0.100	0.500	1.00	2.00	5.00
			2297282	3533944	3784320	4698037		10.0	15.0	20.0	25.0	
3-Nitroaniline	ANT	Ave		19690	38897	78900	198121		0.500	1.00	2.00	5.00
			410362	641308	679100	833279		10.0	15.0	20.0	25.0	
Acenaphthene	ANT	Ave	13403	76397	139043	260506	667716	0.100	0.500	1.00	2.00	5.00
			1409544	2160352	2300796	2872293		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Nitrophenol	ANT	Ave	260031	12145 406602	26061 445568	50626 546942	133954	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dinitrotoluene	ANT	Ave	516303	24154 805779	47428 855999	90816 1050745	245880	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzofuran	ANT	Ave	20040 1986790	107417 3066119	193420 3278305	370151 4044561	938582	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Diethyl phthalate	ANT	Ave	1595115	82788 2467369	155145 2616144	289531 3243054	757979	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chlorophenyl phenyl ether	ANT	Ave	804738	41180 1263720	76667 1357353	145319 1655724	379756	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Nitroaniline	ANT	Ave	441672	20629 684675	41867 730213	80411 916964	208109	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluorene	ANT	Ave	15976 1685696	87662 2588039	163315 2729287	309537 3398566	789674	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodiphenylamine	PHN	Ave	1220312	63414 1884534	116230 2002299	216005 2478537	547948	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave	2355794	129067 3623759	240996 3863452	446405 4807854	1139676	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Azobenzene	PHN	Ave	2355704	129067 3624350	242286 3862905	446687 4807851	1140074	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Bromophenyl phenyl ether	PHN	Ave	449463	22773 699234	41529 751527	81663 933776	208245	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobenzene	PHN	Ave	3872 429279	21395 668803	38446 711332	75042 885739	192190	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Atrazine	PHN	Ave	410916	21126 635294	41248 670348	77019 821919	194702	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pentachlorophenol	PHN	Qua	625384	18246 1040503	48879 1094390	94490 1401647	286553	20.0	1.00 30.0	2.00 40.0	4.00 50.0	10.0
Phenanthrene	PHN	Ave	23723 2394261	126329 3711598	234322 3984519	438547 4889276	1122212	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Anthracene	PHN	Ave	23582 2501232	127464 3895930	239438 4173990	456709 5161355	1179140	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Carbazole	PHN	Ave	2252290	116715 3509318	219022 3733503	409981 4579268	1051042	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-butyl phthalate	PHN	Ave	2734832	136252 4262096	258344 4549321	482149 5561764	1285803	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Fluoranthene	PHN	Ave	24530 2671683	131798 4170466	251389 4427146	480053 5458190	1228325	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzidine	CRY	Ave	1433709	66374 2225058	133388 2343491	270603 2775597	681515	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyrene	CRY	Ave	25434 2746796	140970 4277543	262950 4548221	500932 5642079	1259318	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Butyl benzyl phthalate	CRY	Ave	1207712	56449 1868847	113668 1964394	218917 2470869	571774	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dimethoxybenzidine	CRY	Ave	692688	27002 1116775	59131 1191531	116075 1460678	319384	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-ethylhexyl) phthalate	CRY	Ave	1684205	79329 2593658	156713 2743125	297088 3405235	792225	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4,4'-Methylene bis(2-chloroaniline)	CRY	Ave	539491	23546 830594	47734 877217	94394 1102210	244886	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3,3'-Dichlorobenzidine	CRY	Ave	983524	45199 1553119	89509 1646297	169632 2021461	445246	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]anthracene	CRY	Ave	26405 2701251	140223 4229895	263514 4327109	469165 5824965	1217942	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Chrysene	CRY	Ave	23979 2390081	123536 3802785	226172 4036567	437514 4827988	1101409	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Di-n-octyl phthalate	PRY	Ave	2849640	114335 4512968	242887 4678127	489992 5894890	1344725	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[b]fluoranthene	PRY	Ave	22461 2760781	123333 4312843	250925 4487831	490408 5906433	1288837	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[k]fluoranthene	PRY	Ave	20853 2383206	116321 3730499	219119 3928795	399833 4727818	1022888	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[a]pyrene	PRY	Ave	19285 2335867	104938 3636440	207658 3799037	387613 4783307	1045060	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Indeno[1,2,3-cd]pyrene	PRY	Ave	17559 2469446	110194 3870977	212916 4051072	425759 5075560	1117405	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Dibenzo(a,h)anthracene	PRY	Ave	14639 2061451	87450 3237038	174986 3393292	350801 4301300	936214	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzo[g,h,i]perylene	PRY	Ave	15546 2050559	92677 3210740	177916 3347859	351062 4173853	923625	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorophenol (Surr)	DCB	Ave	780891	41241 1167311	79201 1233417	149837 1615457	376587	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Phenol-d5 (Surr)	DCB	Ave	1080801	58664 1645372	111014 1789582	209589 2230887	531734	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene-d5 (Surr)	NPT	Ave	11917 1183051	63981 1785024	121800 1931810	228666 2442218	583093	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Fluorobiphenyl (Surr)	ANT	Ave	15658 1624557	85547 2519452	162749 2694248	303503 3347310	780527	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4,6-Tribromophenol (Surr)	ANT	Ave	185781	8668 295119	15549 320738	32495 395523	84839	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Terphenyl-d14 (Surr)	CRY	Ave	15155 1764452	86078 2760486	161522 2926421	312617 3678727	802250	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-56877/11 Calibration Date: 09/06/2012 14:36

Instrument ID: A4HP9 Calib Start Date: 09/06/2012 11:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/06/2012 13:49

Lab File ID: 20906011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.7969	0.8107		10.2	10.0	1.7	30.0
N-Nitrosodimethylamine	Ave	1.429	1.434		10.0	10.0	0.4	30.0
Pyridine	Ave	2.200	2.131		9.68	10.0	-3.2	30.0
Ethyl methacrylate	Ave	1.956	1.875		9.59	10.0	-4.1	30.0
3-Chloropropionitrile	Ave	0.8984	0.8742		9.73	10.0	-2.7	30.0
Malononitrile	Ave	2.478	2.371		9.57	10.0	-4.3	30.0
Benzaldehyde	Qua		1.293	0.0100	9.96	10.0	-0.4	30.0
Phenol	Ave	2.266	2.158	0.8000	9.52	10.0	-4.8	30.0
Aniline	Ave	2.885	2.748		9.52	10.0	-4.8	30.0
Bis(2-chloroethyl)ether	Ave	1.854	1.720	0.7000	9.28	10.0	-7.2	30.0
2-Chlorophenol	Ave	1.398	1.338	0.8000	9.57	10.0	-4.3	30.0
1,3-Dichlorobenzene	Ave	1.561	1.485		9.51	10.0	-4.9	30.0
1,4-Dichlorobenzene	Ave	1.561	1.473		9.43	10.0	-5.7	30.0
Benzyl alcohol	Ave	1.101	1.050		9.54	10.0	-4.6	30.0
1,2-Dichlorobenzene	Ave	1.467	1.401		9.55	10.0	-4.5	30.0
2-Methylphenol	Ave	1.545	1.483	0.7000	9.60	10.0	-4.0	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.825	1.747		9.57	10.0	-4.3	30.0
3 & 4 Methylphenol	Ave	1.629	1.572		9.65	10.0	-3.5	30.0
N-Nitrosodi-n-propylamine	Ave	1.553	1.491	0.5000	9.60	10.0	-4.0	30.0
Acetophenone	Ave	2.314	2.190	0.0100	9.47	10.0	-5.3	30.0
Hexachloroethane	Ave	0.6332	0.6040	0.3000	9.54	10.0	-4.6	30.0
Nitrobenzene	Ave	0.5609	0.5326	0.2000	9.49	10.0	-5.1	30.0
Isophorone	Ave	0.9765	0.9209	0.4000	9.43	10.0	-5.7	30.0
2-Nitrophenol	Ave	0.1900	0.1863	0.1000	9.81	10.0	-1.9	30.0
2,4-Dimethylphenol	Ave	0.4474	0.4262	0.2000	9.52	10.0	-4.8	30.0
1,3,5-Trichlorobenzene	Ave	0.3368	0.3151		9.36	10.0	-6.4	30.0
Bis(2-chloroethoxy)methane	Ave	0.5289	0.4946	0.3000	9.35	10.0	-6.5	30.0
Benzoic acid	Qua		0.2111		19.1	20.0	-4.7	30.0
2,4-Dichlorophenol	Ave	0.2901	0.2716	0.2000	9.36	10.0	-6.4	30.0
1,2,4-Trichlorobenzene	Ave	0.3283	0.3086		9.40	10.0	-6.0	30.0
Naphthalene	Ave	1.052	1.005	0.7000	9.55	10.0	-4.5	30.0
4-Chloroaniline	Ave	0.4487	0.4078	0.0100	9.09	10.0	-9.1	30.0
Hexachlorobutadiene	Ave	0.1876	0.1788	0.0100	9.53	10.0	-4.7	30.0
1,2,3-Trichlorobenzene	Ave	0.3046	0.2874		9.44	10.0	-5.6	30.0
Caprolactam	Ave	0.1352	0.1334	0.0100	9.86	10.0	-1.4	30.0
4-Chloro-3-methylphenol	Ave	0.3861	0.3692	0.2000	9.56	10.0	-4.4	30.0
2-Methylnaphthalene	Ave	0.6801	0.6479	0.4000	9.53	10.0	-4.7	30.0
1-Methylnaphthalene	Ave	0.6526	0.6197		9.50	10.0	-5.0	30.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5489	0.5125		9.34	10.0	-6.6	30.0
Hexachlorocyclopentadiene	Ave	0.3735	0.3499	0.0500	9.37	10.0	-6.3	30.0
2,4,6-Trichlorophenol	Ave	0.3464	0.3169	0.2000	9.15	10.0	-8.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-56877/11 Calibration Date: 09/06/2012 14:36

Instrument ID: A4HP9 Calib Start Date: 09/06/2012 11:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/06/2012 13:49

Lab File ID: 20906011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3640	0.3396	0.2000	9.33	10.0	-6.7	30.0
2,4-Toluene diamine	Qua		0.1962		8.42	10.0	-15.8	30.0
1,1'-Biphenyl	Ave	1.385	1.281	0.0100	9.25	10.0	-7.5	30.0
1,2,3,4 -Tetrachlorobenzene	Ave	0.5262	0.4894		9.30	10.0	-7.0	30.0
2-Chloronaphthalene	Ave	1.068	0.9871	0.8000	9.24	10.0	-7.6	30.0
2-Nitroaniline	Ave	0.4603	0.4345	0.0100	9.44	10.0	-5.6	30.0
Dimethyl phthalate	Ave	1.246	1.144	0.0100	9.18	10.0	-8.2	30.0
2,6-Dinitrotoluene	Ave	0.2867	0.2747		9.58	10.0	-4.2	30.0
1,2-Dinitrobenzene	Ave	0.1454	0.1406		9.67	10.0	-3.3	30.0
Acenaphthylene	Ave	1.775	1.662	0.9000	9.36	10.0	-6.4	30.0
3-Nitroaniline	Ave	0.3164	0.2963	0.0100	9.36	10.0	-6.4	30.0
2,4-Dinitrophenol	Qua		0.1887	0.0100	18.2	20.0	-9.0	30.0
Acenaphthene	Ave	1.089	1.007	0.9000	9.24	10.0	-7.6	30.0
4-Nitrophenol	Ave	0.2052	0.1750		8.53	10.0	-14.7	30.0
2,4-Dinitrotoluene	Ave	0.3906	0.3724	0.2000	9.53	10.0	-4.7	30.0
Dibenzofuran	Ave	1.546	1.429	0.8000	9.24	10.0	-7.6	30.0
2,3,5,6-Tetrachlorophenol	Ave	0.3134	0.2909		9.28	10.0	-7.2	30.0
Diethyl phthalate	Ave	1.231	1.137	0.0100	9.24	10.0	-7.6	30.0
4-Chlorophenyl phenyl ether	Ave	0.6219	0.5838	0.4000	9.39	10.0	-6.1	30.0
4-Nitroaniline	Ave	0.3367	0.3225	0.0100	9.58	10.0	-4.2	30.0
Fluorene	Ave	1.288	1.201	0.9000	9.32	10.0	-6.8	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1465	0.1379	0.0100	9.41	10.0	-5.9	30.0
N-Nitrosodiphenylamine	Ave	0.5656	0.5254	0.0100	9.29	10.0	-7.1	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.130	1.015		8.99	10.0	-10.1	30.0
Azobenzene	Ave	1.130	1.016		8.99	10.0	-10.1	30.0
4-Bromophenyl phenyl ether	Ave	0.2097	0.1933	0.1000	9.22	10.0	-7.8	30.0
Hexachlorobenzene	Ave	0.1956	0.1810	0.1000	9.25	10.0	-7.5	30.0
Atrazine	Ave	0.1936	0.1767	0.0100	9.13	10.0	-8.7	30.0
Pentachlorophenol	Qua		0.1341	0.0500	18.1	20.0	-9.4	30.0
Phenanthrene	Ave	1.130	1.027	0.7000	9.09	10.0	-9.1	30.0
Anthracene	Ave	1.169	1.079	0.7000	9.23	10.0	-7.7	30.0
Carbazole	Ave	1.058	0.9583	0.0100	9.06	10.0	-9.4	30.0
Di-n-butyl phthalate	Ave	1.270	1.163	0.0100	9.15	10.0	-8.5	30.0
Fluoranthene	Ave	1.231	1.134	0.6000	9.21	10.0	-7.9	30.0
Benzidine	Ave	0.6390	0.5773		9.03	10.0	-9.7	30.0
Pyrene	Ave	1.237	1.130	0.6000	9.14	10.0	-8.6	30.0
Butyl benzyl phthalate	Ave	0.5396	0.4916	0.0100	9.11	10.0	-8.9	30.0
3,3'-Dimethoxybenzidine	Ave	0.3013	0.2817		9.35	10.0	-6.5	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7474	0.6834	0.0100	9.14	10.0	-8.6	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2349	0.2202		9.37	10.0	-6.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-56877/11 Calibration Date: 09/06/2012 14:36

Instrument ID: A4HP9 Calib Start Date: 09/06/2012 11:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/06/2012 13:49

Lab File ID: 20906011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3,3'-Dichlorobenzidine	Ave	0.4346	0.4022	0.0100	9.25	10.0	-7.5	30.0
Benzo[a]anthracene	Ave	1.222	1.142	0.8000	9.35	10.0	-6.5	30.0
Chrysene	Ave	1.090	0.9417	0.7000	8.64	10.0	-13.6	30.0
Di-n-octyl phthalate	Ave	1.512	1.399	0.0100	9.25	10.0	-7.5	30.0
Benzo[b]fluoranthene	Ave	1.474	1.361	0.7000	9.23	10.0	-7.7	30.0
Benzo[k]fluoranthene	Ave	1.266	1.154	0.7000	9.11	10.0	-8.9	30.0
Benzo[a]pyrene	Ave	1.224	1.133	0.7000	9.25	10.0	-7.5	30.0
Dibenzo(a,h)anthracene	Ave	1.064	0.999	0.4000	9.39	10.0	-6.1	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.282	1.207	0.5000	9.42	10.0	-5.8	30.0
Benzo[g,h,i]perylene	Ave	1.069	0.9872	0.5000	9.23	10.0	-7.7	30.0
2-Fluorophenol (Surr)	Ave	1.472	1.407		9.55	10.0	-4.5	30.0
Phenol-d5 (Surr)	Ave	2.073	1.993		9.61	10.0	-3.9	30.0
Nitrobenzene-d5 (Surr)	Ave	0.5697	0.5415		9.51	10.0	-4.9	30.0
2-Fluorobiphenyl (Surr)	Ave	1.264	1.170		9.25	10.0	-7.5	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1402	0.1334		9.52	10.0	-4.8	30.0
Terphenyl-d14 (Surr)	Ave	0.7790	0.7173		9.21	10.0	-7.9	30.0

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Sample No.: STD6 240-56877/10 Date Analyzed: 09/06/2012 13:49

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20906010.D Heated Purge: (Y/N) N

Calibration ID: 11220

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		216005	3.85	853119	4.81	528765	6.10
UPPER LIMIT		432010	4.35	1706238	5.31	1057530	6.60
LOWER LIMIT		108003	3.35	426560	4.31	264383	5.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-56877/11		257431	3.85	1036701	4.81	650765	6.11
MB 240-55629/14-A		170227	3.84	660165	4.81	419099	6.10
LCS 240-55629/15-A		161344	3.85	655983	4.80	414445	6.10
240-14408-2	MT-MW09S-082112	158219	3.84	644148	4.81	398875	6.10
240-14408-3	MT-MW11S-082112	175888	3.85	705362	4.80	442562	6.10
240-14408-4	MT-MW12S-082112	146559	3.85	579664	4.80	364262	6.10

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII

GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Sample No.: STD6 240-56877/10 Date Analyzed: 09/06/2012 13:49

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20906010.D Heated Purge: (Y/N) N

Calibration ID: 11220

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		880859	7.19	914424	9.17	755962	10.56
UPPER LIMIT		1761718	7.69	1828848	9.67	1511924	11.06
LOWER LIMIT		440430	6.69	457212	8.67	377981	10.06
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-56877/11		1094416	7.20	1142381	9.23	948282	10.63
MB 240-55629/14-A		683551	7.19	723026	9.15	578419	10.54
LCS 240-55629/15-A		687772	7.19	742661	9.15	611824	10.53
240-14408-2	MT-MW09S-082112	690291	7.19	727734	9.15	611220	10.54
240-14408-3	MT-MW11S-082112	744374	7.19	784038	9.14	656310	10.53
240-14408-4	MT-MW12S-082112	597454	7.19	639465	9.15	550491	10.54

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

SAMPLE ID MT-MW09S-082112

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Extract Volume (UL)	AVE RRF	CONCENTRATION PPB
644148	1	19103	4	2000	0.1352	1.75
			Amt. inj	Sample Volume (ML)		
			1	1000		

Caprolactum = 1.7 ug/L

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A4HP9\20120906-12973.b\20906024.D		
Lims ID:	240-14408-I-2-A	Client ID:	MT-MW09S-082112
Inject. Date:	06-Sep-2012 18:52:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0012973-024		
Misc. Info.:	240-14408-I-2-A =240-14408-I-2-A		
Operator:	001574	Instrument ID:	A4HP9
Vol. Injected:	1.0000	ALS Bottle#:	24
Lims Batch ID:	56877	Lims Sample ID:	24
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A4HP9\20120906-12973.b\8270 _9.m		
Last Update:	07-Sep-2012 09:48:47	Calib Date:	06-Sep-2012 17:14:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A4HP9\20120906-12973.b\20906019.D		
Limit Group:	MSS 8270D ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	XAWRK021		
First Level Reviewer: ulmanm		Date:	07-Sep-2012 09:39:02

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	3.843	3.844	-0.001	95	158219	4.00	
* 2 Naphthalene-d8	136	4.805	4.805	0.0	99	644148	4.00	
* 3 Acenaphthene-d10	164	6.103	6.103	0.0	86	398875	4.00	
* 4 Phenanthrene-d10	188	7.187	7.188	-0.001	98	690291	4.00	
* 5 Chrysene-d12	240	9.148	9.175	-0.027	76	727734	4.00	
* 6 Perylene-d12	264	10.542	10.575	-0.033	92	611220	4.00	
$ 7 2-Fluorophenol	112	2.844	2.849	-0.005	94	624043	10.7	
$ 8 Phenol-d5	99	3.528	3.528	0.0	0	905568	11.0	
$ 9 Nitrobenzene-d5	82	4.255	4.259	-0.004	84	607219	6.62	
$ 10 2-Fluorobiphenyl (Surr)	172	5.590	5.590	0.0	99	835509	6.63	
$ 11 2,4,6-Tribromophenol	330	6.680	6.679	0.001	89	179373	12.8	
$ 12 Terphenyl-d14	244	8.325	8.335	-0.010	98	619081	4.37	
25 1,4-Dioxane	88		1.743					9
26 N-Nitrosodimethylamine	74		1.920					
41 Benzaldehyde	77		3.517					9
43 Phenol	94		3.538					9
69 Bis(2-chloroethyl)ether	93		3.624					9
46 2-Chlorophenol	128		3.688					
51 2-Methylphenol	108		4.003					9
53 2,2'-oxybis[1-chloropropane]	45		4.030					9
21 3 & 4 Methylphenol	108		4.115					
57 N-Nitrosodi-n-propylamine	70		4.131					9
58 Acetophenone	105		4.142					
61 Hexachloroethane	117		4.243					
62 Nitrobenzene	77		4.275					9
64 Isophorone	82		4.446					
66 2-Nitrophenol	139		4.516					
65 2,4-Dimethylphenol	107		4.521					9
70 Bis(2-chloroethoxy)methane	93		4.591					9
73 2,4-Dichlorophenol	162		4.687					
75 Naphthalene	128		4.826					9

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
76 4-Chloroaniline	127		4.847					9
79 Hexachlorobutadiene	225		4.911					
84 Caprolactam	113	5.093	5.109	-0.016	89	19103	0.8772	
86 4-Chloro-3-methylphenol	107		5.189					9
87 2-Methylnaphthalene	142		5.333					9
89 Hexachlorocyclopentadiene	237		5.451					
92 2,4,6-Trichlorophenol	196		5.531					
93 2,4,5-Trichlorophenol	196		5.563					
98 1,1'-Biphenyl	154		5.670					
100 2-Chloronaphthalene	162		5.696					
102 2-Nitroaniline	65		5.755					9
105 Dimethyl phthalate	163		5.873					9
107 2,6-Dinitrotoluene	165		5.921					9
109 Acenaphthylene	152		6.006					9
110 3-Nitroaniline	138		6.054					9
111 2,4-Dinitrophenol	184		6.124					
112 Acenaphthene	153		6.129					
113 4-Nitrophenol	109		6.150					9
114 2,4-Dinitrotoluene	165		6.220					
116 Dibenzofuran	168		6.252					9
121 Diethyl phthalate	149		6.375					9
123 4-Chlorophenyl phenyl ether	204		6.482					
125 4-Nitroaniline	138		6.498					
126 Fluorene	166		6.503					9
128 4,6-Dinitro-2-methylphenol	198		6.519					
131 N-Nitrosodiphenylamine	169		6.567					9
139 4-Bromophenyl phenyl ether	248		6.845					
141 Hexachlorobenzene	284		6.914					
142 Atrazine	200		6.930					
143 Pentachlorophenol	266		7.048					
148 Phenanthrene	178		7.208					9
149 Anthracene	178		7.246					
151 Carbazole	167		7.347					9
154 Di-n-butyl phthalate	149	7.551	7.555	-0.004	84	41978	0.1915	
159 Fluoranthene	202		8.079					9
161 Pyrene	202		8.255					
168 Butyl benzyl phthalate	149		8.672					
173 Bis(2-ethylhexyl) phthalate	149	9.073	9.089	-0.016	95	105845	0.7784	
175 3,3'-Dichlorobenzidine	252		9.115					
177 Benzo[a]anthracene	228		9.158					9
178 Chrysene	228		9.190					9
180 Di-n-octyl phthalate	149		9.618					9
182 Benzo[b]fluoranthene	252		10.136					9
183 Benzo[k]fluoranthene	252		10.157					9
184 Benzo[a]pyrene	252		10.504					9
188 Indeno[1,2,3-cd]pyrene	276		12.075					
189 Dibenz(a,h)anthracene	278		12.075					
190 Benzo[g,h,i]perylene	276		12.529					

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Surrogate Recovery Report

8015C Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Client Matrix: Water

Lab Sample ID	Client Sample ID	TFT1 %Rec
240-14408-2	MT-MW09S-082112	91
240-14408-3	MT-MW11S-082112	92
240-14408-4	MT-MW12S-082112	92
MB 240-55708/6		92
LCS 240-55708/7		105

Surrogate	Acceptance Limits
TFT = Trifluorotoluene (Surr)	10-150

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: MB 240-55708/6

Matrix: Water Date Extracted: 08/26/2012 14:50

Lab File ID:(1) YF082606.D Lab File ID:(2)

Date Analyzed:(1) 08/26/2012 14:50 Date Analyzed:(2)

Instrument ID:(1) YPID Instrument ID:(2)

GC Column:(1) RTX-VRX ID: 0.45(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-55708/7	08/26/2012 15:29	
MT-MW09S-082112	240-14408-2	08/26/2012 21:14	
MT-MW11S-082112	240-14408-3	08/26/2012 21:53	
MT-MW12S-082112	240-14408-4	08/26/2012 22:34	

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Method Blank - Batch: 240-55708

Method: 8015C
Preparation: 5030B

Lab Sample ID:	MB 240-55708/6	Analysis Batch:	240-55708	Instrument ID:	YPID
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	YF082606.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/26/2012 1450	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/26/2012 1450			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Total Petroleum Hydrocarbons (C6-C10)	43.7	J	25	100

Surrogate	% Rec	Acceptance Limits
Trifluorotoluene (Surr)	92	10 - 150

Lab Control Sample - Batch: 240-55708

Method: 8015C
Preparation: 5030B

Lab Sample ID:	LCS 240-55708/7	Analysis Batch:	240-55708	Instrument ID:	YPID
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	YF082607.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/26/2012 1529	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/26/2012 1529			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Petroleum Hydrocarbons (C6-C10)	800	936	117	72 - 140	

Surrogate	% Rec	Acceptance Limits
Trifluorotoluene (Surr)	105	10 - 150

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 54512

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/15/2012 18:36 Calibration End Date: 08/15/2012 22:00 Calibration ID: 10676

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54512/6	YF081506.D
Level 2	STD2 240-54512/7	YF081507.D
Level 3	STD3 240-54512/8	YF081508.D
Level 4	STD4 240-54512/9	YF081509.D
Level 5	STD5 240-54512/10	YF081510.D
Level 6	STD6 240-54512/11	YF081511.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.760	11.760	11.760	11.760	11.760	11.760					4.755 - 18.765	11.760
C6-C12	13.426	13.426	13.426	13.426	13.426	13.426					4.855 - 21.997	13.426
Trifluorotoluene (Surr)	9.711	9.710	9.713	9.708	9.711	9.712					9.463 - 9.963	9.711

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 54512

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/15/2012 18:36 Calibration End Date: 08/15/2012 22:00 Calibration ID: 10676

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54512/6	YF081506.D
Level 2	STD2 240-54512/7	YF081507.D
Level 3	STD3 240-54512/8	YF081508.D
Level 4	STD4 240-54512/9	YF081509.D
Level 5	STD5 240-54512/10	YF081510.D
Level 6	STD6 240-54512/11	YF081511.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	183542 118119	135498 128955	126511	123496	Ave		136019.970				18.0		20.0			
C6-C12	255673 133903	170408 145976	149081	141314	Lin	6701438.48	136365.157							0.9940		0.9900
Trifluorotoluene (Surr)	136571 165376	137906 183597	145025	153818	Ave		153715.733				12.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 54512

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/15/2012 18:36 Calibration End Date: 08/15/2012 22:00 Calibration ID: 10676

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54512/6	YF081506.D
Level 2	STD2 240-54512/7	YF081507.D
Level 3	STD3 240-54512/8	YF081508.D
Level 4	STD4 240-54512/9	YF081509.D
Level 5	STD5 240-54512/10	YF081510.D
Level 6	STD6 240-54512/11	YF081511.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Total Petroleum Hydrocarbons (C6-C10)	Ave	18354154 206328514	27099537	50604228	98796615	141742722	100 1600	200	400	800	1200
C6-C12	Lin	25567346 233562173	34081672	59632568	113051081	160683965	100 1600	200	400	800	1200
Trifluorotoluene (Surr)	Ave	1365710 1835973	1379064	1450251	1538182	1653764	10.0 10.0	10.0	10.0	10.0	10.0

Curve Type Legend:

Ave = Average
Lin = Linear

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-54512/12 Calibration Date: 08/15/2012 22:40

Instrument ID: YPID Calib Start Date: 08/15/2012 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/15/2012 22:00

Lab File ID: YF081512.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	136020	146461		861	800	7.7	20.0
C6-C12	Lin		171870		959	800	19.9	20.0
Trifluorotoluene (Surr)	Ave	153716	157910		10.3	10.0	2.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-54512/12 Calibration Date: 08/15/2012 22:40

Instrument ID: YPID Calib Start Date: 08/15/2012 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/15/2012 22:00

Lab File ID: YF081512.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.76	4.76	18.77
C6-C12	13.43	4.86	22.00
Trifluorotoluene (Surr)	9.72	9.46	9.96

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Sample No.: CCV 240-55708/5 Date Analyzed: 08/26/2012 14:12

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): YF082605.D Heated Purge: (Y/N) N

Calibration ID: 10676

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.73		
UPPER LIMIT				9.83		
LOWER LIMIT				9.63		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-55708/5 CCVRT		08/26/2012 14:12	YF082605.D	9.73		
MB 240-55708/6		08/26/2012 14:50	YF082606.D	9.73		
LCS 240-55708/7		08/26/2012 15:29	YF082607.D	9.73		
CCV 240-55708/15		08/26/2012 20:35	YF082615.D	9.73		
240-14408-2	MT-MW09S-082112	08/26/2012 21:14	YF082616.D	9.73		
240-14408-3	MT-MW11S-082112	08/26/2012 21:53	YF082617.D	9.73		
240-14408-4	MT-MW12S-082112	08/26/2012 22:34	YF082618.D	9.72		
CCV 240-55708/19		08/26/2012 23:14	YF082619.D	9.73		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55708/5 Calibration Date: 08/26/2012 14:12

Instrument ID: YPID Calib Start Date: 08/15/2012 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/15/2012 22:00

Lab File ID: YF082605.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	136020	130791		769	800	-3.8	20.0
C6-C12	Lin		148361		821	800	2.7	20.0
Trifluorotoluene (Surr)	Ave	153716	164106		10.7	10.0	6.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55708/5 Calibration Date: 08/26/2012 14:12

Instrument ID: YPID Calib Start Date: 08/15/2012 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/15/2012 22:00

Lab File ID: YF082605.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.78	4.80	18.73
C6-C12	13.44	4.90	21.97
Trifluorotoluene (Surr)	9.73	9.48	9.98

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55708/15 Calibration Date: 08/26/2012 20:35

Instrument ID: YPID Calib Start Date: 08/15/2012 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/15/2012 22:00

Lab File ID: YF082615.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	136020	130178		766	800	-4.3	20.0
C6-C12	Lin		147437		816	800	2.0	20.0
Trifluorotoluene (Surr)	Ave	153716	159148		10.4	10.0	3.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55708/15 Calibration Date: 08/26/2012 20:35

Instrument ID: YPID Calib Start Date: 08/15/2012 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/15/2012 22:00

Lab File ID: YF082615.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.78	4.80	18.73
C6-C12	13.44	4.90	21.97
Trifluorotoluene (Surr)	9.73	9.48	9.98

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55708/19 Calibration Date: 08/26/2012 23:14

Instrument ID: YPID Calib Start Date: 08/15/2012 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/15/2012 22:00

Lab File ID: YF082619.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	136020	127698		751	800	-6.1	20.0
C6-C12	Lin		144527		799	800	-0.2	20.0
Trifluorotoluene (Surr)	Ave	153716	154773		10.1	10.0	0.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55708/19 Calibration Date: 08/26/2012 23:14

Instrument ID: YPID Calib Start Date: 08/15/2012 18:36

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/15/2012 22:00

Lab File ID: YF082619.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.78	4.80	18.73
C6-C12	13.44	4.90	21.97
Trifluorotoluene (Surr)	9.73	9.48	9.98

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Surrogate Recovery Report

8015C Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Client Matrix: Water

Lab Sample ID	Client Sample ID	C91 %Rec
240-14408-2	MT-MW09S-082112	53
240-14408-3	MT-MW11S-082112	59
240-14408-4	MT-MW12S-082112	59
MB 240-55631/7-A		37
LCS 240-55631/8-A		64

Surrogate	Acceptance Limits
C9 = n-Nonane	10-110

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: MB 240-55631/7-A

Matrix: Water Date Extracted: 08/24/2012 11:18

Lab File ID:(1) P6F82805.D Lab File ID:(2)

Date Analyzed:(1) 08/28/2012 13:31 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-55631/8-A	08/28/2012 14:02	
MT-MW09S-082112	240-14408-2	08/28/2012 14:33	
MT-MW11S-082112	240-14408-3	08/28/2012 15:04	
MT-MW12S-082112	240-14408-4	08/28/2012 15:35	

Client: Tetra Tech, Inc

Job Number: 240-14408-1

Method Blank - Batch: 240-55631

Method: 8015C
Preparation: 3520C

Lab Sample ID:	MB 240-55631/7-A	Analysis Batch:	240-55969	Instrument ID:	A2HP6F
Client Matrix:	Water	Prep Batch:	240-55631	Lab File ID:	P6F82805.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	08/28/2012 1331	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/24/2012 1118			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Total Petroleum Hydrocarbons (C10-C32)	348	J	240	500

Surrogate	% Rec	Acceptance Limits
n-Nonane	37	10 - 110

Lab Control Sample - Batch: 240-55631

Method: 8015C
Preparation: 3520C

Lab Sample ID:	LCS 240-55631/8-A	Analysis Batch:	240-55969	Instrument ID:	A2HP6F
Client Matrix:	Water	Prep Batch:	240-55631	Lab File ID:	P6F82806.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	08/28/2012 1402	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/24/2012 1118			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Diesel	2500	2400	96	36 - 124	

Surrogate	% Rec	Acceptance Limits
n-Nonane	64	10 - 110

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52483

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 13:26 Calibration End Date: 07/30/2012 15:30 Calibration ID: 10355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-52483/4	P6F73004.D
Level 2	STD2 240-52483/5	P6F73005.D
Level 3	STD3 240-52483/6	P6F73006.D
Level 4	STD4 240-52483/7	P6F73007.D
Level 5	STD5 240-52483/8	P6F73008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	9.398	9.398	9.398	9.398	9.398						5.181 - 13.615	9.398
n-Nonane	4.174	4.175	4.175	4.174	4.176						4.124 - 4.224	4.175

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52483

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 13:26 Calibration End Date: 07/30/2012 15:30 Calibration ID: 10355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-52483/4	P6F73004.D
Level 2	STD2 240-52483/5	P6F73005.D
Level 3	STD3 240-52483/6	P6F73006.D
Level 4	STD4 240-52483/7	P6F73007.D
Level 5	STD5 240-52483/8	P6F73008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	198017 164866	195063	182983	164938	Ave		181173.338				8.8		20.0			
n-Nonane	178972 183715	194879	194900	180011	Ave		186495.525				4.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14408-1 Analy Batch No.: 52483

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 13:26 Calibration End Date: 07/30/2012 15:30 Calibration ID: 10355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-52483/4	P6F73004.D
Level 2	STD2 240-52483/5	P6F73005.D
Level 3	STD3 240-52483/6	P6F73006.D
Level 4	STD4 240-52483/7	P6F73007.D
Level 5	STD5 240-52483/8	P6F73008.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel	Ave	19801734	39012577	91491572	164937593	329731459	100	200	500	1000	2000
n-Nonane	Ave	1789719	3897586	9745006	18001099	36743063	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-52483/9 Calibration Date: 07/30/2012 16:02

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F73009.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181173	183339		506	500	1.2	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICV 240-52483/9 Calibration Date: 07/30/2012 16:02

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F73009.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.40	5.18	13.62

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Sample No.: CCV 240-55969/4 Date Analyzed: 08/28/2012 13:00

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm)

Lab File ID (Standard): P6F82804.D Heated Purge: (Y/N) N

Calibration ID: 10355

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				C9 RT #		
CONTINUING CALIBRATION SURROGATE				4.17		
UPPER LIMIT				4.27		
LOWER LIMIT				4.07		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-55969/4 CCVRT		08/28/2012 13:00	P6F82804.D	4.17		
MB 240-55631/7-A		08/28/2012 13:31	P6F82805.D	4.17		
LCS 240-55631/8-A		08/28/2012 14:02	P6F82806.D	4.17		
240-14408-2	MT-MW09S-082112	08/28/2012 14:33	P6F82807.D	4.17		
240-14408-3	MT-MW11S-082112	08/28/2012 15:04	P6F82808.D	4.17		
240-14408-4	MT-MW12S-082112	08/28/2012 15:35	P6F82809.D	4.17		
CCV 240-55969/13		08/28/2012 17:39	P6F82813.D	4.17		

C9 = n-Nonane

C9 RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55969/4 Calibration Date: 08/28/2012 13:00

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F82804.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181173	183218		506	500	1.1	20.0
n-Nonane	Ave	186496	215459		57.8	50.0	15.5	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55969/4 Calibration Date: 08/28/2012 13:00

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F82804.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.39	5.18	13.61
n-Nonane	4.17	4.12	4.22

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55969/13 Calibration Date: 08/28/2012 17:39

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F82813.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181173	186932		516	500	3.2	20.0
n-Nonane	Ave	186496	221057		59.3	50.0	18.5	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: CCV 240-55969/13 Calibration Date: 08/28/2012 17:39

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F82813.D

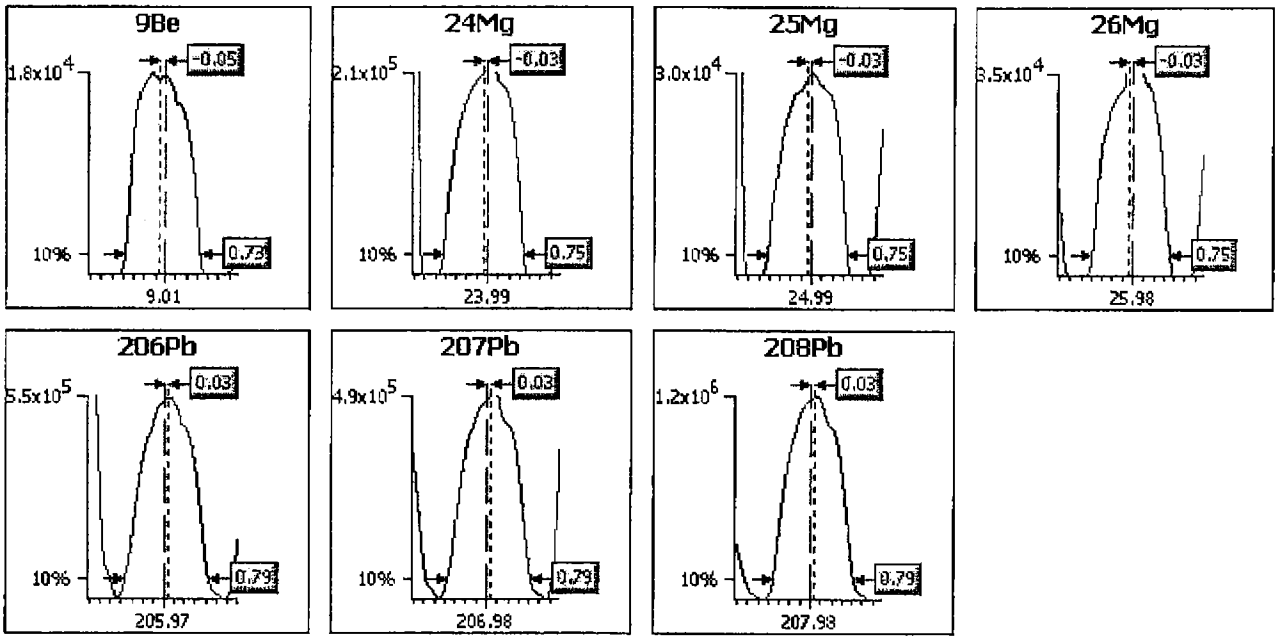
Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.39	5.18	13.61
n-Nonane	4.17	4.12	4.22

Performance Report

Sample details
Acquired at : 9/6/2012 07:27:23
Report name : STD MODE PERF REPORT [8/11/2009 07:18:25]

Mass Calibration verification

Acquisition parameters
Sweeps : 10
Dwell : 5.0 mSecs
Point spacing : 0.02 amu
Peak width measured at 10% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.85	0.65	0.10	0.73	-0.05
24Mg	0.85	0.65	0.10	0.75	-0.03
25Mg	0.85	0.65	0.10	0.75	-0.03
26Mg	0.85	0.65	0.10	0.75	-0.03
206Pb	0.85	0.65	0.10	0.79	0.03
207Pb	0.85	0.65	0.10	0.79	0.03
208Pb	0.85	0.65	0.10	0.79	0.03

Experiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\Templates\TEST AMERICA 6020A_MULTIMODE.tet
Created By User	martin.nash
Analyte Database	TA NORTH CANTON MULTIMODE.tea
Creation Timestamp	10/10/2007 09:08:48
Last Edited By	Upload
Last Edit Timestamp	9/6/2012 09:51:16
Instrument Detector	Simultaneous
Database Version	3,51
Acquisition Mode	Unknown

Numerical Results report key (text indicates meaning)

Blue text indicates that cell is a statistic.
Underlining indicates that a data warning flag is set.

Column headings
- No flag
- Semi Quant
- Standard Addition
- Multi Element

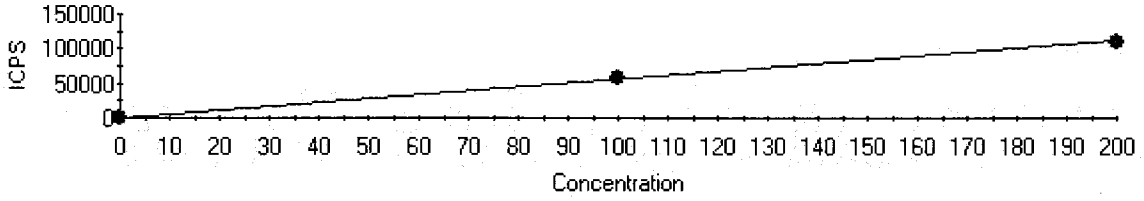
Result cells
- Internal Standard
- Excluded
- QC Warning
- QC Failure

Transient TRA only:
- Peak Not Found
- Manually Edited
- Merged Peak

Data warning flags
I - Invalid calibration
T - Tripped
F - Interference correction failed
M - Result over max
V - Valley integration failed
D - Different method used

Fully Quant Calibration

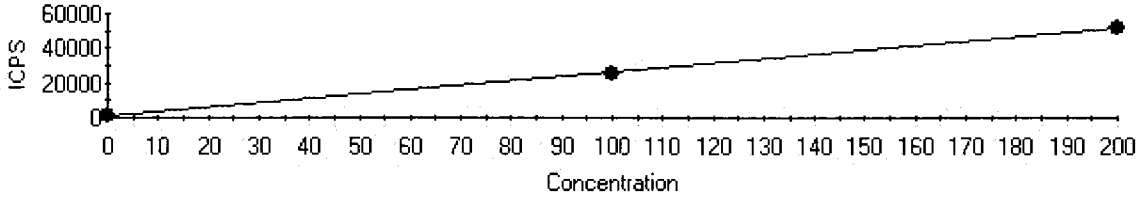
9Be FQ Block 1



Intercept CPS=6.595340 Intercept Conc=0.011850
Sensitivity=556.555082 Correlation Coeff=0.999964

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	6.60	0.00
STD2	100.000	101.177	1.177	56317.27	1.18
STD3	200.000	199.411	0.589	110990.03	0.29

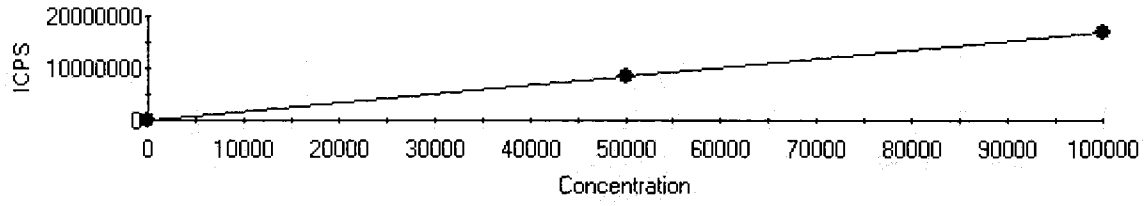
10B FQ Block 1



Intercept CPS=605.421899 Intercept Conc=2.385601
Sensitivity=253.781712 Correlation Coeff=0.999511

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	605.42	0.00
STD2	100.000	95.616	4.384	24870.90	4.38
STD4	200.000	202.192	2.192	51918.11	1.10

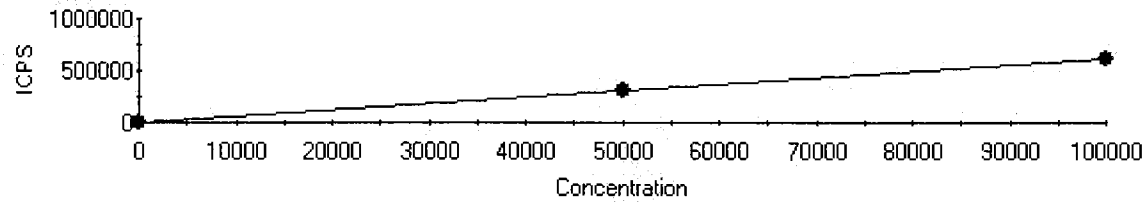
23Na FQ Block 1



Intercept CPS=10299.261830 Intercept Conc=61.052595
Sensitivity=168.694908 Correlation Coeff=0.999981

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	10299.26	0.00
STD2	50000.000	50430.233	430.233	8517622.71	0.86
STD3	100000.000	99784.884	215.116	16843501.01	0.22

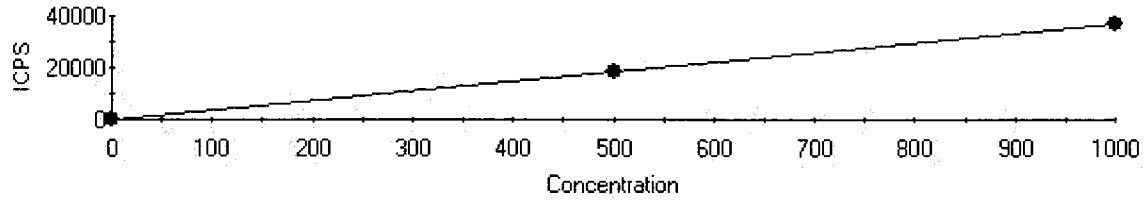
25Mg FQ Block 1



Intercept CPS=1.110696 Intercept Conc=0.180560
Sensitivity=6.151396 Correlation Coeff=0.999894

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	1.11	0.00
STD2	50000.000	51003.849	1003.849	313745.98	2.01
STD3	100000.000	99498.075	501.925	612053.17	0.50

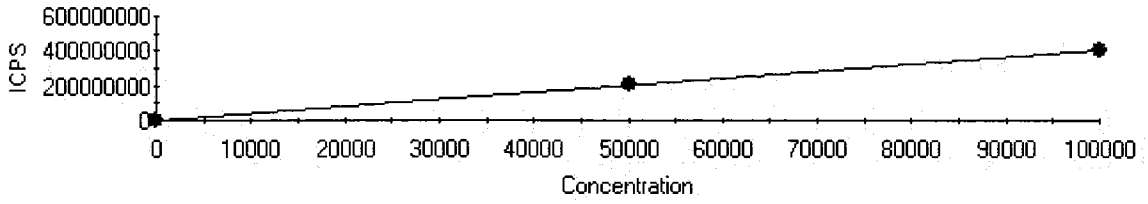
27Al FQ Block 1



Intercept CPS=118.882583 Intercept Conc=3.242594
Sensitivity=36.662807 Correlation Coeff=1.000000

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	118.88	0.00
STD2	500.000	500.311	0.311	18461.69	0.06
STD3	1000.000	999.845	0.155	36775.99	0.02

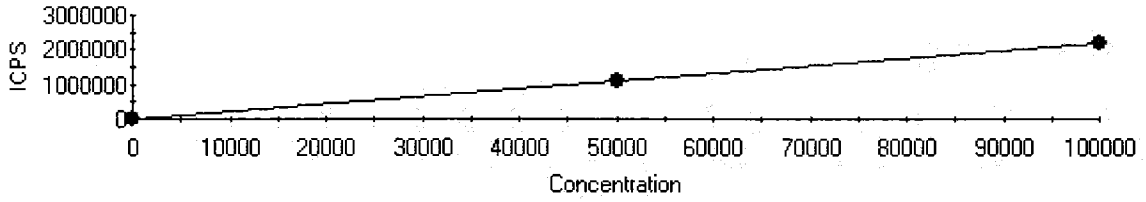
39K FQ Block 1



Intercept CPS=204019.640627 Intercept Conc=49.996921
Sensitivity=4080.644058 Correlation Coeff=0.999971

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	204019.64	0.00
STD2	50000.000	50524.943	524.943	206378326.84	1.05
STD3	100000.000	99737.529	262.471	407197373.29	0.26

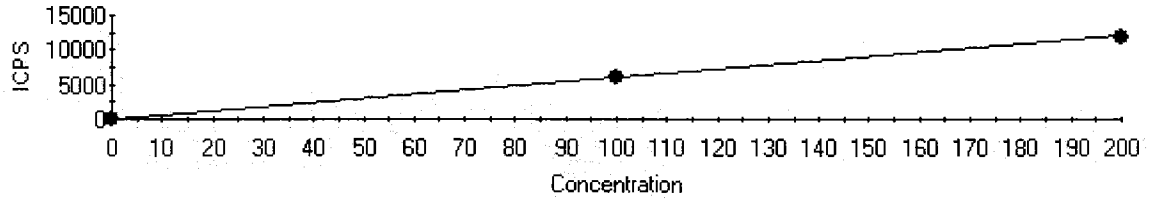
43Ca FQ Block 1



Intercept CPS=684.223033 Intercept Conc=31.255450
Sensitivity=21.891319 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	684.22	0.00
STD2	50000.000	49912.678	87.322	1093338.57	0.17
STD3	100000.000	100043.661	43.661	2190771.92	0.04

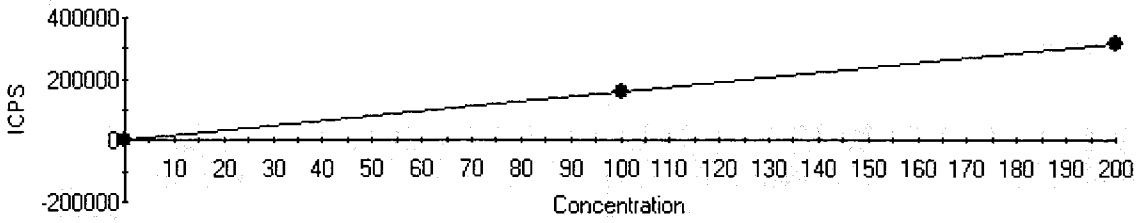
47Ti FQ Block 1



Intercept CPS=0.000000 Intercept Conc=0.000000
Sensitivity=60.006349 Correlation Coeff=0.999927

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	0.00	0.00
STD2	100.000	101.666	1.666	6100.58	1.67
STD4	200.000	199.167	0.833	11951.30	0.42

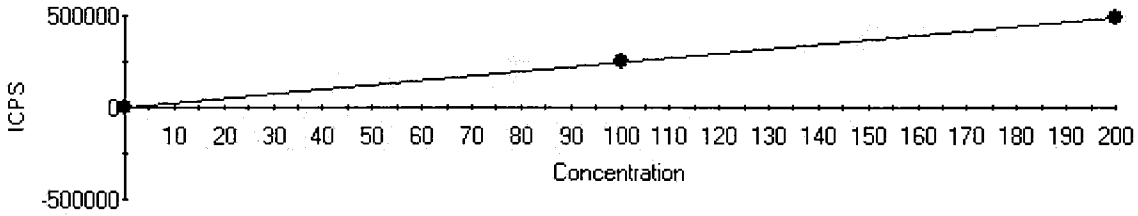
51V FQ Block 1



Intercept CPS=-382.234554 Intercept Conc=-0.242463
Sensitivity=1576.464137 Correlation Coeff=0.999983

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	-382.23	0.00
STD2	100.000	99.199	0.801	156001.31	0.80
STD3	200.000	200.401	0.401	315542.03	0.20

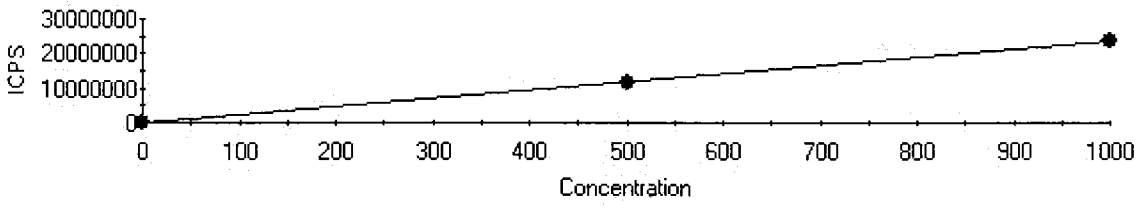
52Cr FQ Block 1



Intercept CPS=-29.539499 Intercept Conc=-0.011968
Sensitivity=2468.114325 Correlation Coeff=1.000000

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	-29.54	0.00
STD2	100.000	100.012	0.012	246812.27	0.01
STD3	200.000	199.994	0.006	493578.13	0.00

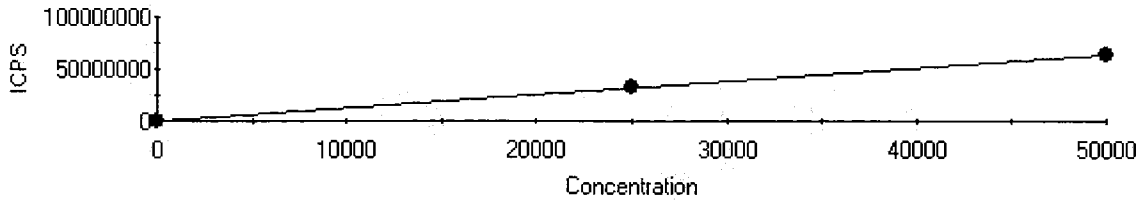
55Mn FQ Block 1



Intercept CPS=7517.527810 Intercept Conc=0.320840
Sensitivity=23430.784088 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	7517.53	0.00
STD2	500.000	501.198	1.198	11750971.48	0.24
STD3	1000.000	999.401	0.599	23424270.66	0.06

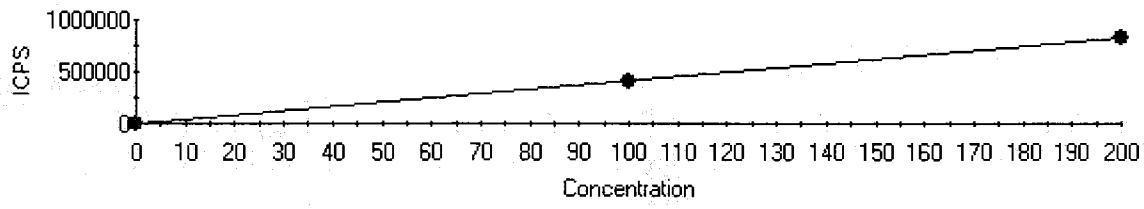
56Fe FQ Block 1



Intercept CPS=982.103403 Intercept Conc=0.764948
Sensitivity=1283.882996 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	982.10	0.00
STD2	25000.000	24912.065	87.935	31985158.84	0.35
STD3	50000.000	50043.967	43.967	64251580.99	0.09

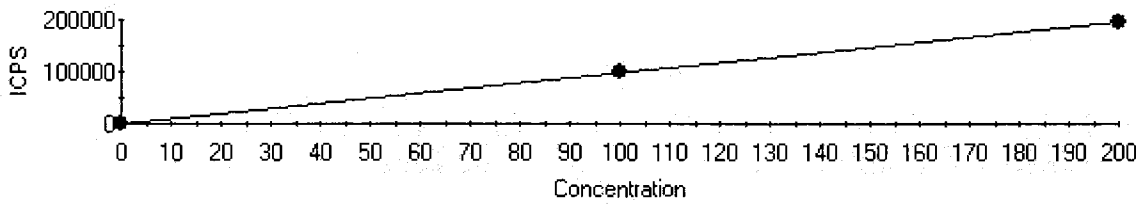
59Co FQ Block 1



Intercept CPS=8.904210 Intercept Conc=0.002175
Sensitivity=4094.798289 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	8.90	0.00
STD2	100.000	100.357	0.357	410949.69	0.36
STD3	200.000	199.822	0.178	818238.09	0.09

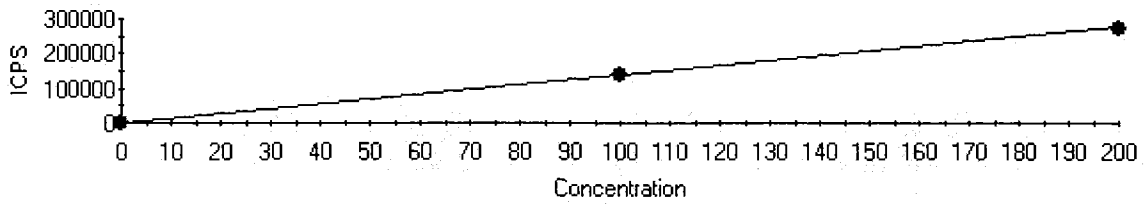
60Ni FQ Block 1



Intercept CPS=32.228557 Intercept Conc=0.032860
Sensitivity=980.781088 Correlation Coeff=0.999981

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	32.23	0.00
STD2	100.000	100.858	0.858	98951.97	0.86
STD3	200.000	199.571	0.429	195767.63	0.21

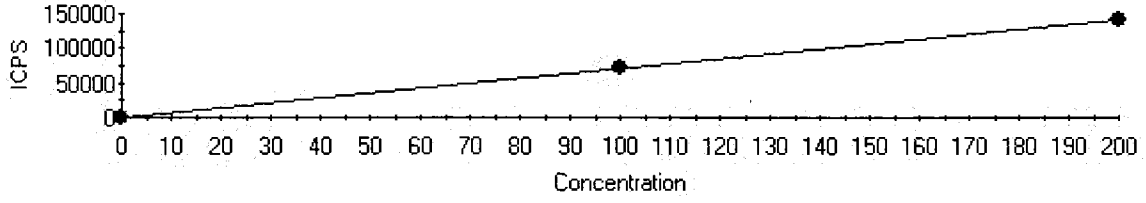
65Cu FQ Block 1



Intercept CPS=54.460598 Intercept Conc=0.039648
Sensitivity=1373.588929 Correlation Coeff=0.999867

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	54.46	0.00
STD2	100.000	102.250	2.250	140504.02	2.25
STD3	200.000	198.875	1.125	273226.91	0.56

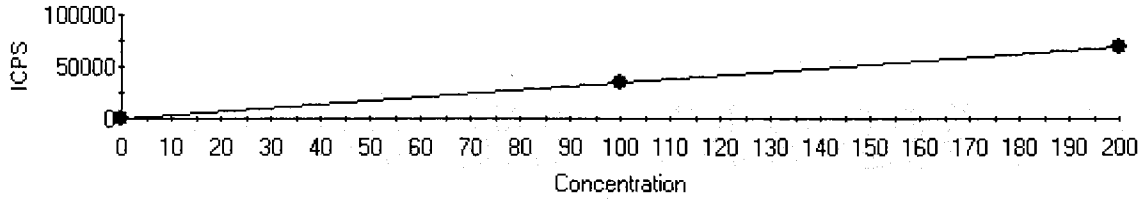
66Zn FQ Block 1



Intercept CPS=586.566504 Intercept Conc=0.827044
Sensitivity=709.232523 Correlation Coeff=0.999860

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	586.57	0.00
STD2	100.000	102.304	2.304	73143.91	2.30
STD3	200.000	198.848	1.152	141616.03	0.58

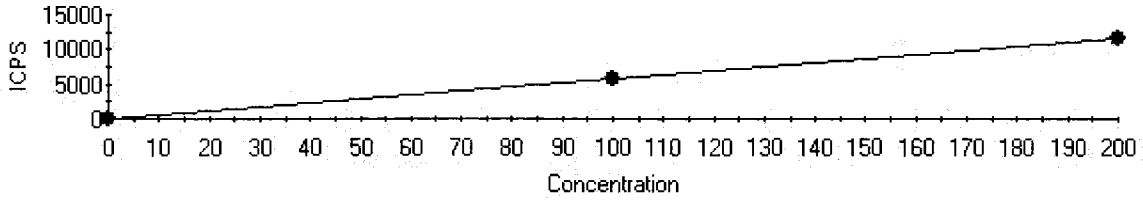
75As FQ Block 1



Intercept CPS=529.915509 Intercept Conc=1.542357
Sensitivity=343.575099 Correlation Coeff=0.999970

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	529.92	0.00
STD2	100.000	98.918	1.082	34515.63	1.08
STD3	200.000	200.541	0.541	69430.83	0.27

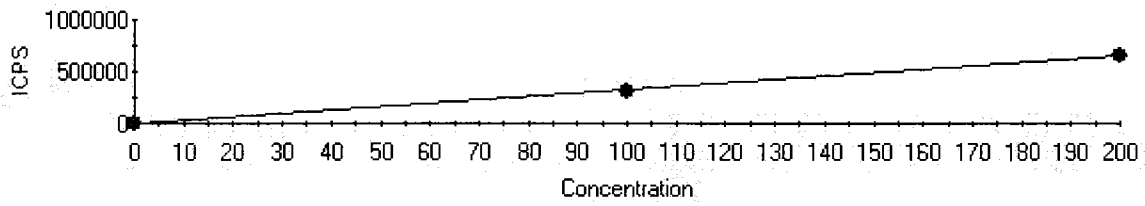
78Se FQ Block 1



Intercept CPS=2.789213 Intercept Conc=0.048840
Sensitivity=57.109725 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	2.79	0.00
STD2	100.000	100.431	0.431	5738.36	0.43
STD3	200.000	199.785	0.215	11412.44	0.11

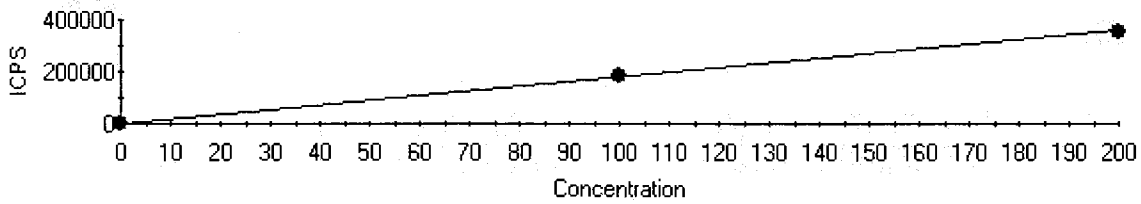
88Sr FQ Block 1



Intercept CPS=165.601969 Intercept Conc=0.051140
Sensitivity=3238.212459 Correlation Coeff=0.999801

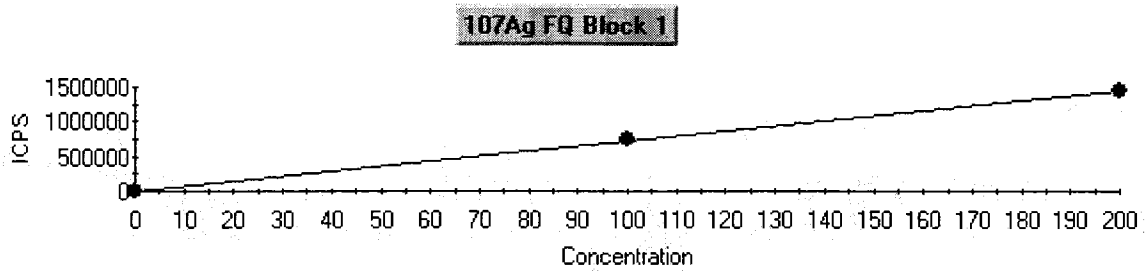
Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	165.60	0.00
STD2	100.000	97.217	2.783	314974.51	2.78
STD3	200.000	201.392	1.392	652314.26	0.70

95Mo FQ Block 1



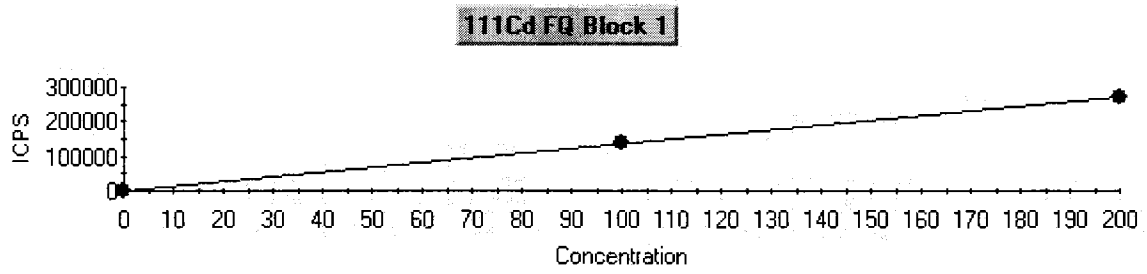
Intercept CPS=37.804349 Intercept Conc=0.021070
Sensitivity=1794.222276 Correlation Coeff=0.999915

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	37.80	0.00
STD2	100.000	101.798	1.798	182686.23	1.80
STD4	200.000	199.101	0.899	357269.16	0.45



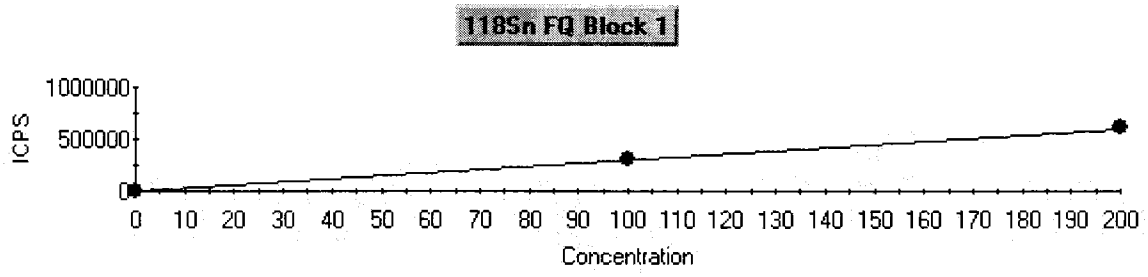
Intercept CPS=41.125929 Intercept Conc=0.005688
Sensitivity=7230.363782 Correlation Coeff=0.999869

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	41.13	0.00
STD2	100.000	102.230	2.230	739200.12	2.23
STD3	200.000	198.885	1.115	1438052.57	0.56



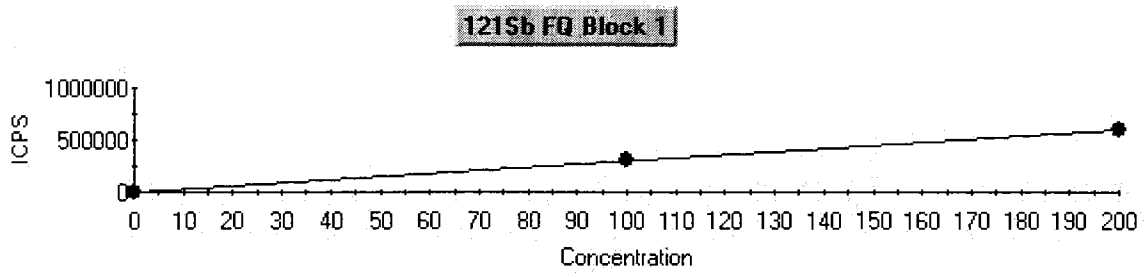
Intercept CPS=5.508341 Intercept Conc=0.004072
Sensitivity=1352.608383 Correlation Coeff=0.999968

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	5.51	0.00
STD2	100.000	101.105	1.105	136760.54	1.10
STD3	200.000	199.448	0.552	269780.09	0.28



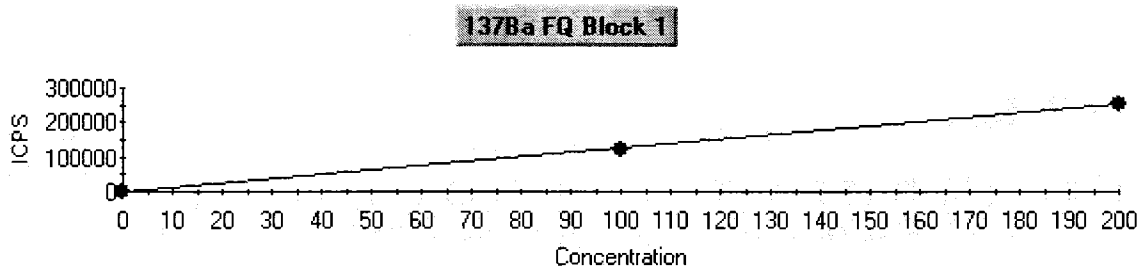
Intercept CPS=313.364222 Intercept Conc=0.103607
Sensitivity=3024.552580 Correlation Coeff=0.999971

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	313.36	0.00
STD2	100.000	98.949	1.051	299588.79	1.05
STD4	200.000	200.526	0.526	606813.80	0.26



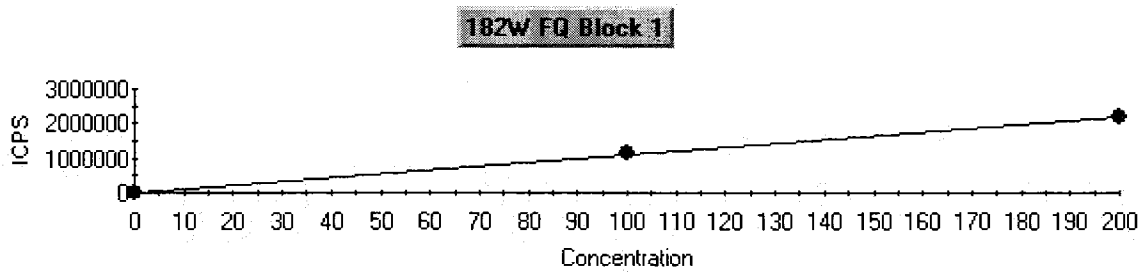
Intercept CPS=45.619796 Intercept Conc=0.015101
Sensitivity=3021.012588 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	45.62	0.00
STD2	100.000	100.518	0.518	303712.53	0.52
STD4	200.000	199.741	0.259	603465.31	0.13



Intercept CPS=108.929917 Intercept Conc=0.086409
Sensitivity=1260.634138 Correlation Coeff=0.999832

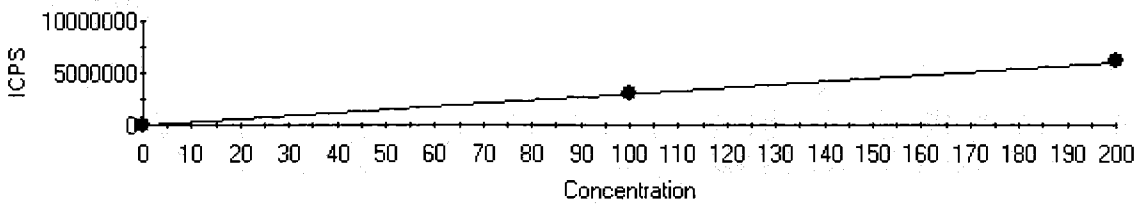
Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	108.93	0.00
STD2	100.000	97.446	2.554	122952.55	2.55
STD3	200.000	201.277	1.277	253845.65	0.64



Intercept CPS=462.277384 Intercept Conc=0.041709
Sensitivity=11083.352333 Correlation Coeff=0.998968

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	0.000	0.000	462.28	0.00
STD2	100.000	106.202	6.202	1177532.93	6.20
STD4	200.000	196.899	3.101	2182765.03	1.55

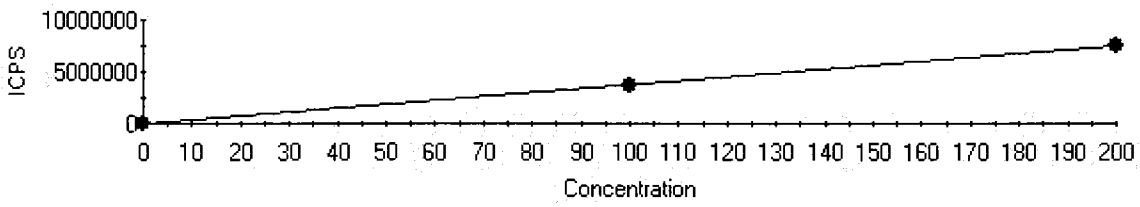
205Tl FQ Block 1



Intercept CPS=383.382560 Intercept Conc=0.012664
Sensitivity=30272.476019 Correlation Coeff=0.999963

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	383.38	0.00
STD2	100.000	98.802	1.198	2991371.36	1.20
STD3	200.000	200.599	0.599	6073008.40	0.30

208Pb FQ Block 1



Intercept CPS=411.104768 Intercept Conc=0.011056
Sensitivity=37184.397552 Correlation Coeff=0.999986

Label	Defined	Measured	Error	Mean CPS	% Error
ICISM=6020	0.000	-0.000	0.000	411.10	0.00
STD2	100.000	99.272	0.728	3691771.67	0.73
STD3	200.000	200.364	0.364	7450830.21	0.18

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

ICV Source: MTMSICVW_00016 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00047

Analyte	ICV 240-57039/5 09/06/2012 10:16				CCV 240-57039/11 09/06/2012 10:52				CCV 240-57039/23 09/06/2012 12:02			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	81.6		80.0	102	100		100	100	99.8		100	100
Arsenic	80.0		80.0	100	98.1		100	98	99.2		100	99
Barium	79.0		80.0	99	96.8		100	97	97.0		100	97
Beryllium	82.0		80.0	103	99.3		100	99	97.4		100	97
Cadmium	82.5		80.0	103	101		100	101	101		100	101
Chromium	82.0		80.0	102	100		100	100	100		100	100
Cobalt	81.6		80.0	102	101		100	101	101		100	101
Copper	83.9		80.0	105	103		100	103	104		100	104
Lead	79.4		80.0	99	97.8		100	98	97.4		100	97
Molybdenum	80.8		80.0	101	106		100	106	103		100	103
Nickel	83.1		80.0	104	103		100	103	102		100	102
Selenium	80.3		80.0	100	99.6		100	100	99.6		100	100
Silver	83.6		80.0	105	103		100	103	103		100	103
Thallium	79.3		80.0	99	97.8		100	98	96.9		100	97
Vanadium	81.1		80.0	101	99.3		100	99	99.2		100	99
Zinc	84.0		80.0	105	102		100	102	102		100	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

ICV Source: MTMSICVW_00016 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00047

Analyte	CCV 240-57039/35 09/06/2012 13:09											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	101		100	101								
Arsenic	99.1		100	99								
Barium	99.1		100	99								
Beryllium	98.4		100	98								
Cadmium	102		100	102								
Chromium	101		100	101								
Cobalt	101		100	101								
Copper	103		100	103								
Lead	98.7		100	99								
Molybdenum	103		100	103								
Nickel	102		100	102								
Selenium	101		100	101								
Silver	103		100	103								
Thallium	97.7		100	98								
Vanadium	99.4		100	99								
Zinc	102		100	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

ICV Source: MTHGICVW_00374 Concentration Units: ug/L

CCV Source: MTHGCALW_00241

Analyte	ICV 240-56462/7-A 08/31/2012 09:08				CCVL 240-56462/10-A 08/31/2012 09:13				CCV 240-56462/11-A 08/31/2012 09:30			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.31		2.50	92	5.15		5.00	103	5.24		5.00	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

ICV Source: MTHGICVW_00374 Concentration Units: ug/L

CCV Source: MTHGCALW_00241

Analyte	CCV 240-56462/11-A 08/31/2012 09:48				CCV 240-56462/11-A 08/31/2012 10:06							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.41		5.00	108	5.38		5.00	108				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICSA 240-57039/9 Instrument ID: I8

Lab File ID: I8090612A.csv ICS Source: MTMSICSAW_00017

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.164**	
Arsenic		**0.303**	
Barium		**0.172**	
Beryllium		**0.0270**	
Cadmium		**-0.138**	
Chromium		**0.585**	
Cobalt		**0.0930**	
Copper		**0.291**	
Lead		**0.117**	
Molybdenum	**1000**	**1014**	**101**
Nickel		**0.449**	
Selenium		**0.114**	
Silver		**0.0420**	
Thallium		**0.158**	
Vanadium		**0.233**	
Zinc		**1.54**	
Aluminum	*50000*	*50930*	*102*
Boron		*-0.0910*	
Calcium	*50000*	*52880*	*106*
Iron	*50000*	*51590*	*103*
Magnesium	*50000*	*52630*	*105*
Manganese		*0.193*	
Potassium	*50000*	*53350*	*107*
Sodium	*50000*	*52780*	*106*
Strontium		*0.242*	
Tin		*0.126*	
Titanium	*1000*	*1052*	*105*
Tungsten		*0.353*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Lab Sample ID: ICSAB 240-57039/10 Instrument ID: I8

Lab File ID: I8090612A.csv ICS Source: MTMSICSABW_00017

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**101**	**101**
Arsenic	**100**	**97.1**	**97**
Barium	**100**	**98.5**	**98**
Beryllium	**100**	**102**	**102**
Cadmium	**100**	**100**	**100**
Chromium	**100**	**104**	**104**
Cobalt	**100**	**101**	**101**
Copper	**100**	**101**	**101**
Lead	**100**	**99.6**	**100**
Molybdenum	**1100**	**1122**	**102**
Nickel	**100**	**102**	**102**
Selenium	**100**	**98.2**	**98**
Silver	**100**	**103**	**103**
Thallium	**100**	**99.7**	**100**
Vanadium	**100**	**103**	**103**
Zinc	**100**	**104**	**104**
Aluminum	*50000*	*51150*	*102*
Boron	*100*	*98.6*	*99*
Calcium	*50000*	*52880*	*106*
Iron	*50000*	*52530*	*105*
Magnesium	*50000*	*53580*	*107*
Manganese	*100*	*106*	*106*
Potassium	*50000*	*53560*	*107*
Sodium	*50000*	*53670*	*107*
Strontium	*100*	*95.4*	*95*
Tin	*100*	*101*	*101*
Titanium	*1100*	*1177*	*107*
Tungsten	*100*	*107*	*107*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Method: 6020A Instrument ID: I8

Lab Sample ID: CRI 240-57039/8 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00003

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.07		104	70-130
Arsenic	5.00	4.68	J	94	70-130
Barium	5.00	4.93	J	99	70-130
Beryllium	1.00	1.05		105	70-130
Cadmium	1.00	1.13		113	70-130
Chromium	2.00	2.05		103	70-130
Cobalt	1.00	1.07		107	70-130
Copper	2.00	2.36		118	70-130
Lead	1.00	1.05		105	70-130
Molybdenum	10.0	10.4		104	70-130
Nickel	2.00	2.37		119	70-130
Selenium	5.00	5.40		108	70-130
Silver	1.00	1.12		112	70-130
Thallium	2.00	2.04		102	70-130
Vanadium	5.00	5.04	J	101	70-130
Zinc	20.0	22.8		114	70-130

Lab Sample ID: CRI 240-57039/43 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00003

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.06		103	70-130
Arsenic	5.00	4.76	J	95	70-130
Barium	5.00	4.90	J	98	70-130
Beryllium	1.00	1.05		105	70-130
Cadmium	1.00	1.05		105	70-130
Chromium	2.00	2.10		105	70-130
Cobalt	1.00	1.08		108	70-130
Copper	2.00	2.34		117	70-130
Lead	1.00	1.05		105	70-130
Molybdenum	10.0	9.97	J	100	70-130
Nickel	2.00	2.13		107	70-130
Selenium	5.00	4.78	J	96	70-130
Silver	1.00	1.14		114	70-130
Thallium	2.00	1.90	J	95	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Method: 6020A Instrument ID: I8

Lab Sample ID: CRI 240-57039/43 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00003

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	5.00	4.97	J	99	70-130
Zinc	20.0	22.8		114	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-56462/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00241

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.176	J	88	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-57039/6 09/06/2012 10:23		CCB 240-57039/12 09/06/2012 10:59		CCB 240-57039/24 09/06/2012 12:09		CCB 240-57039/36 09/06/2012 13:16	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Molybdenum	10	0.400	J	1.08	J	0.420	J	0.370	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	2.0	0.386	J	0.376	J	0.351	J	0.299	J
Vanadium	20	20	U	20	U	20	U	20	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-56462/8-A 08/31/2012 09:10		CCB 240-56462/12-A 08/31/2012 09:15		CCB 240-56462/12-A 08/31/2012 09:31		CCB 240-56462/12-A 08/31/2012 09:50	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-56462/12-A 08/31/2012 10:07							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-56218/1-A

Instrument Code: I8 Batch No.: 57039

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020A
7440-38-2	Arsenic	5.0	U		6020A
7440-39-3	Barium	0.678	J		6020A
7440-41-7	Beryllium	1.0	U		6020A
7440-43-9	Cadmium	1.0	U		6020A
7440-47-3	Chromium	2.0	U		6020A
7440-48-4	Cobalt	1.0	U		6020A
7440-50-8	Copper	0.514	J		6020A
7439-92-1	Lead	1.0	U		6020A
7439-98-7	Molybdenum	0.557	J		6020A
7440-02-0	Nickel	2.0	U		6020A
7782-49-2	Selenium	5.0	U		6020A
7440-22-4	Silver	1.0	U		6020A
7440-28-0	Thallium	0.225	J		6020A
7440-62-2	Vanadium	20	U		6020A
7440-66-6	Zinc	6.90	J		6020A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-56220/1-A

Instrument Code: H1 Batch No.: 56469

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-56218/2-A

Lab Name: TestAmerica Canton Job No.: 240-14408-1

Sample Matrix: Water LCS Source: MTICPMSB_00009

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	93.9		94	80	120		6020A
Arsenic	1000	926		93	80	120		6020A
Barium	1000	897		90	80	120		6020A
Beryllium	1000	954		95	80	120		6020A
Cadmium	1000	967		97	80	120		6020A
Chromium	1000	948		95	80	120		6020A
Cobalt	1000	902		90	80	120		6020A
Copper	1000	1000		100	80	120		6020A
Lead	1000	864		86	80	120		6020A
Molybdenum	100	92.0		92	80	120		6020A
Nickel	1000	962		96	80	120		6020A
Selenium	1000	945		94	80	120		6020A
Silver	100	101		101	80	120		6020A
Thallium	250	211		84	80	120		6020A
Vanadium	1000	920		92	80	120		6020A
Zinc	1000	1010		101	80	120		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-56220/2-A

Lab Name: TestAmerica Canton Job No.: 240-14408-1

Sample Matrix: Water LCS Source: MTHGICVW_00373

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.86		97	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: MT-MW09S-082112 MS
Lab ID: 240-14408-2 MS
Lab Name: TestAmerica Canton
Job No.: 240-14408-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	96.2		1.9	J	100	94	44-153		6020A
Arsenic	922		0.60	J	1000	92	82-123		6020A
Barium	968		59		1000	91	45-144		6020A
Beryllium	929		1.8		1000	93	77-124		6020A
Cadmium	970		1.0	U	1000	97	78-117		6020A
Chromium	957		1.8	J	1000	96	72-110		6020A
Cobalt	906		7.6		1000	90	67-114		6020A
Copper	987		2.2		1000	98	60-123		6020A
Lead	886		0.79	J	1000	89	73-115		6020A
Molybdenum	94.0		1.9	J	100	92	80-110		6020A
Nickel	959		12		1000	95	72-111		6020A
Selenium	922		0.62	J	1000	92	72-148		6020A
Silver	100		1.0	U	100	100	10-139		6020A
Thallium	216		0.57	J	250	86	69-117		6020A
Vanadium	931		0.84	J	1000	93	70-112		6020A
Zinc	1020		43		1000	98	49-156		6020A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: _____ Lab ID: 240-14454-G-4-D MS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.950		0.20	U	1.00	95	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS - TOTAL RECOVERABLE

Client ID: MT-MW09S-082112 DU | Lab ID: 240-14408-2 DU

Lab Name: TestAmerica Canton | Job No.: 240-14408-1

SDG No.:

% Solids for Sample: | % Solids for Duplicate:

Matrix: Water | Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.0	1.9	J	1.90	J	2		6020A
Arsenic	5.0	0.60	J	0.513	J	16		6020A
Barium	5.0	59		57.9		1		6020A
Beryllium	1.0	1.8		1.85		5		6020A
Cadmium	1.0	1.0	U	1.0	U	NC		6020A
Chromium	2.0	1.8	J	2.28		24		6020A
Cobalt	1.0	7.6		7.41		2		6020A
Copper	2.0	2.2		2.35		5		6020A
Lead	1.0	0.79	J	0.757	J	4		6020A
Molybdenum	10	1.9	J	1.67	J	15		6020A
Nickel	2.0	12		12.7		4		6020A
Selenium	5.0	0.62	J	5.0	U	NC		6020A
Silver	1.0	1.0	U	1.0	U	NC		6020A
Thallium	2.0	0.57	J	0.255	J	77		6020A
Vanadium	20	0.84	J	0.596	J	34		6020A
Zinc	20	43		46.2		8		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATES
METALS

Client ID: _____ Lab ID: 240-14454-G-4-C DU

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.: _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.20	0.20	U	0.20	U	NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-14408-2

SDG No:

Lab Name: TestAmerica Canton Job No: 240-14408-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	1.9	J	2.11	J	NC		6020A
Arsenic	0.60	J	25	U	NC		6020A
Barium	59		58.6		NC		6020A
Beryllium	1.8		2.10	J	NC		6020A
Cadmium	1.0	U	5.0	U	NC		6020A
Chromium	1.8	J	10	U	NC		6020A
Cobalt	7.6		7.57		NC		6020A
Copper	2.2		2.84	J	NC		6020A
Lead	0.79	J	0.945	J	NC		6020A
Molybdenum	1.9	J	2.85	J	NC		6020A
Nickel	12		12.9		NC		6020A
Selenium	0.62	J	25	U	NC		6020A
Silver	1.0	U	5.0	U	NC		6020A
Thallium	0.57	J	1.46	J	NC		6020A
Vanadium	0.84	J	100	U	NC		6020A
Zinc	43		50.4	J	NC		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-14408-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020A MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-14408-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020A XMDL Date: 02/09/2010 15:53

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14408-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020A MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14408-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020A XMDL Date: 02/09/2010 15:53

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-14408-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-14408-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14408-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14408-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-14408-1

SDG No.:

Instrument ID: I8 Date: 06/18/2012 15:26

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		2000	6020A
Arsenic		10000	6020A
Barium		10000	6020A
Beryllium		10000	6020A
Cadmium		10000	6020A
Chromium		10000	6020A
Cobalt		10000	6020A
Copper		10000	6020A
Lead		10000	6020A
Molybdenum		2000	6020A
Nickel		10000	6020A
Selenium		10000	6020A
Silver		2000	6020A
Thallium		10000	6020A
Vanadium		10000	6020A
Zinc		10000	6020A

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-14408-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-56218/1-A	08/30/2012 07:45	56218		50	50
LCS 240-56218/2-A	08/30/2012 07:45	56218		50	50
240-14408-2	08/30/2012 07:45	56218		50	50
240-14408-2 DU	08/30/2012 07:45	56218		50	50
240-14408-2 MS	08/30/2012 07:45	56218		50	50
240-14408-2	08/30/2012 07:45	56218		50	50
240-14408-3	08/30/2012 07:45	56218		50	50
240-14408-3	08/30/2012 07:45	56218		50	50
240-14408-4	08/30/2012 07:45	56218		50	50
240-14408-4	08/30/2012 07:45	56218		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-56220/1-A	08/30/2012 14:00	56220		100	100
LCS 240-56220/2-A	08/30/2012 14:00	56220		100	100
240-14408-2	08/30/2012 14:00	56220		100	100
240-14408-2	08/30/2012 14:00	56220		100	100
240-14408-3	08/30/2012 14:00	56220		100	100
240-14408-3	08/30/2012 14:00	56220		100	100
240-14408-4	08/30/2012 14:00	56220		100	100
240-14408-4	08/30/2012 14:00	56220		100	100
240-14454-G-4-C DU	08/30/2012 14:00	56220		100	100
240-14454-G-4-D MS	08/30/2012 14:00	56220		100	100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Instrument ID: I8 Method: 6020A

Start Date: 09/06/2012 09:53 End Date: 09/06/2012 17:32

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ICIS 240-57039/1			09:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
STD2 240-57039/2 IC	1		09:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
STD3 240-57039/3 IC	1		10:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
STD4 240-57039/4 IC	1		10:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-57039/5	1		10:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB 240-57039/6	1		10:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-57039/7			10:28																				
CRI 240-57039/8	1		10:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSA 240-57039/9	1		10:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-57039/10	1		10:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-57039/11	1		10:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-57039/12	1		10:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MB 240-56218/1-A	1	R	11:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-56218/2-A	1	R	11:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-2	1	R	11:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-2 SD	5	R	11:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-2 DU	1	R	11:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-2 MS	1	R	11:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			11:40																				
240-14408-2	1	D	11:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-3	1	R	11:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-3	1	D	11:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-57039/23	1		12:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-57039/24	1		12:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-4	1	R	12:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-4	1	D	12:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			12:26																				
ZZZZZZ			12:31																				
ZZZZZZ			12:36																				
ZZZZZZ			12:42																				
ZZZZZZ			12:47																				
ZZZZZZ			12:53																				
ZZZZZZ			12:58																				
ZZZZZZ			13:04																				
CCV 240-57039/35	1		13:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-57039/36	1		13:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			13:22																				
ZZZZZZ			13:27																				
ZZZZZZ			13:33																				
ZZZZZZ			13:38																				
ZZZZZZ			13:44																				
ZZZZZZ			13:49																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Instrument ID: I8 Method: 6020A

Start Date: 09/06/2012 09:53 End Date: 09/06/2012 17:32

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CRI 240-57039/43	1		13:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			14:00																				
CCV 240-57039/45			14:07																				
CCB 240-57039/46			14:14																				
ZZZZZZ			14:20																				
ZZZZZZ			14:25																				
CCV 240-57039/49			14:33																				
CCB 240-57039/50			14:40																				
ZZZZZZ			14:45																				
ZZZZZZ			14:51																				
ZZZZZZ			14:56																				
ZZZZZZ			15:03																				
ZZZZZZ			15:10																				
ZZZZZZ			15:16																				
ZZZZZZ			15:21																				
ZZZZZZ			15:27																				
ZZZZZZ			15:32																				
ZZZZZZ			15:38																				
CCV 240-57039/61			15:43																				
CCB 240-57039/62			15:51																				
ZZZZZZ			15:56																				
ZZZZZZ			16:02																				
ZZZZZZ			16:07																				
ZZZZZZ			16:13																				
ZZZZZZ			16:18																				
ZZZZZZ			16:24																				
ZZZZZZ			16:29																				
ZZZZZZ			16:35																				
ZZZZZZ			16:40																				
ZZZZZZ			16:46																				
CCV 240-57039/73			16:51																				
CCB 240-57039/74			16:58																				
ZZZZZZ			17:03																				
ZZZZZZ			17:09																				
ZZZZZZ			17:14																				
ZZZZZZ			17:20																				
CCV 240-57039/79			17:25																				
CCB 240-57039/80			17:32																				

Prep Types
D = Dissolved
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/31/2012 09:00 End Date: 08/31/2012 11:40

Lab Sample ID	D / F	Type	Time	Analytes																					
				Hg																					
IC 240-56462/1-A			09:00	X																					
IC 240-56462/2-A			09:01	X																					
IC 240-56462/3-A			09:02	X																					
IC 240-56462/4-A			09:03	X																					
IC 240-56462/5-A			09:05	X																					
IC 240-56462/6-A			09:07	X																					
ICV 240-56462/7-A	1		09:08	X																					
ICB 240-56462/8-A	1		09:10	X																					
CRA 240-56462/9-A	1		09:11	X																					
CCVL 240-56462/10-A	1		09:13	X																					
CCB 240-56462/12-A	1		09:15	X																					
ZZZZZZ			09:16																						
ZZZZZZ			09:17																						
ZZZZZZ			09:19																						
ZZZZZZ			09:20																						
MB 240-56220/1-A	1	T	09:21	X																					
LCS 240-56220/2-A	1	T	09:23	X																					
ZZZZZZ			09:24																						
ZZZZZZ			09:25																						
ZZZZZZ			09:27																						
ZZZZZZ			09:28																						
CCV 240-56462/11-A	1		09:30	X																					
CCB 240-56462/12-A	1		09:31	X																					
ZZZZZZ			09:32																						
ZZZZZZ			09:34																						
ZZZZZZ			09:36																						
ZZZZZZ			09:37																						
240-14408-2	1	T	09:39	X																					
240-14408-2	1	D	09:40	X																					
240-14408-3	1	T	09:42	X																					
240-14408-3	1	D	09:44	X																					
240-14408-4	1	T	09:45	X																					
240-14408-4	1	D	09:47	X																					
CCV 240-56462/11-A	1		09:48	X																					
CCB 240-56462/12-A	1		09:50	X																					
ZZZZZZ			09:51																						
ZZZZZZ			09:53																						
ZZZZZZ			09:54																						
ZZZZZZ			09:56																						
ZZZZZZ			09:57																						
240-14454-G-4-C DU	1	T	09:59	X																					
240-14454-G-4-D MS	1	T	10:00	X																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/31/2012 09:00 End Date: 08/31/2012 11:40

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
ZZZZZZ			10:01	
ZZZZZZ			10:03	
ZZZZZZ			10:05	
CCV 240-56462/11-A	1		10:06	X
CCB 240-56462/12-A	1		10:07	X
ZZZZZZ			10:09	
ZZZZZZ			10:11	
ZZZZZZ			10:12	
ZZZZZZ			10:14	
ZZZZZZ			10:16	
ZZZZZZ			10:17	
ZZZZZZ			10:19	
ZZZZZZ			10:21	
ZZZZZZ			10:22	
ZZZZZZ			10:23	
CCV 240-56462/11-A			10:25	
CCB 240-56462/12-A			10:27	
ZZZZZZ			10:28	
ZZZZZZ			10:30	
ZZZZZZ			10:32	
ZZZZZZ			10:34	
ZZZZZZ			10:35	
ZZZZZZ			10:37	
ZZZZZZ			10:38	
ZZZZZZ			10:40	
ZZZZZZ			10:41	
ZZZZZZ			10:42	
CCV 240-56462/11-A			10:44	
CCB 240-56462/12-A			10:45	
ZZZZZZ			10:47	
ZZZZZZ			10:48	
ZZZZZZ			10:50	
ZZZZZZ			10:51	
ZZZZZZ			10:53	
ZZZZZZ			10:54	
ZZZZZZ			10:56	
ZZZZZZ			10:57	
ZZZZZZ			10:59	
ZZZZZZ			11:00	
CCV 240-56462/11-A			11:02	
CCB 240-56462/12-A			11:03	
ZZZZZZ			11:05	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/31/2012 09:00 End Date: 08/31/2012 11:40

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			11:06																					
ZZZZZZ			11:08																					
ZZZZZZ			11:09																					
ZZZZZZ			11:11																					
ZZZZZZ			11:13																					
ZZZZZZ			11:14																					
ZZZZZZ			11:15																					
ZZZZZZ			11:17																					
ZZZZZZ			11:19																					
CCV 240-56462/11-A			11:21																					
CCB 240-56462/12-A			11:22																					
ZZZZZZ			11:24																					
ZZZZZZ			11:25																					
ZZZZZZ			11:27																					
ZZZZZZ			11:28																					
ZZZZZZ			11:29																					
ZZZZZZ			11:31																					
CCV 240-56462/11-A			11:33																					
CCB 240-56462/12-A			11:34																					
ZZZZZZ			11:35																					
ZZZZZZ			11:37																					
ZZZZZZ			11:38																					
ZZZZZZ			11:40																					

Prep Types
D = Dissolved
T = Total/NA

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 09/06/2012 End Date: 09/06/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
STD2 240-57039/2 IC	09:58	96		94		95		93		95	
STD3 240-57039/3 IC	10:05	88		89		92		87		91	
STD4 240-57039/4 IC	10:11	93		88		88		91		93	
ICV 240-57039/5	10:16	95		91		91		90		93	
ICB 240-57039/6	10:23	99		87		87		89		91	
CRI 240-57039/8	10:32	100		93		92		91		95	
ICSA 240-57039/9	10:38	92		85		89		90		92	
ICSAB 240-57039/10	10:43	87		85		90		92		93	
CCV 240-57039/11	10:52	104		94		93		92		94	
CCB 240-57039/12	10:59	107		93		91		93		95	
MB 240-56218/1-A	11:04	106		93		91		93		95	
LCS 240-56218/2-A	11:09	100		91		92		92		95	
240-14408-2	11:16	110		94		93		96		96	
240-14408-2 SD	11:22	111		98		94		97		98	
240-14408-2 DU	11:27	110		97		95		97		97	
240-14408-2 MS	11:32	108		94		93		95		96	
240-14408-2	11:45	109		95		94		95		96	
240-14408-3	11:51	107		97		96		95		95	
240-14408-3	11:57	102		96		95		94		94	
CCV 240-57039/23	12:02	100		94		94		92		95	
CCB 240-57039/24	12:09	111		96		93		93		96	
240-14408-4	12:15	97		92		91		90		92	
240-14408-4	12:20	95		93		91		90		92	
CCV 240-57039/35	13:09	101		97		97		94		97	
CCB 240-57039/36	13:16	111		96		94		94		96	
CRI 240-57039/43	13:54	103		89		86		87		90	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-14408-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 09/06/2012 End Date: 09/06/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD2 240-57039/2 IC	09:58					90					
STD3 240-57039/3 IC	10:05					83					
STD4 240-57039/4 IC	10:11					97					
ICV 240-57039/5	10:16					91					
ICB 240-57039/6	10:23					96					
CRI 240-57039/8	10:32					99					
ICSA 240-57039/9	10:38					89					
ICSAB 240-57039/10	10:43					91					
CCV 240-57039/11	10:52					93					
CCB 240-57039/12	10:59					100					
MB 240-56218/1-A	11:04					101					
LCS 240-56218/2-A	11:09					100					
240-14408-2	11:16					99					
240-14408-2 SD	11:22					102					
240-14408-2 DU	11:27					100					
240-14408-2 MS	11:32					99					
240-14408-2	11:45					99					
240-14408-3	11:51					93					
240-14408-3	11:57					93					
CCV 240-57039/23	12:02					94					
CCB 240-57039/24	12:09					102					
240-14408-4	12:15					92					
240-14408-4	12:20					91					
CCV 240-57039/35	13:09					96					
CCB 240-57039/36	13:16					102					
CRI 240-57039/43	13:54					97					

MT-MW095-052112

240-14408-h-2-a, 9/6/2012 11:16:36 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B
		ppb	ppb	ppb
x		109.538%	1.752	63.830
%RSD		2.545	2.144	0.436
Run	Time	23Na	25Mg	27Al
		ppb	ppb	ppb
x		17060.000	2037.000	906.600
%RSD		1.033	1.135	1.237
Run	Time	35Cl	39K	43Ca
		ppb	ppb	ppb
x		T 0.000	T 5217.000	13390.000
%RSD		T 0.000	T 0.967	0.598
Run	Time	45Sc	45Sc	47Ti
		ppb	ppb	ppb
x		T 94.138%	93.117%	8.845
%RSD		T 1.263	1.984	5.436
Run	Time	51V	52Cr	53Cl O
		ppb	ppb	ppb
x		0.837	1.792	3.664
%RSD		0.157	1.136	43.210
Run	Time	55Mn	56Fe	59Co
		ppb	ppb	ppb
x		T 279.300	1801.000	7.555
%RSD		T 0.302	1.093	0.464
Run	Time	60Ni	65Cu	66Zn
		ppb	ppb	ppb
x		12.270	2.232	42.720
%RSD		3.804	2.020	1.255
Run	Time	72Ge	75As	77Ar Cl
		ppb	ppb	ppb
x		96.332%	0.604	0.235
%RSD		1.963	13.570	19.490
Run	Time	78Se	88Sr	95Mo
		ppb	ppb	ppb
x		0.615	109.100	1.941
%RSD		13.810	0.528	3.247
Run	Time	105Pd	107Ag	108Mo O
		ppb	ppb	ppb
x		0.000	0.007	-0.380
%RSD		0.000	52.260	241.900
Run	Time	111Cd	115In	118Sn
		ppb	ppb	ppb
x		0.087	95.923%	2.483
%RSD		16.530	0.983	1.459
Run	Time	121Sb	137Ba	159Tb
		ppb	ppb	ppb
x		1.945	58.610	0.000
%RSD		4.006	1.310	0.000
Run	Time	165Ho	182W	205Tl
		ppb	ppb	ppb
x		0.000	0.620	0.571
%RSD		0.000	6.660	5.995
Run	Time	208Pb	209Bi	
		ppb	ppb	
x		0.789	99.222%	
%RSD		0.389	1.718	

Antimony = 1.9 ug/L

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**T. APANAVAGE**	**DATE:**	**SEPTEMBER 25, 2012**
FROM:	**EDWARD SEDLMYER**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION- VOC/SVOC/TPH/METALS**
LOCKHEED MARTIN – MSA
SDG 240-14454-1

SAMPLES: 4/Aqueous/VOC/SVOC/PCB/PET

MT-MW07S-082212 MT-MW08S-082212 MT-MW10S-082212
TB-082212

Overview

The sample set for Lockheed Martin – MSA, SDG 240-14454-1 consists of three (3) aqueous environmental samples and one (1) trip blank. The samples were analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), polychlorinated biphenyls (PCB), total petroleum hydrocarbons (TPH C6-10 & TPH C10-32), total and dissolved metals. The trip blank was analyzed for VOCs only.

The samples were collected by Tetra Tech on August 22, 2012 and analyzed by Test America (North Canton). All analyses were conducted in accordance with SW-846 Methods 8260B, 8270D, 8015C, 6020A, and 7470A analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, blank spike/blank spike duplicate results, internal standard recoveries, ICP interference results, laboratory duplicate results, ICP serial dilution results, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

- The VOC initial calibration and associated continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for tert-butyl alcohol and vinyl acetate on instrument A3UX10. Only non-detected results were reported for tert-butyl alcohol and vinyl acetate and these results were rejected (UR).

Minor

- The following compounds were detected in the organic method blanks at the maximum concentrations indicated below:

Compound	Concentration	Action Level
1,2,3-Trichlorobenzene	0.325 ug/L	1.625 ug/L
1,2,4-Trichlorobenzene	0.219 ug/L	1.095 ug/L
Hexachlorobutadiene	0.540 ug/L	2.7 ug/L
Naphthalene	0.246 ug/L	1.23 ug/L
TPH (C6-C10)	32.0 ug/L	160 ug/L
TPH (C10-C32)	348 ug/L	1,740 ug/L

An action level of 5 times the maximum contaminant concentration was established for 1,2,3-trichlorobenzene, TPH (C6-C10), and TPH (C10-C32) to evaluate laboratory contamination. Dilution factors and sample aliquots were taken into consideration during the application of all action levels. No action was taken on for 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, hexachlorobutadiene, and naphthalene because all results were nondetected. All results for TPH (C6-C10) and TPH (C10-C32) were qualified (B) as a result of laboratory blank contamination.

- The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

Analyte	Maximum Concentration	Action Level
Barium[(1)]	0.678 ug/L	3.39 ug/L
Copper[(1)]	0.514 ug/L	2.57 ug/L
Molybdenum[(2)]	1.08 ug/L	5.4 ug/L
Thallium[(2)]	0.376 ug/L	1.88 ug/L
Zinc[(1)]	6.90 ug/L	34.5 ug/L

(1) Maximum concentration present in a method blank affecting all samples.
(2) Maximum concentration present in a preparation blank affecting all samples.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. The positive results less than the blank action level reported for copper, molybdenum, thallium and zinc were qualified (B) as a result of laboratory blank contamination.

- The CRDL percent recovery for copper was > 110% quality control limit affecting all samples. Positive result < 2X CRDL for copper was qualified (K) as biased high.

- Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

Notes

The VOC continuing calibration %Ds were greater than the quality control limit of 20% and less than 50% for 1,1,2-trichlorotrifluoroethane, 2-butanone, 1,2,-dichloroethane, 4-methyl-2-pentanone, trans-1,3-dichloropropene, 2-hexanone, and 1,1,2,2-tetrachloroethane for instrument A3UX10 on 09/04/12 @ 10:42. No action was taken on this basis because only nondetected results were reported for the aforementioned compounds in the affected samples.

The VOC MS/MSD associated with batch 56575 had zero percent recoveries for 2-chloroethyl vinyl ether.

No action was taken on this basis because the batch MS/MSD was not performed on a Tetra Tech sample.

The laboratory control sample (LCS) associated with batch 55629 had a percent recovery greater than the quality control limit for benzaldehyde. No action was taken on this basis because only nondetects were reported for benzaldehyde.

The CRDL percent recoveries for cadmium, nickel, silver, and zinc were > 110% quality control limit affecting all samples. However, no validation actions were required as all sample results were either > 2X CRDL or nondetects

Naphthalene and hexachlorobutadiene were reported in both the VOC and SVOC analytical fractions. No validation action was taken on this basis.

Executive Summary

Laboratory Performance: Two VOC compounds had RRF noncompliances resulting in the rejection of data. Blank contamination for the TPH (C6-C10), TPH (C10-C32), total and dissolved metals fraction resulted in the qualification of data. The CRDL percent recoveries for several analytes were outside the 90-110% quality control limits.

Other Factors Affecting Data Quality: Positive results less than the reporting limit (RL) were qualified as estimated, (J), due to uncertainty near the detection limit.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Organic Data Validation (Sept. 1994) and Region III modifications to the National Functional Guidelines for Inorganic Data Validation (April 1993). The text of this report has been formulated to address only those problem areas affecting data quality.

for Tetra Tech
Edward Sedlmyer
Chemist/Data Validator

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04054	NSAMPLE	MT-MW07S-082212			MT-MW08S-082212			MT-MW10S-082212			TB-082212		
SDG: 240-14454-1	LAB_ID	240-14454-2			240-14454-3			240-14454-4			240-14454-1		
FRACTION: OV	SAMP_DATE	8/22/2012			8/22/2012			8/22/2012			8/22/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE	0.23	U		0.23	U		0.23	U		0.23	U	
1,1,1-TRICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,1,2,2-TETRACHLOROETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
1,1-DICHLOROETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
1,1-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
1,1-DICHLOROPROPENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2,3-TRICHLOROBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
1,2,3-TRICHLOROPROPANE	0.43	U		0.43	U		0.43	U		0.43	U	
1,2,3-TRIMETHYLBENZENE	0.0059	U		0.0059	U		0.0059	U		0.0059	U	
1,2,4-TRICHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
1,2,4-TRIMETHYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.67	U		0.67	U		0.67	U		0.67	U	
1,2-DIBROMOETHANE	0.24	U		0.24	U		0.24	U		0.24	U	
1,2-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
1,2-DICHLOROETHANE	0.22	U		0.22	U		0.22	U		0.22	U	
1,2-DICHLOROPROPANE	0.18	U		0.18	U		0.18	U		0.18	U	
1,3-DICHLOROBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
1,3-DICHLOROPROPANE	0.16	U		0.16	U		0.16	U		0.16	U	
1,4-DICHLOROBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
2,2-DICHLOROPROPANE	0.13	U		0.13	U		0.13	U		0.13	U	
2-BUTANONE	0.57	U		0.57	U		0.57	U		0.57	U	
2-CHLOROETHYL VINYL ETHER	0.99	U		0.99	U		0.99	U		0.99	U	
2-CHLOROTOLUENE	0.11	U		0.11	U		0.11	U		0.11	U	
2-HEXANONE	0.41	U		0.41	U		0.41	U		0.41	U	
4-CHLOROTOLUENE	0.18	U		0.18	U		0.18	U		0.18	U	
4-ISOPROPYLTOLUENE	0.12	U		0.12	U		0.12	U		0.12	U	
4-METHYL-2-PENTANONE	0.32	U		0.32	U		0.32	U		0.32	U	
ACETONE	1.1	U		2.8	J	P	1.1	U		1.1	U	
BENZENE	0.13	U		0.13	U		1.9			0.13	U	
BROMOBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
BROMOCHLOROMETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
BROMODICHLOROMETHANE	0.15	U		0.15	U		0.15	U		0.15	U	
BROMOFORM	0.64	U		0.64	U		0.64	U		0.64	U	
BROMOMETHANE	0.41	U		0.41	U		0.41	U		0.41	U	

PROJ_NO: 04054	NSAMPLE	MT-MW07S-082212			MT-MW08S-082212			MT-MW10S-082212			TB-082212		
SDG: 240-14454-1	LAB_ID	240-14454-2			240-14454-3			240-14454-4			240-14454-1		
FRACTION: OV	SAMP_DATE	8/22/2012			8/22/2012			8/22/2012			8/22/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE	0.16	J	P	1.3			0.67	J	P	0.13	U	
CARBON TETRACHLORIDE	0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE	0.15	U		0.15	U		0.15	U		0.15	U	
CHLORODIBROMOMETHANE	0.18	U		0.18	U		0.18	U		0.18	U	
CHLOROETHANE	0.29	U		0.29	U		0.29	U		0.29	U	
CHLOROFORM	0.16	U		0.16	U		0.16	U		0.16	U	
CHLOROMETHANE	0.3	U		0.37	J	P	0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE	0.17	U		0.17	U		0.17	U		0.17	U	
CIS-1,3-DICHLOROPROPENE	0.14	U		0.14	U		0.14	U		0.14	U	
DIBROMOMETHANE	0.28	U		0.28	U		0.28	U		0.28	U	
DICHLORODIFLUOROMETHANE	0.31	U		0.31	U		0.31	U		0.31	U	
DIISOPROPYL ETHER	1.5	U		1.5	U		1.5	U		1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U		0.11	U		0.11	U		0.11	U	
ETHYLBENZENE	0.17	U		0.17	U		0.17	U		0.17	U	
HEXACHLOROBUTADIENE	0.3	U		0.3	U		0.3	U		0.3	U	
ISOPROPYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
M+P-XYLENES	0.24	U		0.24	U		0.24	U		0.24	U	
METHYL TERT-BUTYL ETHER	0.17	U		0.17	U		0.17	U		0.17	U	
METHYLENE CHLORIDE	0.33	U		0.33	U		0.33	U		0.33	U	
NAPHTHALENE	0.24	U		0.24	U		0.24	U		0.24	U	
N-BUTYLBENZENE	0.12	U		0.12	U		0.12	U		0.12	U	
N-PROPYLBENZENE	0.14	U		0.14	U		0.14	U		0.14	U	
O-XYLENE	0.14	U		0.14	U		0.14	U		0.14	U	
SEC-BUTYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
STYRENE	0.11	U		0.11	U		0.11	U		0.11	U	
TERT-AMYL METHYL ETHER	0.067	U		0.067	U		0.067	U		0.067	U	
TERT-BUTYLBENZENE	0.13	U		0.13	U		0.13	U		0.13	U	
TERTIARY-BUTYL ALCOHOL	3.9	UR	C	3.9	UR	C	3.9	UR	C	3.9	UR	C
TETRACHLOROETHENE	0.29	U		0.29	U		0.29	U		0.29	U	
TOLUENE	0.13	U		0.16	J	P	0.27	J	P	0.13	U	
TOTAL XYLENES	0.28	U		0.28	U		0.28	U		0.28	U	
TRANS-1,2-DICHLOROETHENE	0.19	U		0.19	U		0.19	U		0.19	U	
TRANS-1,3-DICHLOROPROPENE	0.19	U		0.19	U		0.19	U		0.19	U	
TRICHLOROETHENE	0.17	U		0.17	U		0.17	U		0.17	U	
TRICHLOROFLUOROMETHANE	0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04054	NSAMPLE	MT-MW07S-082212			MT-MW08S-082212			MT-MW10S-082212			TB-082212		
SDG: 240-14454-1	LAB_ID	240-14454-2			240-14454-3			240-14454-4			240-14454-1		
FRACTION: OV	SAMP_DATE	8/22/2012			8/22/2012			8/22/2012			8/22/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
VINYL ACETATE		0.19	UR	C	0.19	UR	C	0.19	UR	C	0.19	UR	C
VINYL CHLORIDE		0.22	U		0.22	U		0.22	U		0.22	U	

PROJ_NO: 04054	NSAMPLE	MT-MW07S-082212			MT-MW08S-082212			MT-MW10S-082212		
SDG: 240-14454-1	LAB_ID	240-14454-2			240-14454-3			240-14454-4		
FRACTION: OS	SAMP_DATE	8/22/2012			8/22/2012			8/22/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1-BIPHENYL		0.78	U		0.76	U		0.76	U	
1,4-DIOXANE		0.48	U		0.47	U		0.47	U	
2,2'-OXYBIS(1-CHLOROPROPANE)		0.39	U		0.38	U		0.38	U	
2,4,5-TRICHLOROPHENOL		0.29	U		0.29	U		0.29	U	
2,4,6-TRICHLOROPHENOL		0.78	U		0.76	U		0.76	U	
2,4-DICHLOROPHENOL		0.78	U		0.76	U		0.76	U	
2,4-DIMETHYLPHENOL		0.78	U		0.76	U		0.76	U	
2,4-DINITROPHENOL		2.4	U		2.3	U		2.3	U	
2,4-DINITROTOLUENE		0.26	U		0.26	U		0.26	U	
2,6-DINITROTOLUENE		0.78	U		0.76	U		0.76	U	
2-CHLORONAPHTHALENE		0.098	U		0.095	U		0.095	U	
2-CHLOROPHENOL		0.28	U		0.28	U		0.28	U	
2-METHYLNAPHTHALENE		0.098	U		0.095	U		0.095	U	
2-METHYLPHENOL		0.78	U		0.76	U		0.76	U	
2-NITROANILINE		0.78	U		0.76	U		0.76	U	
2-NITROPHENOL		0.27	U		0.27	U		0.27	U	
3&4-METHYLPHENOL		0.74	U		0.71	U		0.71	U	
3,3'-DICHLOROBENZIDINE		0.36	U		0.35	U		0.35	U	
3-NITROANILINE		0.27	U		0.27	U		0.27	U	
4,6-DINITRO-2-METHYLPHENOL		2.4	U		2.3	U		2.3	U	
4-BROMOPHENYL PHENYL ETHER		0.78	U		0.76	U		0.76	U	
4-CHLORO-3-METHYLPHENOL		0.78	U		0.76	U		0.76	U	
4-CHLOROANILINE		0.78	U		0.76	U		0.76	U	
4-CHLOROPHENYL PHENYL ETHER		0.29	U		0.29	U		0.29	U	
4-NITROANILINE		0.78	U		0.76	U		0.76	U	
4-NITROPHENOL		2.4	U		2.3	U		2.3	U	
ACENAPHTHENE		0.098	U		0.095	U		0.095	U	
ACENAPHTHYLENE		0.098	U		0.095	U		0.095	U	
ACETOPHENONE		0.33	U		0.32	U		0.32	U	
ANTHRACENE		0.098	U		0.095	U		0.095	U	
ATRAZINE		0.33	U		0.32	U		0.32	U	
BENZALDEHYDE		0.38	U		0.37	U		0.37	U	
BENZO(A)ANTHRACENE		0.098	U		0.095	U		0.095	U	
BENZO(A)PYRENE		0.098	U		0.095	U		0.095	U	
BENZO(B)FLUORANTHENE		0.098	U		0.095	U		0.095	U	

PROJ_NO: 04054	NSAMPLE	MT-MW07S-082212			MT-MW08S-082212			MT-MW10S-082212		
SDG: 240-14454-1	LAB_ID	240-14454-2			240-14454-3			240-14454-4		
FRACTION: OS	SAMP_DATE	8/22/2012			8/22/2012			8/22/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
BENZO(G,H,I)PERYLENE		0.098	U		0.095	U		0.095	U	
BENZO(K)FLUORANTHENE		0.098	U		0.095	U		0.095	U	
BIS(2-CHLOROETHOXY)METHANE		0.31	U		0.3	U		0.3	U	
BIS(2-CHLOROETHYL)ETHER		0.098	U		0.095	U		0.095	U	
BIS(2-ETHYLHEXYL)PHTHALATE		0.91	J	P	0.79	J	P	0.76	U	
BUTYL BENZYL PHTHALATE		0.78	U		0.76	U		0.76	U	
CAPROLACTAM		0.78	U		0.78	J	P	0.76	U	
CARBAZOLE		0.27	U		0.27	U		0.27	U	
CHRYSENE		0.098	U		0.095	U		0.095	U	
DIBENZO(A,H)ANTHRACENE		0.098	U		0.095	U		0.095	U	
DIBENZOFURAN		0.098	U		0.095	U		0.095	U	
DIETHYL PHTHALATE		0.59	U		0.57	U		0.57	U	
DIMETHYL PHTHALATE		0.28	U		0.28	U		0.28	U	
DI-N-BUTYL PHTHALATE		0.66	U		0.64	U		0.64	U	
DI-N-OCTYL PHTHALATE		0.78	U		0.76	U		0.76	U	
FLUORANTHENE		0.098	U		0.095	U		0.095	U	
FLUORENE		0.098	U		0.095	U		0.095	U	
HEXACHLOROBENZENE		0.098	U		0.095	U		0.095	U	
HEXACHLOROBUTADIENE		0.26	U		0.26	U		0.26	U	
HEXACHLOROCYCLOPENTADIENE		0.78	U		0.76	U		0.76	U	
HEXACHLOROETHANE		0.78	U		0.76	U		0.76	U	
INDENO(1,2,3-CD)PYRENE		0.098	U		0.095	U		0.095	U	
ISOPHORONE		0.26	U		0.26	U		0.26	U	
NAPHTHALENE		0.098	U		0.095	U		0.095	U	
NITROBENZENE		0.039	U		0.038	U		0.038	U	
N-NITROSODIMETHYLAMINE		0.3	U		0.3	U		0.3	U	
N-NITROSO-DI-N-PROPYLAMINE		0.78	U		0.76	U		0.76	U	
N-NITROSODIPHENYLAMINE		0.3	U		0.3	U		0.3	U	
PENTACHLOROPHENOL		2.4	U		2.3	U		2.3	U	
PHENANTHRENE		0.098	U		0.095	U		0.095	U	
PHENOL		0.59	U		0.57	U		0.57	U	
PYRENE		0.098	U		0.095	U		0.095	U	

PROJ_NO: 04054	NSAMPLE	MT-MW07S-082212			MT-MW08S-082212			MT-MW10S-082212		
SDG: 240-14454-1	LAB_ID	240-14454-2			240-14454-3			240-14454-4		
FRACTION: PET	SAMP_DATE	8/22/2012			8/22/2012			8/22/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
TPH (C06-C10)		36	B	A	40	B	A	41	B	A
TPH (C10-C32)		400	B	A	240	U		330	B	A

PROJ_NO: 04054	NSAMPLE	MT-MW07S-082212			MT-MW08S-082212			MT-MW10S-082212		
SDG: 240-14454-1	LAB_ID	240-14454-2			240-14454-3			240-14454-4		
FRACTION: M	SAMP_DATE	8/22/2012			8/22/2012			8/22/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.17	J	P	0.4	J	P	0.15	J	P
ARSENIC		0.4	U		0.4	U		0.56	J	P
BARIUM		20			63			63		
BERYLLIUM		3			0.2	U		23		
CADMIUM		0.13	U		0.13	U		0.13	U	
CHROMIUM		5.2			1.8	J	P	2.5		
COBALT		20			5.9			250		
COPPER		3.4	K	C	2.1	B	A	1.5	B	A
LEAD		0.55	J	P	0.29	J	P	0.44	J	P
MERCURY		0.39			0.12	U		0.12	U	
MOLYBDENUM		0.22	B	A	0.67	B	A	0.34	B	A
NICKEL		31			11			380		
SELENIUM		0.57	U		0.57	U		0.57	U	
SILVER		0.08	U		0.08	U		0.08	U	
THALLIUM		0.16	B	A	0.14	U		0.2	B	A
VANADIUM		2.4	J	P	0.61	J	P	0.53	J	P
ZINC		53			12	B	A	370		

PROJ_NO: 04054	NSAMPLE	MT-MW07S-082212			MT-MW08S-082212			MT-MW10S-082212		
SDG: 240-14454-1	LAB_ID	240-14454-2			240-14454-3			240-14454-4		
FRACTION: MF	SAMP_DATE	8/22/2012			8/22/2012			8/22/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ANTIMONY		0.13	J	P	0.31	J	P	0.14	J	P
ARSENIC		0.4	U		0.4	U		0.4	U	
BARIUM		17			62			62		
BERYLLIUM		2.9			0.2	U		22		
CADMIUM		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U	
COBALT		21			5.5			250		
COPPER		1.5	B	A	1.4	B	A	0.29	B	A
LEAD		0.18	U		0.18	U		0.18	U	
MERCURY		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		0.11	B	A	0.69	B	A	0.23	B	A
NICKEL		31			11			370		
SELENIUM		0.57	U		0.57	U		0.57	U	
SILVER		0.08	U		0.08	U		0.08	U	
THALLIUM		0.14	B	A	0.14	U		0.19	B	A
VANADIUM		0.44	U		0.44	U		0.44	U	
ZINC		51			12	B	A	360		

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Matrix: Water Lab File ID: UXX8680.D

Analysis Method: 8260B Date Collected: 08/22/2012 11:10

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 16:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.16	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Matrix: Water Lab File ID: UXX8680.D

Analysis Method: 8260B Date Collected: 08/22/2012 11:10

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 16:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Matrix: Water Lab File ID: UXX8680.D

Analysis Method: 8260B Date Collected: 08/22/2012 11:10

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 16:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	72		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
2037-26-5	Toluene-d8 (Surr)	88		74-115
1868-53-7	Dibromofluoromethane (Surr)	105		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Matrix: Water Lab File ID: UXX8680.D

Analysis Method: 8260B Date Collected: 08/22/2012 11:10

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 16:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 | Lab Sample ID: 240-14454-3

Matrix: Water | Lab File ID: UXX8681.D

Analysis Method: 8260B | Date Collected: 08/22/2012 09:40

Sample wt/vol: 5(mL) | Date Analyzed: 09/04/2012 16:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 56575 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	2.8	J	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.3		1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 Lab Sample ID: 240-14454-3

Matrix: Water Lab File ID: UXX8681.D

Analysis Method: 8260B Date Collected: 08/22/2012 09:40

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 16:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	0.37	J	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.16	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 | Lab Sample ID: 240-14454-3

Matrix: Water | Lab File ID: UXX8681.D

Analysis Method: 8260B | Date Collected: 08/22/2012 09:40

Sample wt/vol: 5(mL) | Date Analyzed: 09/04/2012 16:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 56575 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	74		63-129
460-00-4	4-Bromofluorobenzene (Surr)	90		66-117
2037-26-5	Toluene-d8 (Surr)	87		74-115
1868-53-7	Dibromofluoromethane (Surr)	102		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 Lab Sample ID: 240-14454-3

Matrix: Water Lab File ID: UXX8681.D

Analysis Method: 8260B Date Collected: 08/22/2012 09:40

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 16:37

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 Lab Sample ID: 240-14454-4

Matrix: Water Lab File ID: UXX8682.D

Analysis Method: 8260B Date Collected: 08/22/2012 13:20

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 16:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.9		1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	0.67	J	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 | Lab Sample ID: 240-14454-4

Matrix: Water | Lab File ID: UXX8682.D

Analysis Method: 8260B | Date Collected: 08/22/2012 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 09/04/2012 16:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 56575 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	0.27	J	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 | Lab Sample ID: 240-14454-4

Matrix: Water | Lab File ID: UXX8682.D

Analysis Method: 8260B | Date Collected: 08/22/2012 13:20

Sample wt/vol: 5(mL) | Date Analyzed: 09/04/2012 16:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 56575 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	71		63-129
460-00-4	4-Bromofluorobenzene (Surr)	85		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	99		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 Lab Sample ID: 240-14454-4

Matrix: Water Lab File ID: UXX8682.D

Analysis Method: 8260B Date Collected: 08/22/2012 13:20

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 16:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: TB-082212 Lab Sample ID: 240-14454-1

Matrix: Water Lab File ID: UXX8679.D

Analysis Method: 8260B Date Collected: 08/22/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	1.0	U	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: TB-082212 Lab Sample ID: 240-14454-1

Matrix: Water Lab File ID: UXX8679.D

Analysis Method: 8260B Date Collected: 08/22/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	1.0	U	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: TB-082212 Lab Sample ID: 240-14454-1

Matrix: Water Lab File ID: UXX8679.D

Analysis Method: 8260B Date Collected: 08/22/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	72		63-129
460-00-4	4-Bromofluorobenzene (Surr)	87		66-117
2037-26-5	Toluene-d8 (Surr)	88		74-115
1868-53-7	Dibromofluoromethane (Surr)	103		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: TB-082212 Lab Sample ID: 240-14454-1

Matrix: Water Lab File ID: UXX8679.D

Analysis Method: 8260B Date Collected: 08/22/2012 00:00

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 15:54

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 | Lab Sample ID: 240-14454-2

Matrix: Water | Lab File ID: 20906027.D

Analysis Method: 8270D | Date Collected: 08/22/2012 11:10

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1020(mL) | Date Analyzed: 09/06/2012 19:50

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	0.98	U	0.98	0.78
123-91-1	1,4-Dioxane	0.98	U	0.98	0.48
88-06-2	2,4,6-Trichlorophenol	4.9	U	4.9	0.78
95-95-4	2,4,5-Trichlorophenol	4.9	U	4.9	0.29
120-83-2	2,4-Dichlorophenol	2.0	U	2.0	0.78
105-67-9	2,4-Dimethylphenol	2.0	U	2.0	0.78
51-28-5	2,4-Dinitrophenol	4.9	U	4.9	2.4
121-14-2	2,4-Dinitrotoluene	4.9	U	4.9	0.26
91-58-7	2-Chloronaphthalene	0.98	U	0.98	0.098
95-57-8	2-Chlorophenol	0.98	U	0.98	0.28
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.098
95-48-7	2-Methylphenol	0.98	U	0.98	0.78
88-74-4	2-Nitroaniline	2.0	U	2.0	0.78
88-75-5	2-Nitrophenol	2.0	U	2.0	0.27
15831-10-4	3 & 4 Methylphenol	2.0	U	2.0	0.74
91-94-1	3,3'-Dichlorobenzidine	4.9	U	4.9	0.36
99-09-2	3-Nitroaniline	2.0	U	2.0	0.27
534-52-1	4,6-Dinitro-2-methylphenol	4.9	U	4.9	2.4
101-55-3	4-Bromophenyl phenyl ether	2.0	U	2.0	0.78
59-50-7	4-Chloro-3-methylphenol	2.0	U	2.0	0.78
106-47-8	4-Chloroaniline	2.0	U	2.0	0.78
7005-72-3	4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29
100-01-6	4-Nitroaniline	2.0	U	2.0	0.78
83-32-9	Acenaphthene	0.20	U	0.20	0.098
208-96-8	Acenaphthylene	0.20	U	0.20	0.098
98-86-2	Acetophenone	0.98	U	0.98	0.33
120-12-7	Anthracene	0.20	U	0.20	0.098
1912-24-9	Atrazine	0.98	U	0.98	0.33
100-52-7	Benzaldehyde	0.98	U *	0.98	0.38
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.098
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.098
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.098
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.098
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.098

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 | Lab Sample ID: 240-14454-2

Matrix: Water | Lab File ID: 20906027.D

Analysis Method: 8270D | Date Collected: 08/22/2012 11:10

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1020(mL) | Date Analyzed: 09/06/2012 19:50

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	0.98	U	0.98	0.31
111-44-4	Bis(2-chloroethyl)ether	0.98	U	0.98	0.098
117-81-7	Bis(2-ethylhexyl) phthalate	0.91	J	2.0	0.78
85-68-7	Butyl benzyl phthalate	0.98	U	0.98	0.78
105-60-2	Caprolactam	4.9	U	4.9	0.78
86-74-8	Carbazole	0.98	U	0.98	0.27
218-01-9	Chrysene	0.20	U	0.20	0.098
84-74-2	Di-n-butyl phthalate	0.98	U	0.98	0.66
117-84-0	Di-n-octyl phthalate	0.98	U	0.98	0.78
53-70-3	Dibenzo(a,h)anthracene	0.20	U	0.20	0.098
132-64-9	Dibenzofuran	0.98	U	0.98	0.098
84-66-2	Diethyl phthalate	0.98	U	0.98	0.59
131-11-3	Dimethyl phthalate	0.98	U	0.98	0.28
206-44-0	Fluoranthene	0.20	U	0.20	0.098
86-73-7	Fluorene	0.20	U	0.20	0.098
118-74-1	Hexachlorobenzene	0.20	U	0.20	0.098
87-68-3	Hexachlorobutadiene	0.98	U	0.98	0.26
77-47-4	Hexachlorocyclopentadiene	9.8	U	9.8	0.78
67-72-1	Hexachloroethane	0.98	U	0.98	0.78
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.098
78-59-1	Isophorone	0.98	U	0.98	0.26
621-64-7	N-Nitrosodi-n-propylamine	0.98	U	0.98	0.78
62-75-9	N-Nitrosodimethylamine	0.98	U	0.98	0.30
86-30-6	N-Nitrosodiphenylamine	0.98	U	0.98	0.30
91-20-3	Naphthalene	0.20	U	0.20	0.098
98-95-3	Nitrobenzene	0.98	U	0.98	0.039
87-86-5	Pentachlorophenol	4.9	U	4.9	2.4
85-01-8	Phenanthrene	0.20	U	0.20	0.098
108-95-2	Phenol	0.98	U	0.98	0.59
129-00-0	Pyrene	0.20	U	0.20	0.098
108-60-1	2,2'-oxybis[1-chloropropane]	0.98	U	0.98	0.39
606-20-2	2,6-Dinitrotoluene	4.9	U	4.9	0.78
100-02-7	4-Nitrophenol	4.9	U	4.9	2.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Matrix: Water Lab File ID: 20906027.D

Analysis Method: 8270D Date Collected: 08/22/2012 11:10

Extract. Method: 3520C Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1020(mL) Date Analyzed: 09/06/2012 19:50

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	84		24-110
4165-62-2	Phenol-d5 (Surr)	69		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	68		21-110
367-12-4	2-Fluorophenol (Surr)	72		10-110
321-60-8	2-Fluorobiphenyl (Surr)	68		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	73		21-110

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 Lab Sample ID: 240-14454-3

Matrix: Water Lab File ID: 20906028.D

Analysis Method: 8270D Date Collected: 08/22/2012 09:40

Extract. Method: 3520C Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1050(mL) Date Analyzed: 09/06/2012 20:10

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	0.95	U	0.95	0.76
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47
88-06-2	2,4,6-Trichlorophenol	4.8	U	4.8	0.76
95-95-4	2,4,5-Trichlorophenol	4.8	U	4.8	0.29
120-83-2	2,4-Dichlorophenol	1.9	U	1.9	0.76
105-67-9	2,4-Dimethylphenol	1.9	U	1.9	0.76
51-28-5	2,4-Dinitrophenol	4.8	U	4.8	2.3
121-14-2	2,4-Dinitrotoluene	4.8	U	4.8	0.26
91-58-7	2-Chloronaphthalene	0.95	U	0.95	0.095
95-57-8	2-Chlorophenol	0.95	U	0.95	0.28
91-57-6	2-Methylnaphthalene	0.19	U	0.19	0.095
95-48-7	2-Methylphenol	0.95	U	0.95	0.76
88-74-4	2-Nitroaniline	1.9	U	1.9	0.76
88-75-5	2-Nitrophenol	1.9	U	1.9	0.27
15831-10-4	3 & 4 Methylphenol	1.9	U	1.9	0.71
91-94-1	3,3'-Dichlorobenzidine	4.8	U	4.8	0.35
99-09-2	3-Nitroaniline	1.9	U	1.9	0.27
534-52-1	4,6-Dinitro-2-methylphenol	4.8	U	4.8	2.3
101-55-3	4-Bromophenyl phenyl ether	1.9	U	1.9	0.76
59-50-7	4-Chloro-3-methylphenol	1.9	U	1.9	0.76
106-47-8	4-Chloroaniline	1.9	U	1.9	0.76
7005-72-3	4-Chlorophenyl phenyl ether	1.9	U	1.9	0.29
100-01-6	4-Nitroaniline	1.9	U	1.9	0.76
83-32-9	Acenaphthene	0.19	U	0.19	0.095
208-96-8	Acenaphthylene	0.19	U	0.19	0.095
98-86-2	Acetophenone	0.95	U	0.95	0.32
120-12-7	Anthracene	0.19	U	0.19	0.095
1912-24-9	Atrazine	0.95	U	0.95	0.32
100-52-7	Benzaldehyde	0.95	U *	0.95	0.37
56-55-3	Benzo[a]anthracene	0.19	U	0.19	0.095
50-32-8	Benzo[a]pyrene	0.19	U	0.19	0.095
205-99-2	Benzo[b]fluoranthene	0.19	U	0.19	0.095
191-24-2	Benzo[g,h,i]perylene	0.19	U	0.19	0.095
207-08-9	Benzo[k]fluoranthene	0.19	U	0.19	0.095

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 | Lab Sample ID: 240-14454-3

Matrix: Water | Lab File ID: 20906028.D

Analysis Method: 8270D | Date Collected: 08/22/2012 09:40

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1050(mL) | Date Analyzed: 09/06/2012 20:10

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	0.95	U	0.95	0.30
111-44-4	Bis(2-chloroethyl)ether	0.95	U	0.95	0.095
117-81-7	Bis(2-ethylhexyl) phthalate	0.79	J	1.9	0.76
85-68-7	Butyl benzyl phthalate	0.95	U	0.95	0.76
105-60-2	Caprolactam	0.78	J	4.8	0.76
86-74-8	Carbazole	0.95	U	0.95	0.27
218-01-9	Chrysene	0.19	U	0.19	0.095
84-74-2	Di-n-butyl phthalate	0.95	U	0.95	0.64
117-84-0	Di-n-octyl phthalate	0.95	U	0.95	0.76
53-70-3	Dibenzo(a,h)anthracene	0.19	U	0.19	0.095
132-64-9	Dibenzofuran	0.95	U	0.95	0.095
84-66-2	Diethyl phthalate	0.95	U	0.95	0.57
131-11-3	Dimethyl phthalate	0.95	U	0.95	0.28
206-44-0	Fluoranthene	0.19	U	0.19	0.095
86-73-7	Fluorene	0.19	U	0.19	0.095
118-74-1	Hexachlorobenzene	0.19	U	0.19	0.095
87-68-3	Hexachlorobutadiene	0.95	U	0.95	0.26
77-47-4	Hexachlorocyclopentadiene	9.5	U	9.5	0.76
67-72-1	Hexachloroethane	0.95	U	0.95	0.76
193-39-5	Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.095
78-59-1	Isophorone	0.95	U	0.95	0.26
621-64-7	N-Nitrosodi-n-propylamine	0.95	U	0.95	0.76
62-75-9	N-Nitrosodimethylamine	0.95	U	0.95	0.30
86-30-6	N-Nitrosodiphenylamine	0.95	U	0.95	0.30
91-20-3	Naphthalene	0.19	U	0.19	0.095
98-95-3	Nitrobenzene	0.95	U	0.95	0.038
87-86-5	Pentachlorophenol	4.8	U	4.8	2.3
85-01-8	Phenanthrene	0.19	U	0.19	0.095
108-95-2	Phenol	0.95	U	0.95	0.57
129-00-0	Pyrene	0.19	U	0.19	0.095
108-60-1	2,2'-oxybis[1-chloropropane]	0.95	U	0.95	0.38
606-20-2	2,6-Dinitrotoluene	4.8	U	4.8	0.76
100-02-7	4-Nitrophenol	4.8	U	4.8	2.3

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 | Lab Sample ID: 240-14454-3

Matrix: Water | Lab File ID: 20906028.D

Analysis Method: 8270D | Date Collected: 08/22/2012 09:40

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1050(mL) | Date Analyzed: 09/06/2012 20:10

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	81		24-110
4165-62-2	Phenol-d5 (Surr)	70		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	65		21-110
367-12-4	2-Fluorophenol (Surr)	74		10-110
321-60-8	2-Fluorobiphenyl (Surr)	66		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	80		21-110

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 | Lab Sample ID: 240-14454-4

Matrix: Water | Lab File ID: 20906029.D

Analysis Method: 8270D | Date Collected: 08/22/2012 13:20

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1050(mL) | Date Analyzed: 09/06/2012 20:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	0.95	U	0.95	0.76
123-91-1	1,4-Dioxane	0.95	U	0.95	0.47
88-06-2	2,4,6-Trichlorophenol	4.8	U	4.8	0.76
95-95-4	2,4,5-Trichlorophenol	4.8	U	4.8	0.29
120-83-2	2,4-Dichlorophenol	1.9	U	1.9	0.76
105-67-9	2,4-Dimethylphenol	1.9	U	1.9	0.76
51-28-5	2,4-Dinitrophenol	4.8	U	4.8	2.3
121-14-2	2,4-Dinitrotoluene	4.8	U	4.8	0.26
91-58-7	2-Chloronaphthalene	0.95	U	0.95	0.095
95-57-8	2-Chlorophenol	0.95	U	0.95	0.28
91-57-6	2-Methylnaphthalene	0.19	U	0.19	0.095
95-48-7	2-Methylphenol	0.95	U	0.95	0.76
88-74-4	2-Nitroaniline	1.9	U	1.9	0.76
88-75-5	2-Nitrophenol	1.9	U	1.9	0.27
15831-10-4	3 & 4 Methylphenol	1.9	U	1.9	0.71
91-94-1	3,3'-Dichlorobenzidine	4.8	U	4.8	0.35
99-09-2	3-Nitroaniline	1.9	U	1.9	0.27
534-52-1	4,6-Dinitro-2-methylphenol	4.8	U	4.8	2.3
101-55-3	4-Bromophenyl phenyl ether	1.9	U	1.9	0.76
59-50-7	4-Chloro-3-methylphenol	1.9	U	1.9	0.76
106-47-8	4-Chloroaniline	1.9	U	1.9	0.76
7005-72-3	4-Chlorophenyl phenyl ether	1.9	U	1.9	0.29
100-01-6	4-Nitroaniline	1.9	U	1.9	0.76
83-32-9	Acenaphthene	0.19	U	0.19	0.095
208-96-8	Acenaphthylene	0.19	U	0.19	0.095
98-86-2	Acetophenone	0.95	U	0.95	0.32
120-12-7	Anthracene	0.19	U	0.19	0.095
1912-24-9	Atrazine	0.95	U	0.95	0.32
100-52-7	Benzaldehyde	0.95	U *	0.95	0.37
56-55-3	Benzo[a]anthracene	0.19	U	0.19	0.095
50-32-8	Benzo[a]pyrene	0.19	U	0.19	0.095
205-99-2	Benzo[b]fluoranthene	0.19	U	0.19	0.095
191-24-2	Benzo[g,h,i]perylene	0.19	U	0.19	0.095
207-08-9	Benzo[k]fluoranthene	0.19	U	0.19	0.095

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 | Lab Sample ID: 240-14454-4

Matrix: Water | Lab File ID: 20906029.D

Analysis Method: 8270D | Date Collected: 08/22/2012 13:20

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1050(mL) | Date Analyzed: 09/06/2012 20:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	0.95	U	0.95	0.30
111-44-4	Bis(2-chloroethyl)ether	0.95	U	0.95	0.095
117-81-7	Bis(2-ethylhexyl) phthalate	1.9	U	1.9	0.76
85-68-7	Butyl benzyl phthalate	0.95	U	0.95	0.76
105-60-2	Caprolactam	4.8	U	4.8	0.76
86-74-8	Carbazole	0.95	U	0.95	0.27
218-01-9	Chrysene	0.19	U	0.19	0.095
84-74-2	Di-n-butyl phthalate	0.95	U	0.95	0.64
117-84-0	Di-n-octyl phthalate	0.95	U	0.95	0.76
53-70-3	Dibenzo(a,h)anthracene	0.19	U	0.19	0.095
132-64-9	Dibenzofuran	0.95	U	0.95	0.095
84-66-2	Diethyl phthalate	0.95	U	0.95	0.57
131-11-3	Dimethyl phthalate	0.95	U	0.95	0.28
206-44-0	Fluoranthene	0.19	U	0.19	0.095
86-73-7	Fluorene	0.19	U	0.19	0.095
118-74-1	Hexachlorobenzene	0.19	U	0.19	0.095
87-68-3	Hexachlorobutadiene	0.95	U	0.95	0.26
77-47-4	Hexachlorocyclopentadiene	9.5	U	9.5	0.76
67-72-1	Hexachloroethane	0.95	U	0.95	0.76
193-39-5	Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.095
78-59-1	Isophorone	0.95	U	0.95	0.26
621-64-7	N-Nitrosodi-n-propylamine	0.95	U	0.95	0.76
62-75-9	N-Nitrosodimethylamine	0.95	U	0.95	0.30
86-30-6	N-Nitrosodiphenylamine	0.95	U	0.95	0.30
91-20-3	Naphthalene	0.19	U	0.19	0.095
98-95-3	Nitrobenzene	0.95	U	0.95	0.038
87-86-5	Pentachlorophenol	4.8	U	4.8	2.3
85-01-8	Phenanthrene	0.19	U	0.19	0.095
108-95-2	Phenol	0.95	U	0.95	0.57
129-00-0	Pyrene	0.19	U	0.19	0.095
108-60-1	2,2'-oxybis[1-chloropropane]	0.95	U	0.95	0.38
606-20-2	2,6-Dinitrotoluene	4.8	U	4.8	0.76
100-02-7	4-Nitrophenol	4.8	U	4.8	2.3

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 | Lab Sample ID: 240-14454-4

Matrix: Water | Lab File ID: 20906029.D

Analysis Method: 8270D | Date Collected: 08/22/2012 13:20

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1050(mL) | Date Analyzed: 09/06/2012 20:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	72		24-110
4165-62-2	Phenol-d5 (Surr)	63		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	62		21-110
367-12-4	2-Fluorophenol (Surr)	65		10-110
321-60-8	2-Fluorobiphenyl (Surr)	61		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	71		21-110

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Matrix: Water Lab File ID: O1082814.D

Analysis Method: 8015C Date Collected: 08/22/2012 11:10

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2012 20:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 55983 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	36	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	54		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 Lab Sample ID: 240-14454-3

Matrix: Water Lab File ID: O1082817.D

Analysis Method: 8015C Date Collected: 08/22/2012 09:40

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2012 22:26

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 55983 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	40	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	71		10-150

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 Lab Sample ID: 240-14454-4

Matrix: Water Lab File ID: O1082818.D

Analysis Method: 8015C Date Collected: 08/22/2012 13:20

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2012 23:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 55983 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	41	J B	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	55		10-150

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Matrix: Water Lab File ID: P6F82810.D

Analysis Method: 8015C Date Collected: 08/22/2012 11:10

Extraction Method: 3520C Date Extracted: 08/24/2012 11:18

Sample wt/vol: 1010(mL) Date Analyzed: 08/28/2012 16:06

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 55969 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	400	J B	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	46		10-110

FORM I

DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW08S-082212 Lab Sample ID: 240-14454-3

Matrix: Water Lab File ID: P5F82905.D

Analysis Method: 8015C Date Collected: 08/22/2012 09:40

Extraction Method: 3520C Date Extracted: 08/24/2012 11:18

Sample wt/vol: 1010(mL) Date Analyzed: 08/29/2012 14:10

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 56105 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	500	U	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	36		10-110

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: MT-MW10S-082212 Lab Sample ID: 240-14454-4

Matrix: Water Lab File ID: P6F82812.D

Analysis Method: 8015C Date Collected: 08/22/2012 13:20

Extraction Method: 3520C Date Extracted: 08/24/2012 11:18

Sample wt/vol: 1050(mL) Date Analyzed: 08/28/2012 17:08

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: RTX-5 ID: 0.53(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 55969 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	330	J B	480	230

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	54		10-110

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 11:10

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.17	2.0	0.13	ug/L	J		1	6020A
7440-38-2	Arsenic	5.0	5.0	0.40	ug/L	U		1	6020A
7440-39-3	Barium	20	5.0	0.19	ug/L		B	1	6020A
7440-41-7	Beryllium	3.0	1.0	0.20	ug/L			1	6020A
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020A
7440-47-3	Chromium	5.2	2.0	0.71	ug/L			1	6020A
7440-48-4	Cobalt	20	1.0	0.058	ug/L			1	6020A
7440-50-8	Copper	3.4	2.0	0.29	ug/L		B	1	6020A
7439-92-1	Lead	0.55	1.0	0.18	ug/L	J		1	6020A
7439-98-7	Molybdenum	0.22	10	0.093	ug/L	J	B	1	6020A
7440-02-0	Nickel	31	2.0	0.20	ug/L			1	6020A
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020A
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020A
7440-28-0	Thallium	0.16	2.0	0.14	ug/L	J	B	1	6020A
7440-62-2	Vanadium	2.4	20	0.44	ug/L	J		1	6020A
7440-66-6	Zinc	53	20	2.3	ug/L		B	1	6020A

INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 11:10

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.13	2.0	0.13	ug/L	J		1	6020A
7440-38-2	Arsenic	5.0	5.0	0.40	ug/L	U		1	6020A
7440-39-3	Barium	17	5.0	0.19	ug/L		B	1	6020A
7440-41-7	Beryllium	2.9	1.0	0.20	ug/L			1	6020A
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020A
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020A
7440-48-4	Cobalt	21	1.0	0.058	ug/L			1	6020A
7440-50-8	Copper	1.5	2.0	0.29	ug/L	J	B	1	6020A
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020A
7439-98-7	Molybdenum	0.11	10	0.093	ug/L	J	B	1	6020A
7440-02-0	Nickel	31	2.0	0.20	ug/L			1	6020A
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020A
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020A
7440-28-0	Thallium	0.14	2.0	0.14	ug/L	J	B	1	6020A
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020A
7440-66-6	Zinc	51	20	2.3	ug/L		B	1	6020A
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW07S-082212 Lab Sample ID: 240-14454-2

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 11:10

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.39	0.20	0.12	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW08S-082212 Lab Sample ID: 240-14454-3

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 09:40

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.40	2.0	0.13	ug/L	J		1	6020A
7440-38-2	Arsenic	5.0	5.0	0.40	ug/L	U		1	6020A
7440-39-3	Barium	63	5.0	0.19	ug/L		B	1	6020A
7440-41-7	Beryllium	1.0	1.0	0.20	ug/L	U		1	6020A
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020A
7440-47-3	Chromium	1.8	2.0	0.71	ug/L	J		1	6020A
7440-48-4	Cobalt	5.9	1.0	0.058	ug/L			1	6020A
7440-50-8	Copper	2.1	2.0	0.29	ug/L		B	1	6020A
7439-92-1	Lead	0.29	1.0	0.18	ug/L	J		1	6020A
7439-98-7	Molybdenum	0.67	10	0.093	ug/L	J	B	1	6020A
7440-02-0	Nickel	11	2.0	0.20	ug/L			1	6020A
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020A
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020A
7440-28-0	Thallium	2.0	2.0	0.14	ug/L	U		1	6020A
7440-62-2	Vanadium	0.61	20	0.44	ug/L	J		1	6020A
7440-66-6	Zinc	12	20	2.3	ug/L	J	B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW08S-082212 Lab Sample ID: 240-14454-3

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 09:40

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.31	2.0	0.13	ug/L	J		1	6020A
7440-38-2	Arsenic	5.0	5.0	0.40	ug/L	U		1	6020A
7440-39-3	Barium	62	5.0	0.19	ug/L		B	1	6020A
7440-41-7	Beryllium	1.0	1.0	0.20	ug/L	U		1	6020A
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020A
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020A
7440-48-4	Cobalt	5.5	1.0	0.058	ug/L			1	6020A
7440-50-8	Copper	1.4	2.0	0.29	ug/L	J	B	1	6020A
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020A
7439-98-7	Molybdenum	0.69	10	0.093	ug/L	J	B	1	6020A
7440-02-0	Nickel	11	2.0	0.20	ug/L			1	6020A
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020A
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020A
7440-28-0	Thallium	2.0	2.0	0.14	ug/L	U		1	6020A
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020A
7440-66-6	Zinc	12	20	2.3	ug/L	J	B	1	6020A
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW08S-082212 Lab Sample ID: 240-14454-3

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 09:40

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: MT-MW10S-082212 Lab Sample ID: 240-14454-4

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 13:20

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.15	2.0	0.13	ug/L	J		1	6020A
7440-38-2	Arsenic	0.56	5.0	0.40	ug/L	J		1	6020A
7440-39-3	Barium	63	5.0	0.19	ug/L		B	1	6020A
7440-41-7	Beryllium	23	1.0	0.20	ug/L			1	6020A
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020A
7440-47-3	Chromium	2.5	2.0	0.71	ug/L			1	6020A
7440-48-4	Cobalt	250	1.0	0.058	ug/L			1	6020A
7440-50-8	Copper	1.5	2.0	0.29	ug/L	J	B	1	6020A
7439-92-1	Lead	0.44	1.0	0.18	ug/L	J		1	6020A
7439-98-7	Molybdenum	0.34	10	0.093	ug/L	J	B	1	6020A
7440-02-0	Nickel	380	2.0	0.20	ug/L			1	6020A
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020A
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020A
7440-28-0	Thallium	0.20	2.0	0.14	ug/L	J	B	1	6020A
7440-62-2	Vanadium	0.53	20	0.44	ug/L	J		1	6020A
7440-66-6	Zinc	370	20	2.3	ug/L		B	1	6020A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MT-MW10S-082212 Lab Sample ID: 240-14454-4

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 13:20

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.14	2.0	0.13	ug/L	J		1	6020A
7440-38-2	Arsenic	5.0	5.0	0.40	ug/L	U		1	6020A
7440-39-3	Barium	62	5.0	0.19	ug/L		B	1	6020A
7440-41-7	Beryllium	22	1.0	0.20	ug/L			1	6020A
7440-43-9	Cadmium	1.0	1.0	0.13	ug/L	U		1	6020A
7440-47-3	Chromium	2.0	2.0	0.71	ug/L	U		1	6020A
7440-48-4	Cobalt	250	1.0	0.058	ug/L			1	6020A
7440-50-8	Copper	0.29	2.0	0.29	ug/L	J	B	1	6020A
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020A
7439-98-7	Molybdenum	0.23	10	0.093	ug/L	J	B	1	6020A
7440-02-0	Nickel	370	2.0	0.20	ug/L			1	6020A
7782-49-2	Selenium	5.0	5.0	0.57	ug/L	U		1	6020A
7440-22-4	Silver	1.0	1.0	0.080	ug/L	U		1	6020A
7440-28-0	Thallium	0.19	2.0	0.14	ug/L	J	B	1	6020A
7440-62-2	Vanadium	20	20	0.44	ug/L	U		1	6020A
7440-66-6	Zinc	360	20	2.3	ug/L		B	1	6020A
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MT-MW10S-082212 Lab Sample ID: 240-14454-4

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG ID.:

Matrix: Water Date Sampled: 08/22/2012 13:20

Reporting Basis: WET Date Received: 08/23/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

Appendix C

Support Documentation

HOLDTIME

SDG 240-14408-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HG	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HG	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
HG	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HG	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
HG	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
M	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
M	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
M	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
M	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
M	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
M	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
HGF	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HGF	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
HGF	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HGF	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
HGF	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/30/2012	8/31/2012	8	1	9
HGF	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/30/2012	8/31/2012	9	1	10
MF	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
MF	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
MF	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
MF	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
MF	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/30/2012	9/6/2012	8	7	15
MF	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/30/2012	9/6/2012	9	7	16
OS	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/24/2012	9/6/2012	3	13	16
OS	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/24/2012	9/6/2012	2	13	15
OS	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/24/2012	9/6/2012	3	13	16
OS	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/24/2012	9/6/2012	3	13	16
OS	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/24/2012	9/6/2012	2	13	15
OS	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/24/2012	9/6/2012	2	13	15
OV	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	9/1/2012	9/1/2012	11	0	11
OV	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/31/2012	8/31/2012	10	0	10
OV	UG/L	TB-082112	240-14408-1	NM	8/21/2012	8/31/2012	8/31/2012	10	0	10

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	9/4/2012	9/4/2012	13	0	13
OV	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	9/4/2012	9/4/2012	13	0	13
OV	UG/L	TB-082212	240-14454-1	NM	8/22/2012	9/4/2012	9/4/2012	13	0	13
OV	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	9/4/2012	9/4/2012	13	0	13
OV	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/31/2012	8/31/2012	10	0	10
DRO	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/24/2012	8/28/2012	2	4	6
DRO	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/24/2012	8/29/2012	2	5	7
DRO	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/24/2012	8/28/2012	3	4	7
DRO	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/24/2012	8/28/2012	2	4	6
DRO	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/24/2012	8/28/2012	3	4	7
DRO	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/24/2012	8/28/2012	3	4	7
GRO	UG/L	MT-MW09S-082112	240-14408-2	NM	8/21/2012	8/26/2012	8/26/2012	5	0	5
GRO	UG/L	MT-MW08S-082212	240-14454-3	NM	8/22/2012	8/28/2012	8/28/2012	6	0	6
GRO	UG/L	MT-MW10S-082212	240-14454-4	NM	8/22/2012	8/28/2012	8/28/2012	6	0	6
GRO	UG/L	MT-MW11S-082112	240-14408-3	NM	8/21/2012	8/26/2012	8/26/2012	5	0	5
GRO	UG/L	MT-MW12S-082112	240-14408-4	NM	8/21/2012	8/26/2012	8/26/2012	5	0	5
GRO	UG/L	MT-MW07S-082212	240-14454-2	NM	8/22/2012	8/28/2012	8/28/2012	6	0	6

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-14454-1

Job Description: MSA Main Terminal Groundwater Sampling

For:
Tetra Tech, Inc
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage

Patrick O'Meara

Approved for release.
Patrick J O'Meara
Project Manager II
9/7/2012 7:31 PM

Patrick J O'Meara
Project Manager II
patrick.omeara@testamericainc.com
09/07/2012

cc: Samantha Brenner
Ms. Kelly Carper
Vanessa Good
Ms. Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Laboratories, Inc.
TestAmerica Canton 4101 Shuffel Street NW, North Canton, OH 44720
Tel (330) 497-9396 Fax (330) 497-0772 www.testamericainc.com

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MSA Main Terminal Groundwater Sampling

Report Number: 240-14454-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/23/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.2 and 4.1 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples TB-082212 (240-14454-1), MT-MW07S-082212 (240-14454-2), MT-MW08S-082212 (240-14454-3) and MT-MW10S-082212 (240-14454-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 09/04/2012.

Several analytes were detected in method blank MB 240-56575/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS/MSD of sample 240-14427-1 in batch 240-56575.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MT-MW07S-082212 (240-14454-2), MT-MW08S-082212 (240-14454-3) and MT-MW10S-082212 (240-14454-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/24/2012 and analyzed on 09/06/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

The laboratory control sample (LCS) for batch 55629 exceeded control limits for benzaldehyde. This analytes recovery was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55629. 3520C_Acid 8270C

No other difficulties were encountered during the SVOCs analyses. All other quality control parameters were within the acceptance limits.

GASOLINE RANGE ORGANICS (GRO)

Samples MT-MW07S-082212 (240-14454-2), MT-MW08S-082212 (240-14454-3) and MT-MW10S-082212 (240-14454-4) were analyzed

for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015C - GRO. The samples were analyzed on 08/28/2012.

Total Petroleum Hydrocarbons (C6-C10) was detected in method blank MB 240-55983/11 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the gasoline analyses. All other quality control parameters were within the acceptance limits.

DIESEL RANGE ORGANICS (DRO)
Samples MT-MW07S-082212 (240-14454-2), MT-MW08S-082212 (240-14454-3) and MT-MW10S-082212 (240-14454-4) were analyzed for diesel range organics (DRO) in accordance with EPA-SW-846 Method 8015C - DRO. The samples were prepared on 08/24/2012 and analyzed on 08/28/2012 and 08/29/2012.

Total Petroleum Hydrocarbons (C10-C32) was detected in method blank MB 240-55631/7-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 55631. 3520C 8015C_DRO

No other difficulties were encountered during the DRO analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)
Samples MT-MW07S-082212 (240-14454-2), MT-MW08S-082212 (240-14454-3) and MT-MW10S-082212 (240-14454-4) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 08/30/2012 and analyzed on 09/06/2012.

No difficulties were encountered during the metals analyses. All quality control parameters were within the acceptance limits.

METALS (ICPMS)
Samples MT-MW07S-082212 (240-14454-2), MT-MW08S-082212 (240-14454-3) and MT-MW10S-082212 (240-14454-4) were analyzed for metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 08/30/2012 and analyzed on 09/06/2012.

Several analytes were detected in method blank MB 240-56218/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY
Samples MT-MW07S-082212 (240-14454-2), MT-MW08S-082212 (240-14454-3) and MT-MW10S-082212 (240-14454-4) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/30/2012 and analyzed on 08/31/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

TOTAL MERCURY
Samples MT-MW07S-082212 (240-14454-2), MT-MW08S-082212 (240-14454-3) and MT-MW10S-082212 (240-14454-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/30/2012 and analyzed on 08/31/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-14454-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-14454-1	TB-082212	Water	08/22/2012 0000	08/23/2012 0910
240-14454-2	MT-MW07S-082212	Water	08/22/2012 1110	08/23/2012 0910
240-14454-3	MT-MW08S-082212	Water	08/22/2012 0940	08/23/2012 0910
240-14454-4	MT-MW10S-082212	Water	08/22/2012 1320	08/23/2012 0910

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-14454-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds (GC/MS)	TAL NC	SW846 8260B	
Purge and Trap	TAL NC		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL NC	SW846 8270D	
Liquid-Liquid Extraction (Continuous)	TAL NC		SW846 3520C
Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	TAL NC	SW846 8015C	
Purge and Trap	TAL NC		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL NC	SW846 8015C	
Liquid-Liquid Extraction (Continuous)	TAL NC		SW846 3520C
Metals (ICP/MS)	TAL NC	SW846 6020A	
Preparation, Total Recoverable or Dissolved Metals	TAL NC		SW846 3005A
Metals (ICP/MS)	TAL NC	SW846 6020A	
Preparation, Total Recoverable or Dissolved Metals	TAL NC		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL NC	SW846 7470A	
Preparation, Mercury	TAL NC		SW846 7470A
Mercury (CVAA)	TAL NC	SW846 7470A	
Preparation, Mercury	TAL NC		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD

Lab References:

TAL NC = TestAmerica Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-14454-1

Method	Analyst	Analyst ID
SW846 8260B	Quayle, Rick	RQ
SW846 8270D	Ulman, Mark	MU
SW846 8015C	Bosworth, Heather M	HMB
SW846 8015C	Bolgrin, Deborah	DB
SW846 6020A	Davies, Brian	BD
SW846 7470A	Davies, Brian	BD

North Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Tony Apanavage	Site Contact: Stuart Cameron	Date: 8-22-12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 1 COCs
20251 Century Blvd, Suite 200	**Analysis Turnaround Time**			Job No. 112IC04054 - 05
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
Phone: (301) 528-3021	TAT if different from Below 21 days			SDG No.
Fax: (301) 528-3000	☐ 2 weeks			
Project Name: Main Terminal Groundwater Sampling	☐ 1 week			
Site: Main Terminal, Martin State Airport	☐ 2 days			Sampler: S. Cameron
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	SVOCs / 1,4-Dioxane	TPH-GRO	TPH-DRO	Total Metals	Dissolved Metals	Sample Specific Notes:
TB-082212	–	–	GW	Water	2		X						
MT-MW07S-082212	8-22-12	1110	GW	Water	12	1	X	X	X	X	X	X	
MT-MW08S-082212	↓	0940	GW	Water	12	1	X	X	X	X	X	X	
MT-MW10S-082212	↓	1320	GW	Water	12	1	X	X	X	X	X	X	
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									
			GW	Water									

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments: DISSOLVED METALS FILTERED IN FIELD

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tera Tech	8-22-12/1500		TA	8-23-12 910
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 14454**

Client Tetra Tech Site Name _____ By: _____

Cooler Received on 8-23-12 Opened on 8-23-12 (Signature)

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF 0°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C		
IR GUN# 4G	(CF –1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C		
IR GUN# 5G	(CF –1°C)	Observed Sample Temp. 4.2 °C	Corrected Sample Temp. 3.2 °C	BACK	☐ Multiple on Back
IR GUN# 8	(CF 0°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C		

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 4 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? (Yes) No NA
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 031512-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
78	12 12	8-23-12	[illegible]
85	12 12	↓	↓
105	12 12		

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
Client	4.2	3.2	5[illegible]	1[illegible]
No#	5.1	4.1	↓	↓

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-082212	240-14454-1	103	72	88	87
MT-MW07S-082212	240-14454-2	105	72	88	88
MT-MW08S-082212	240-14454-3	102	74	87	90
MT-MW10S-082212	240-14454-4	99	71	86	85
	MB 240-56575/5	101	71	86	86
	LCS 240-56575/4	99	74	89	92
	240-14427-E-1 MS	99	75	91	92
	240-14427-E-1 MSD	99	73	87	91

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-121
DCA = 1,2-Dichloroethane-d4 (Surr)	63-129
TOL = Toluene-d8 (Surr)	74-115
BFB = 4-Bromofluorobenzene (Surr)	66-117

Column to be used to flag recovery values

FORM II 8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: A3UX10 Start Date: 08/02/2012 15:37

Analysis Batch Number: 53056 End Date: 08/02/2012 20:17

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-53056/1		08/02/2012 15:37	1	BFB4857.D	DB-624 0.18(mm)
STD8260 240-53056/2 IC		08/02/2012 16:00	1	UXX8048.D	DB-624 0.18(mm)
STD8260 240-53056/3 IC		08/02/2012 16:22	1	UXX8049.D	DB-624 0.18(mm)
STD8260 240-53056/4 ICIS		08/02/2012 16:43	1	UXX8050.D	DB-624 0.18(mm)
STD8260 240-53056/5 IC		08/02/2012 17:04	1	UXX8051.D	DB-624 0.18(mm)
STD8260 240-53056/6 IC		08/02/2012 17:26	1	UXX8052.D	DB-624 0.18(mm)
STD8260 240-53056/7 IC		08/02/2012 17:47	1	UXX8053.D	DB-624 0.18(mm)
STDA9 240-53056/8 IC		08/02/2012 18:08	1	UXX8054.D	DB-624 0.18(mm)
STDA9 240-53056/9 IC		08/02/2012 18:30	1	UXX8055.D	DB-624 0.18(mm)
STDA9 240-53056/10 IC		08/02/2012 18:51	1	UXX8056.D	DB-624 0.18(mm)
STDA9 240-53056/11 IC		08/02/2012 19:12	1	UXX8057.D	DB-624 0.18(mm)
STDA9 240-53056/12 IC		08/02/2012 19:34	1	UXX8058.D	DB-624 0.18(mm)
STDA9 240-53056/13 IC		08/02/2012 19:56	1	UXX8059.D	DB-624 0.18(mm)
ICV 240-53056/14		08/02/2012 20:17	1	UXX8060.D	DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab File ID: BFB4857.D BFB Injection Date: 08/02/2012

Instrument ID: A3UX10 BFB Injection Time: 15:37

Analysis Batch No.: 53056

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.7	
75	30.0 - 60.0 % of mass 95	51.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.2	(0.2)1
174	50.0 - 120.00 % of mass 95	79.7	
175	5.0 - 9.0 % of mass 174	6.1	(7.7)1
176	95.0 - 101.0 % of mass 174	79.0	(99.1)1
177	5.0 - 9.0 % of mass 176	5.4	(6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-53056/2	UXX8048.D	08/02/2012	16:00
	STD8260 240-53056/3	UXX8049.D	08/02/2012	16:22
	STD8260 240-53056/4	UXX8050.D	08/02/2012	16:43
	STD8260 240-53056/5	UXX8051.D	08/02/2012	17:04
	STD8260 240-53056/6	UXX8052.D	08/02/2012	17:26
	STD8260 240-53056/7	UXX8053.D	08/02/2012	17:47
	STDA9 240-53056/8	UXX8054.D	08/02/2012	18:08
	STDA9 240-53056/9	UXX8055.D	08/02/2012	18:30
	STDA9 240-53056/10	UXX8056.D	08/02/2012	18:51
	STDA9 240-53056/11	UXX8057.D	08/02/2012	19:12
	STDA9 240-53056/12	UXX8058.D	08/02/2012	19:34
	STDA9 240-53056/13	UXX8059.D	08/02/2012	19:56

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-53056/7	UXX8053.D
Level 2	STD8260 240-53056/6	UXX8052.D
Level 3	STD8260 240-53056/5	UXX8051.D
Level 4	STD8260 240-53056/4	UXX8050.D
Level 5	STD8260 240-53056/3	UXX8049.D
Level 6	STD8260 240-53056/2	UXX8048.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2336 0.2521	0.2483	0.2761	0.2368	0.2556	Ave		0.2504				6.1		15.0			
Chloromethane	0.3622 0.3229	0.3607	0.3695	0.3188	0.3489	Ave		0.3471			0.1000	6.2		15.0			
Vinyl chloride	0.2434 0.2477	0.2627	0.2803	0.2526	0.2664	Ave		0.2589				5.3		15.0			
Bromomethane	0.1073 0.0929	0.1155	0.1110	0.1011	0.0985	Ave		0.1044				8.1		15.0			
Chloroethane	0.1490 0.1314	0.1582	0.1562	0.1416	0.1425	Ave		0.1465				6.9		15.0			
Trichlorofluoromethane	0.2438 0.2679	0.2809	0.2719	0.2592	0.2680	Ave		0.2653				4.8		15.0			
Acrolein	0.0211 0.0192	0.0190	0.0213	0.0203	0.0224	Ave		0.0205				6.4		15.0			
1,1-Dichloroethene	0.1918 0.1816	0.2107	0.1989	0.1974	0.2182	Ave		0.1998				6.6		15.0			
Acetone	0.1107 0.0583	0.0842	0.0667	0.0675	0.0652	Lin1	0.1045	0.0591							0.9970		0.9900
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.1452 0.1394	0.1547	0.1693	0.1448	0.1627	Ave		0.1527				7.6		15.0			
Iodomethane	0.3086 0.3079	0.3362	0.3310	0.3088	0.3301	Ave		0.3204				4.2		15.0			
Carbon disulfide	0.7250 0.7903	0.8102	0.7710	0.7541	0.8269	Ave		0.7796				4.8		15.0			
Acetonitrile	0.0244 0.0152	0.0195	0.0189	0.0182	0.0169	Lin1	0.1001	0.0157							0.9950		0.9900
Methyl acetate	0.2246 0.2118	0.2178	0.2044	0.2061	0.2239	Ave		0.2148				4.1		15.0			
Methylene Chloride	0.4694 0.2570	0.3829	0.3169	0.2709	0.2737	Lin1	0.2361	0.2547							0.9990		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
tert-Butyl alcohol	0.0165 0.0116	0.0148	0.0132	0.0147	0.0145	Ave		0.0142				12.0		15.0			
Acrylonitrile	0.0927 0.0948	0.0948	0.0935	0.0968	0.0962	Ave		0.0948				1.6		15.0			
Methyl tert-butyl ether	0.6574 0.7584	0.7478	0.7704	0.7389	0.7876	Ave		0.7434				6.1		15.0			
trans-1,2-Dichloroethene	0.2451 0.2469	0.2554	0.2546	0.2434	0.2622	Ave		0.2513				2.9		15.0			
Hexane	0.0526 0.0560	0.0506	0.0535	0.0509	0.0583	Ave		0.0537				5.6		15.0			
1,1-Dichloroethane	0.4415 0.4749	0.4880	0.4750	0.4733	0.4919	Ave		0.4741			0.1000	3.7		15.0			
Vinyl acetate	0.0225 0.0331	0.0276	0.0356	0.0309	0.0335	Lin1	-0.010	0.0335							0.9980		0.9900
2-Butanone	0.1041 0.1012	0.1083	0.0990	0.1033	0.1032	Ave		0.1031				3.0		15.0			
cis-1,2-Dichloroethene	0.2279 0.2621	0.2593	0.2727	0.2580	0.2762	Ave		0.2594				6.6		15.0			
2,2-Dichloropropane	0.2888 0.3039	0.3097	0.2920	0.2992	0.3202	Ave		0.3023				3.8		15.0			
Bromochloromethane	0.0951 0.1148	0.1259	0.1207	0.1102	0.1164	Ave		0.1139				9.3		15.0			
Tetrahydrofuran	0.0728 0.0690	0.0788	0.0823	0.0736	0.0774	Ave		0.0757				6.3		15.0			
Chloroform	0.4562 0.4643	0.4865	0.4854	0.4430	0.4722	Ave		0.4679				3.6		15.0			
1,1,1-Trichloroethane	0.3485 0.3958	0.3695	0.3772	0.3769	0.4058	Ave		0.3789				5.3		15.0			
Cyclohexane	0.3812 0.4803	0.4539	0.4452	0.4529	0.4982	Ave		0.4519				8.9		15.0			
1,1-Dichloropropene	0.2988 0.3499	0.3322	0.3305	0.3284	0.3526	Ave		0.3321				5.8		15.0			
Carbon tetrachloride	0.2736 0.3281	0.2988	0.3078	0.3075	0.3355	Ave		0.3085				7.1		15.0			
1,2-Dichloroethane	0.3356 0.3878	0.3761	0.3986	0.3692	0.3914	Ave		0.3765				6.0		15.0			
Benzene	0.9506 1.0041	0.9618	0.9974	0.9720	1.0164	Ave		0.9837				2.6		15.0			
Trichloroethene	0.2270 0.2288	0.2294	0.2301	0.2173	0.2324	Ave		0.2275				2.3		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.2871 0.3802	0.3489	0.3339	0.3462	0.3828	Ave		0.3465				10.0		15.0			
1,2-Dichloropropane	0.2103 0.2389	0.2342	0.2545	0.2323	0.2456	Ave		0.2359				6.3		15.0			
Dibromomethane	0.1226 0.1304	0.1288	0.1360	0.1282	0.1360	Ave		0.1303				3.9		15.0			
1,4-Dioxane	0.0009 0.0009	0.0010	0.0014	0.0015	0.0014	Qua	-0.072	0.0019	0						0.9990		0.9900
Bromodichloromethane	0.2853 0.3318	0.3048	0.3256	0.3085	0.3329	Ave		0.3148				5.9		15.0			
2-Chloroethyl vinyl ether	0.1019 0.1347	0.1120	0.1235	0.1254	0.1347	Ave		0.1220				11.0		15.0			
cis-1,3-Dichloropropene	0.2840 0.3766	0.3115	0.3582	0.3414	0.3843	Ave		0.3427				11.0		15.0			
4-Methyl-2-pentanone	0.2025 0.2198	0.1962	0.2221	0.2149	0.2280	Ave		0.2139				5.7		15.0			
Toluene	1.3533 1.5679	1.4774	1.4998	1.5281	1.6034	Ave		1.5050				5.8		15.0			
trans-1,3-Dichloropropene	0.4205 0.5334	0.4229	0.4697	0.4991	0.5379	Ave		0.4806				11.0		15.0			
Ethyl methacrylate	0.2557 0.4406	0.3567	0.3891	0.4188	0.4464	Lin1	-0.199	0.4468							1.0000		0.9900
1,1,2-Trichloroethane	0.2644 0.2840	0.2662	0.2946	0.2864	0.2972	Ave		0.2821				4.9		15.0			
1,3-Dichloropropane	0.4784 0.5299	0.5260	0.5261	0.5347	0.5632	Ave		0.5264				5.2		15.0			
Tetrachloroethene	0.2726 0.2825	0.2730	0.2775	0.2869	0.2914	Ave		0.2807				2.7		15.0			
2-Hexanone	0.1960 0.2102	0.1913	0.1964	0.2220	0.2230	Ave		0.2065				6.7		15.0			
Dibromochloromethane	0.2799 0.3178	0.2775	0.3079	0.3097	0.3278	Ave		0.3034				6.7		15.0			
1,2-Dibromoethane	0.2355 0.2749	0.2482	0.2756	0.2777	0.2911	Ave		0.2672				7.8		15.0			
Chlorobenzene	0.8342 0.8955	0.8767	0.8721	0.8660	0.9191	Ave		0.8773			0.3000	3.3		15.0			
1,1,1,2-Tetrachloroethane	0.2846 0.3213	0.3225	0.3173	0.3203	0.3351	Ave		0.3168				5.4		15.0			
Ethylbenzene	0.4577 0.4984	0.4721	0.4869	0.4951	0.5205	Ave		0.4885				4.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
m-Xylene & p-Xylene	0.5118 0.6225	0.5852	0.6170	0.6151	0.6461	Ave		0.5996				7.9		15.0			
o-Xylene	0.5038 0.5812	0.6160	0.6030	0.6054	0.6336	Ave		0.5905				7.8		15.0			
Styrene	0.7364 0.9649	0.8774	0.9304	0.9580	1.0310	Ave		0.9164				11.0		15.0			
Bromoform	0.1468 0.1860	0.1676	0.1752	0.1828	0.1944	Ave		0.1755			0.1000	9.5		15.0			
Isopropylbenzene	1.2132 1.5311	1.4867	1.4808	1.4780	1.6149	Ave		1.4674				9.2		15.0			
1,1,2,2-Tetrachloroethane	0.6440 0.6951	0.6632	0.7227	0.7273	0.7342	Ave		0.6978			0.3000	5.3		15.0			
Bromobenzene	0.6447 0.7109	0.6359	0.6647	0.6880	0.7183	Ave		0.6771				5.1		15.0			
1,2,3-Trichloropropane	0.2073 0.2404	0.2090	0.2471	0.2369	0.2474	Ave		0.2313				8.0		15.0			
trans-1,4-Dichloro-2-butene	0.1731 0.2584	0.1867	0.2140	0.2226	0.2514	Lin1	-0.121	0.2556							0.9980		0.9900
n-Propylbenzene	0.6089 0.7689	0.6360	0.7151	0.7241	0.7787	Ave		0.7053				9.8		15.0			
2-Chlorotoluene	0.5495 0.6512	0.6118	0.6442	0.6484	0.6650	Ave		0.6283				6.8		15.0			
1,3,5-Trimethylbenzene	1.7914 2.4406	2.2017	2.3123	2.3486	2.5337	Ave		2.2714				11.0		15.0			
4-Chlorotoluene	0.5833 0.6779	0.6229	0.6657	0.6560	0.6917	Ave		0.6496				6.1		15.0			
tert-Butylbenzene	1.4506 2.1650	1.8990	1.8447	2.1076	1.9964	Ave		1.9106				13.0		15.0			
1,2,4-Trimethylbenzene	1.9069 2.4226	2.2928	2.3929	2.3165	2.5132	Ave		2.3075				9.2		15.0			
sec-Butylbenzene	1.9213 2.5390	2.3235	2.4623	2.4414	2.6413	Ave		2.3881				11.0		15.0			
1,3-Dichlorobenzene	1.1618 1.2560	1.2679	1.2691	1.2438	1.2956	Ave		1.2490				3.7		15.0			
p-Isopropyltoluene	1.5826 2.0932	2.0256	2.0592	2.0326	2.1529	Ave		1.9910				10.0		15.0			
1,4-Dichlorobenzene	1.1722 1.3159	1.3172	1.3163	1.2592	1.3389	Ave		1.2866				4.8		15.0			
n-Butylbenzene	1.3723 1.7652	1.6891	1.6905	1.6640	1.7910	Ave		1.6620				9.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dichlorobenzene	1.1959 1.1537	1.3311	1.2448	1.1862	1.2333	Ave		1.2242				5.1		15.0			
1,2-Dibromo-3-Chloropropane	0.1096 0.1145	0.1260	0.1210	0.1161	0.1176	Ave		0.1175				4.8		15.0			
1,3,5-Trichlorobenzene	0.6961 0.6707	0.8693	0.7309	0.7172	0.7160	Ave		0.7334				9.5		15.0			
1,2,4-Trichlorobenzene	0.5949 0.6096	0.7896	0.6238	0.6252	0.6194	Ave		0.6438				11.0		15.0			
Hexachlorobutadiene	0.2219 0.1850	0.3054	0.2516	0.2338	0.2131	Qua	0.0723	0.2387	-0.001						1.0000		0.9900
Naphthalene	1.2516 1.4993	1.6283	1.4608	1.5658	1.5517	Ave		1.4929				8.8		15.0			
1,2,3-Trichlorobenzene	0.5405 0.4855	0.7225	0.5820	0.5545	0.5093	Ave		0.5657				15.0		15.0			
Dibromofluoromethane (Surr)	0.1931 0.2117	0.2068	0.2146	0.2053	0.2103	Ave		0.2070				3.7		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3137 0.3343	0.3352	0.3410	0.3197	0.3360	Ave		0.3300				3.3		15.0			
Toluene-d8 (Surr)	1.0911 1.3323	1.2520	1.2682	1.2712	1.3204	Ave		1.2559				6.9		15.0			
4-Bromofluorobenzene (Surr)	0.3844 0.4240	0.4153	0.4169	0.4253	0.4481	Ave		0.4190				4.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-53056/7	UXX8053.D
Level 2	STD8260 240-53056/6	UXX8052.D
Level 3	STD8260 240-53056/5	UXX8051.D
Level 4	STD8260 240-53056/4	UXX8050.D
Level 5	STD8260 240-53056/3	UXX8049.D
Level 6	STD8260 240-53056/2	UXX8048.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	36648 1653280	82112	202338	394991	801091	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	56813 2117018	119256	270809	531701	1093434	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	38179 1624405	86862	205434	421430	835031	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	16836 609226	38190	81345	168636	308581	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	23379 861674	52319	114490	236242	446466	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	38241 1756710	92879	199245	432360	839879	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	33027 1257287	62741	156252	338662	700620	10.0 400	20.0	50.0	100	200
1,1-Dichloroethene	FB	Ave	30093 1190477	69657	145782	329282	683881	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Lin1	34718 764268	55675	97754	225128	408738	2.00 80.0	4.00	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	FB	Ave	22781 913741	51142	124093	241479	509808	1.00 40.0	2.00	5.00	10.0	20.0
Iodomethane	FB	Ave	48406 2018812	111175	242585	515105	1034574	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	113725 5181912	267890	565059	1257896	2591463	1.00 40.0	2.00	5.00	10.0	20.0
Acetonitrile	FB	Lin1	38217 994943	64425	138155	303587	530727	10.0 400	20.0	50.0	100	200
Methyl acetate	FB	Ave	70470 2777251	144041	299653	687555	1403374	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Lin1	73634 1684975	126615	232260	451923	857897	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Ave	51695 1515314	97736	194104	491956	910782	20.0 800	40.0	100	200	400

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acrylonitrile	FB	Ave	29090 1243327	62712	137072	322856	603098	2.00 80.0	4.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	103129 4972911	247257	564579	1232500	2468454	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	38444 1619002	84449	186567	405974	821625	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	8253 367220	16744	39198	84845	182747	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	69256 3114070	161359	348080	789522	1541698	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Lin1	3523 216826	9131	26061	51624	104880	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone	FB	Ave	32646 1326636	71587	145076	344483	646586	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	35749 1718220	85745	199837	430326	865562	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	45306 1992362	102418	214008	499112	1003538	1.00 40.0	2.00	5.00	10.0	20.0
Bromochloromethane	FB	Ave	14919 752556	41630	88477	183897	364846	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	11426 452320	26063	60306	122687	242714	1.00 40.0	2.00	5.00	10.0	20.0
Chloroform	FB	Ave	71560 3044539	160844	355740	738893	1479854	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	54669 2594975	122166	276410	628702	1271821	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	59789 3149210	150076	326264	755531	1561276	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	46874 2294383	109840	242184	547742	1104939	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	42914 2151215	98793	225556	512957	1051404	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane	FB	Ave	52639 2543005	124348	292105	615837	1226806	1.00 40.0	2.00	5.00	10.0	20.0
Benzene	FB	Ave	149112 6583562	318029	730955	1621336	3185439	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	35615 1500192	75848	168640	362530	728473	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	45031 2492666	115359	244670	577545	1199621	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	32993 1566255	77429	186481	387461	769626	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dibromomethane	FB	Ave	19234 854829	42572	99696	213894	426150	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Qua	7365 307637	15868	51744	121822	213129	50.0 2000	100	250	500	1000
Bromodichloromethane	FB	Ave	44750 2175362	100782	238641	514650	1043211	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	31976 1766623	74054	181021	418419	844500	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	44553 2469373	103006	262540	569412	1204398	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone	FB	Ave	63528 2881977	129725	325548	716965	1429020	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBZ	Ave	128967 6543173	305603	730930	1556725	3138474	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	40073 2225979	87474	228882	508429	1052778	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBZ	Lin1	24372 1838505	73795	189637	426606	873856	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	25193 1185141	55056	143579	291812	581626	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	45588 2211227	108804	256388	544697	1102449	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBZ	Ave	25977 1178862	56478	135234	292303	570466	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBZ	Ave	37354 1754653	79149	191468	452274	872911	2.00 80.0	4.00	10.0	20.0	40.0
Dibromochloromethane	CBZ	Ave	26673 1326400	57404	150039	315464	641597	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBZ	Ave	22441 1147280	51346	134296	282859	569732	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBZ	Ave	79499 3736990	181361	424987	882253	1799083	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	27119 1340995	66702	154614	326247	655871	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBZ	Ave	43621 2080040	97659	237296	504344	1018805	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	97543 5195309	242114	601343	1253245	2529217	2.00 80.0	4.00	10.0	20.0	40.0
o-Xylene	CBZ	Ave	48010 2425203	127417	293877	616715	1240162	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBZ	Ave	70181 4026514	181498	453436	975969	2018012	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bromoform	CBZ	Ave	13990 776089	34679	85383	186188	380429	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBZ	Ave	115613 6389292	307530	721633	1505638	3161003	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	32171 1333334	76330	182615	361940	711528	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCB	Ave	32206 1363666	73180	167944	342364	696131	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	10354 461076	24052	62437	117888	239718	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Lin1	8649 495652	21492	54076	110757	243670	1.00 40.0	2.00	5.00	10.0	20.0
n-Propylbenzene	DCB	Ave	30418 1474869	73192	180692	360322	754687	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCB	Ave	27452 1249100	70414	162766	322646	644459	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	89492 4681332	253396	584269	1168726	2455479	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCB	Ave	29142 1300229	71693	168211	326450	670315	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCB	Ave	72470 4152770	218556	466117	1048816	1934729	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	95262 4646841	263882	604624	1152764	2435525	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCB	Ave	95984 4870166	267416	622162	1214883	2559739	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	58042 2409218	145921	320675	618926	1255581	1.00 40.0	2.00	5.00	10.0	20.0
p-Isopropyltoluene	DCB	Ave	79060 4014980	233123	520316	1011484	2086427	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	58559 2523946	151592	332611	626599	1297515	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCB	Ave	68558 3385873	194398	427139	828069	1735672	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	59744 2212839	153202	314536	590302	1195176	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	5477 219529	14502	30567	57751	113957	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCB	Ave	34776 1286385	100049	184694	356897	693924	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	29721 1169337	90878	157613	311126	600252	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 16:00 Calibration End Date: 08/02/2012 17:47 Calibration ID: 10418

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobutadiene	DCB	Qua	11083 354925	35154	63574	116361	206484	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCB	Ave	62524 2875900	187398	369118	779181	1503772	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	27003 931293	83153	147067	275948	493610	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	30289 1388080	68386	157299	342454	658998	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	49203 2191903	110845	249943	533329	1052973	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	103983 5559940	258978	618068	1295041	2584431	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBZ	Ave	36633 1769259	85909	203188	433299	877176	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 18:08 Calibration End Date: 08/02/2012 19:56 Calibration ID: 10420

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-53056/13	UXX8059.D
Level 2	STDA9 240-53056/12	UXX8058.D
Level 3	STDA9 240-53056/11	UXX8057.D
Level 4	STDA9 240-53056/10	UXX8056.D
Level 5	STDA9 240-53056/9	UXX8055.D
Level 6	STDA9 240-53056/8	UXX8054.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4043 0.3698	0.3660	0.3980	0.3859	0.3995	Ave		0.3872				4.2		15.0			
Ethyl ether	0.2168 0.1880	0.1923	0.1913	0.1931	0.1955	Ave		0.1962				5.3		15.0			
3-Chloro-1-propene	0.1305 0.1454	0.1317	0.1358	0.1431	0.1501	Ave		0.1394				5.7		15.0			
Diisopropyl ether	0.2145 0.2350	0.2089	0.2195	0.2304	0.2380	Ave		0.2244				5.3		15.0			
2-Chloro-1,3-butadiene	0.4529 0.4855	0.4515	0.4553	0.4758	0.4998	Ave		0.4701				4.3		15.0			
Ethyl-t-butyl ether (ETBE)	0.7313 0.8574	0.7365	0.7570	0.8055	0.8575	Ave		0.7909				7.3		15.0			
Propionitrile	0.0285 0.0290	0.0333	0.0283	0.0305	0.0312	Ave		0.0301				6.5		15.0			
Ethyl acetate	0.2002 0.2151	0.1909	0.1849	0.2086	0.2225	Ave		0.2037				7.1		15.0			
Methacrylonitrile	0.1569 0.1594	0.1480	0.1574	0.1551	0.1594	Ave		0.1560				2.7		15.0			
Isobutyl alcohol	0.0100 0.0092	0.0098	0.0106	0.0107	0.0108	Ave		0.0102				6.2		15.0			
Tert-amyl-methyl ether (TAME)	0.5823 0.6996	0.5877	0.6087	0.6618	0.7122	Ave		0.6421				8.9		15.0			
n-Heptane	0.0319 0.0411	0.0302	0.0390	0.0403	0.0415	Ave		0.0373				13.0		15.0			
n-Butanol	0.0060 0.0065	0.0072	0.0068	0.0074	0.0083	Ave		0.0070				11.0		15.0			
Methyl methacrylate	0.1697 0.2031	0.1867	0.1697	0.1834	0.2089	Ave		0.1869				8.8		15.0			
2-Nitropropane	0.0477 0.0603	0.0446	0.0487	0.0536	0.0579	Ave		0.0521				12.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 18:08 Calibration End Date: 08/02/2012 19:56 Calibration ID: 10420

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Cyclohexanone	0.0226 0.0171	0.0241	0.0204	0.0221	0.0204	Ave		0.0211				11.0		15.0			
1,2,3-Trimethylbenzene	2.1656 2.5910	2.3156	2.3171	2.4949	2.6575	Ave		2.4236				7.8		15.0			
2-Methylnaphthalene	0.5946 0.6554	0.6330	0.6199	0.7442	0.7584	Ave		0.6676				10.0		15.0			
n-Butyl acetate	0.1479 0.2038	0.1491	0.1586	0.1829	0.2028	Ave		0.1742				15.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 18:08 Calibration End Date: 08/02/2012 19:56 Calibration ID: 10420

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-53056/13	UXX8059.D
Level 2	STDA9 240-53056/12	UXX8058.D
Level 3	STDA9 240-53056/11	UXX8057.D
Level 4	STDA9 240-53056/10	UXX8056.D
Level 5	STDA9 240-53056/9	UXX8055.D
Level 6	STDA9 240-53056/8	UXX8054.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorofluoromethane	FB	Ave	64052 2476514	122785	311631	637383	1225790	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	34341 1259371	64509	149792	318926	599911	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	20675 974037	44194	106343	236367	460511	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	169889 7871066	350425	859515	1902220	3650702	5.00 200	10.0	25.0	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	71756 3251525	151485	356547	785735	1533552	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl-t-butyl ether (ETBE)	FB	Ave	115853 5742201	247100	592775	1330328	2631266	1.00 40.0	2.00	5.00	10.0	20.0
Propionitrile	FB	Ave	9025 388224	22373	44268	100682	191276	2.00 80.0	4.00	10.0	20.0	40.0
Ethyl acetate	FB	Ave	63439 2881757	128088	289609	688935	1365220	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	24862 1067446	49649	123217	256104	489210	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBZ	Ave	19218 753186	39518	98900	212961	418278	20.0 800	40.0	100	200	400
Tert-amyl-methyl ether (TAME)	FB	Ave	92252 4685814	197182	476612	1093065	2185259	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	5060 275160	10130	30512	66565	127489	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBZ	Ave	11590 533325	28952	63842	147249	320038	20.0 800	40.0	100	200	400
Methyl methacrylate	FB	Ave	26880 1360346	62624	132862	302885	641102	1.00 40.0	2.00	5.00	10.0	20.0
2-Nitropropane	FB	Ave	15106 807711	29953	76339	176888	355483	2.00 80.0	4.00	10.0	20.0	40.0
Cyclohexanone	DCB	Ave	11352 377778	24619	54208	117501	222668	10.0 400	20.0	50.0	100	200

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 53056

SDG No.:

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/02/2012 18:08 Calibration End Date: 08/02/2012 19:56 Calibration ID: 10420

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,3-Trimethylbenzene	DCB	Ave	108981 5728141	236414	616641	1326448	2897741	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCB	Ave	59849 2897848	129250	329960	791300	1653809	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	CBZ	Ave	28471 1666532	60051	148158	363089	782444	2.00 80.0	4.00	10.0	20.0	40.0

Curve Type Legend:
Ave = Average ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-53056/14 Calibration Date: 08/02/2012 20:17

Instrument ID: A3UX10 Calib Start Date: 08/02/2012 16:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/02/2012 17:47

Lab File ID: UXX8060.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2504	0.2485		9.92	10.0	-0.8	50.0
Chloromethane	Ave	0.3471	0.3502	0.1000	10.1	10.0	0.9	50.0
Vinyl chloride	Ave	0.2589	0.2597		10.0	10.0	0.3	20.0
Bromomethane	Ave	0.1044	0.1043		9.99	10.0	-0.0	50.0
Chloroethane	Ave	0.1465	0.1436		9.80	10.0	-2.0	50.0
Trichlorofluoromethane	Ave	0.2653	0.2925		11.0	10.0	10.2	50.0
Acrolein	Ave	0.0205	0.0292		42.6	30.0	42.1	50.0
1,1-Dichloroethene	Ave	0.1998	0.2123		10.6	10.0	6.3	20.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1527	0.1543		10.1	10.0	1.1	50.0
Acetone	Lin1		0.0694		21.7	20.0	8.7	50.0
Iodomethane	Ave	0.3204	0.3379		10.5	10.0	5.4	50.0
Carbon disulfide	Ave	0.7796	0.7767		9.96	10.0	-0.4	50.0
Acetonitrile	Lin1		0.0185		29.0	30.0	-3.4	50.0
Methyl acetate	Ave	0.2148	0.2100		9.78	10.0	-2.2	50.0
Methylene Chloride	Lin1		0.2800		10.1	10.0	0.6	50.0
tert-Butyl alcohol	Ave	0.0142	0.0131		184	200	-7.9	50.0
Acrylonitrile	Ave	0.0948	0.0908		28.7	30.0	-4.2	50.0
Methyl tert-butyl ether	Ave	0.7434	0.7424		9.99	10.0	-0.1	50.0
trans-1,2-Dichloroethene	Ave	0.2513	0.2541		10.1	10.0	1.1	50.0
Hexane	Ave	0.0537	0.0566		10.5	10.0	5.4	20.0
1,1-Dichloroethane	Ave	0.4741	0.4875	0.1000	10.3	10.0	2.8	50.0
Vinyl acetate	Lin1		0.0320		9.83	10.0	-1.7	50.0
2-Butanone	Ave	0.1031	0.0997		19.3	20.0	-3.3	50.0
cis-1,2-Dichloroethene	Ave	0.2594	0.2575		9.93	10.0	-0.7	50.0
2,2-Dichloropropane	Ave	0.3023	0.2833		9.37	10.0	-6.3	50.0
Bromochloromethane	Ave	0.1139	0.1115		9.79	10.0	-2.1	50.0
Tetrahydrofuran	Ave	0.0757	0.0671		8.87	10.0	-11.3	50.0
Chloroform	Ave	0.4679	0.4392		9.39	10.0	-6.1	20.0
1,1,1-Trichloroethane	Ave	0.3789	0.3762		9.93	10.0	-0.7	50.0
Cyclohexane	Ave	0.4519	0.4354		9.63	10.0	-3.7	50.0
1,1-Dichloropropene	Ave	0.3321	0.3292		9.91	10.0	-0.9	50.0
Carbon tetrachloride	Ave	0.3085	0.3087		10.0	10.0	0.0	50.0
1,2-Dichloroethane	Ave	0.3765	0.3740		9.94	10.0	-0.6	50.0
Benzene	Ave	0.9837	0.9742		9.90	10.0	-1.0	50.0
Trichloroethene	Ave	0.2275	0.2219		9.75	10.0	-2.5	50.0
Methylcyclohexane	Ave	0.3465	0.3357		9.69	10.0	-3.1	50.0
1,2-Dichloropropane	Ave	0.2359	0.2367		10.0	10.0	0.3	20.0
Dibromomethane	Ave	0.1303	0.1301		9.98	10.0	-0.2	50.0
Bromodichloromethane	Ave	0.3148	0.3056		9.71	10.0	-2.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1220	0.1149		9.42	10.0	-5.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-53056/14 Calibration Date: 08/02/2012 20:17

Instrument ID: A3UX10 Calib Start Date: 08/02/2012 16:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/02/2012 17:47

Lab File ID: UXX8060.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
cis-1,3-Dichloropropene	Ave	0.3427	0.3208		9.36	10.0	-6.4	50.0
4-Methyl-2-pentanone	Ave	0.2139	0.2113		19.8	20.0	-1.2	50.0
Toluene	Ave	1.505	1.478		9.82	10.0	-1.8	20.0
trans-1,3-Dichloropropene	Ave	0.4806	0.4390		9.14	10.0	-8.6	50.0
1,1,2-Trichloroethane	Ave	0.2821	0.2936		10.4	10.0	4.1	50.0
1,3-Dichloropropane	Ave	0.5264	0.5277		10.0	10.0	0.2	50.0
Tetrachloroethene	Ave	0.2807	0.2739		9.76	10.0	-2.4	50.0
2-Hexanone	Ave	0.2065	0.2050		19.9	20.0	-0.7	50.0
Dibromochloromethane	Ave	0.3034	0.2875		9.47	10.0	-5.3	50.0
1,2-Dibromoethane	Ave	0.2672	0.2659		9.95	10.0	-0.5	50.0
Chlorobenzene	Ave	0.8773	0.8640	0.3000	9.85	10.0	-1.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3168	0.3193		10.1	10.0	0.8	50.0
Ethylbenzene	Ave	0.4885	0.4783		9.79	10.0	-2.1	20.0
m-Xylene & p-Xylene	Ave	0.5996	0.6053		20.2	20.0	1.0	50.0
o-Xylene	Ave	0.5905	0.6024		10.2	10.0	2.0	50.0
Styrene	Ave	0.9164	0.9760		10.7	10.0	6.5	50.0
Bromoform	Ave	0.1755	0.1793	0.1000	10.2	10.0	2.2	50.0
Isopropylbenzene	Ave	1.467	1.505		10.3	10.0	2.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6978	0.6441	0.3000	9.23	10.0	-7.7	50.0
Bromobenzene	Ave	0.6771	0.6276		9.27	10.0	-7.3	50.0
1,2,3-Trichloropropane	Ave	0.2313	0.2241		9.69	10.0	-3.1	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1910		15.4	20.0	-22.9	50.0
n-Propylbenzene	Ave	0.7053	0.7184		10.2	10.0	1.9	50.0
2-Chlorotoluene	Ave	0.6283	0.6083		9.68	10.0	-3.2	50.0
1,3,5-Trimethylbenzene	Ave	2.271	2.236		9.84	10.0	-1.6	50.0
4-Chlorotoluene	Ave	0.6496	0.6079		9.36	10.0	-6.4	50.0
tert-Butylbenzene	Ave	1.911	1.767		9.25	10.0	-7.5	50.0
1,2,4-Trimethylbenzene	Ave	2.307	2.330		10.1	10.0	1.0	50.0
sec-Butylbenzene	Ave	2.388	2.358		9.87	10.0	-1.3	50.0
1,3-Dichlorobenzene	Ave	1.249	1.199		9.60	10.0	-4.0	50.0
p-Isopropyltoluene	Ave	1.991	2.072		10.4	10.0	4.1	50.0
1,4-Dichlorobenzene	Ave	1.287	1.252		9.73	10.0	-2.7	50.0
n-Butylbenzene	Ave	1.662	1.678		10.1	10.0	1.0	50.0
1,2-Dichlorobenzene	Ave	1.224	1.191		9.73	10.0	-2.7	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1175	0.1115		9.50	10.0	-5.0	50.0
1,2,4-Trichlorobenzene	Ave	0.6438	0.6003		9.33	10.0	-6.7	50.0
Hexachlorobutadiene	Qua		0.2036		8.66	10.0	-13.4	50.0
Naphthalene	Ave	1.493	1.416		9.49	10.0	-5.1	50.0
1,2,3-Trichlorobenzene	Ave	0.5657	0.5341		9.44	10.0	-5.6	50.0
Dibromofluoromethane (Surr)	Ave	0.2070	0.1902		11.1	12.0	-8.1	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3300	0.2983		10.9	12.0	-9.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-53056/14 Calibration Date: 08/02/2012 20:17

Instrument ID: A3UX10 Calib Start Date: 08/02/2012 16:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/02/2012 17:47

Lab File ID: UXX8060.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toluene-d8 (Surr)	Ave	1.256	1.209		11.6	12.0	-3.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4190	0.4234		12.2	12.0	1.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-53056/14 Calibration Date: 08/02/2012 20:17

Instrument ID: A3UX10 Calib Start Date: 08/02/2012 18:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/02/2012 19:56

Lab File ID: UXX8060.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.1962	0.1935		9.87	10.0	-1.3	50.0
Diisopropyl ether	Ave	0.2244	0.2218		9.89	10.0	-1.1	50.0
Isobutyl alcohol	Ave	0.0102	0.0099		483	500	-3.4	50.0
Cyclohexanone	Ave	0.0211	0.0107		102	200	-49.2	50.0
1,2,3-Trimethylbenzene	Ave	2.424	2.402		9.91	10.0	-0.9	50.0

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: A3UX10 Start Date: 09/04/2012 10:16

Analysis Batch Number: 56575 End Date: 09/04/2012 20:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-56575/1		09/04/2012 10:16	1	BFB4918.D	DB-624 0.18(mm)
CCVIS 240-56575/2		09/04/2012 10:42	1	UXX8665.D	DB-624 0.18(mm)
CCV 240-56575/3		09/04/2012 11:04	1	UXX8666.D	DB-624 0.18(mm)
LCS 240-56575/4		09/04/2012 11:26	1	UXX8667.D	DB-624 0.18(mm)
MB 240-56575/5		09/04/2012 11:48	1	UXX8668.D	DB-624 0.18(mm)
ZZZZZ		09/04/2012 12:19	3.333		DB-624 0.18(mm)
ZZZZZ		09/04/2012 12:40	3.333		DB-624 0.18(mm)
ZZZZZ		09/04/2012 13:02	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 13:23	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 13:44	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 14:06	1		DB-624 0.18(mm)
240-14427-E-1 MS		09/04/2012 14:27	3.333	UXX8675.D	DB-624 0.18(mm)
240-14427-E-1 MSD		09/04/2012 14:49	3.333	UXX8676.D	DB-624 0.18(mm)
ZZZZZ		09/04/2012 15:10	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 15:32	1		DB-624 0.18(mm)
240-14454-1	TB-082212	09/04/2012 15:54	1	UXX8679.D	DB-624 0.18(mm)
240-14454-2	MT-MW07S-082212	09/04/2012 16:15	1	UXX8680.D	DB-624 0.18(mm)
240-14454-3	MT-MW08S-082212	09/04/2012 16:37	1	UXX8681.D	DB-624 0.18(mm)
240-14454-4	MT-MW10S-082212	09/04/2012 16:59	1	UXX8682.D	DB-624 0.18(mm)
ZZZZZ		09/04/2012 17:20	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 17:42	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 18:04	5		DB-624 0.18(mm)
ZZZZZ		09/04/2012 18:25	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 18:47	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 19:08	2.5		DB-624 0.18(mm)
ZZZZZ		09/04/2012 19:30	2.5		DB-624 0.18(mm)
ZZZZZ		09/04/2012 19:52	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 20:14	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 20:36	1		DB-624 0.18(mm)
ZZZZZ		09/04/2012 20:57	1		DB-624 0.18(mm)

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab File ID: BFB4918.D BFB Injection Date: 09/04/2012

Instrument ID: A3UX10 BFB Injection Time: 10:16

Analysis Batch No.: 56575

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.9	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	91.8	
175	5.0 - 9.0 % of mass 174	6.1	(6.6)1
176	95.0 - 101.0 % of mass 174	87.9	(95.7)1
177	5.0 - 9.0 % of mass 176	5.4	(6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-56575/2	UXX8665.D	09/04/2012	10:42
	CCV 240-56575/3	UXX8666.D	09/04/2012	11:04
	LCS 240-56575/4	UXX8667.D	09/04/2012	11:26
	MB 240-56575/5	UXX8668.D	09/04/2012	11:48
	240-14427-E-1 MS	UXX8675.D	09/04/2012	14:27
	240-14427-E-1 MSD	UXX8676.D	09/04/2012	14:49
TB-082212	240-14454-1	UXX8679.D	09/04/2012	15:54
MT-MW07S-082212	240-14454-2	UXX8680.D	09/04/2012	16:15
MT-MW08S-082212	240-14454-3	UXX8681.D	09/04/2012	16:37
MT-MW10S-082212	240-14454-4	UXX8682.D	09/04/2012	16:59

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCVIS 240-56575/2 Calibration Date: 09/04/2012 10:42

Instrument ID: A3UX10 Calib Start Date: 08/02/2012 16:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/02/2012 17:47

Lab File ID: UXX8665.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2504	0.2063		8.24	10.0	-17.6	50.0
Chloromethane	Ave	0.3471	0.2817	0.1000	8.11	10.0	-18.9	50.0
Vinyl chloride	Ave	0.2589	0.2546		9.84	10.0	-1.6	20.0
Bromomethane	Ave	0.1044	0.1180		11.3	10.0	13.1	50.0
Chloroethane	Ave	0.1465	0.1375		9.38	10.0	-6.2	50.0
Trichlorofluoromethane	Ave	0.2653	0.2601		9.80	10.0	-2.0	50.0
Acrolein	Ave	0.0205	0.0228		111	100	11.2	50.0
1,1-Dichloroethene	Ave	0.1998	0.2085		10.4	10.0	4.4	20.0
Acetone	Lin1		0.0574		17.7	20.0	-11.6	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1527	0.1844		12.1	10.0	20.8	50.0
Iodomethane	Ave	0.3204	0.3559		11.1	10.0	11.1	50.0
Carbon disulfide	Ave	0.7796	0.7232		9.28	10.0	-7.2	50.0
Acetonitrile	Lin1		0.0161		96.3	100	-3.7	50.0
Methyl acetate	Ave	0.2148	0.1520		14.2	20.0	-29.2	50.0
Methylene Chloride	Lin1		0.2455		8.71	10.0	-12.9	50.0
tert-Butyl alcohol	Ave	0.0142	0.0120		169	200	-15.7	50.0
Acrylonitrile	Ave	0.0948	0.0776		16.4	20.0	-18.2	50.0
Methyl tert-butyl ether	Ave	0.7434	0.6461		8.69	10.0	-13.1	50.0
trans-1,2-Dichloroethene	Ave	0.2513	0.2387		9.50	10.0	-5.0	50.0
Hexane	Ave	0.0537	0.0501		9.33	10.0	-6.7	20.0
1,1-Dichloroethane	Ave	0.4741	0.3990	0.1000	8.42	10.0	-15.8	50.0
Vinyl acetate	Lin1		0.036		11.2	10.0	12.1	50.0
2-Butanone	Ave	0.1031	0.0754		14.6	20.0	-26.9	50.0
cis-1,2-Dichloroethene	Ave	0.2594	0.2494		9.62	10.0	-3.8	50.0
2,2-Dichloropropane	Ave	0.3023	0.2813		9.30	10.0	-7.0	50.0
Bromochloromethane	Ave	0.1139	0.1256		11.0	10.0	10.3	50.0
Tetrahydrofuran	Ave	0.0757	0.0486		6.43	10.0	-35.7	50.0
Chloroform	Ave	0.4679	0.3989		8.53	10.0	-14.7	20.0
1,1,1-Trichloroethane	Ave	0.3789	0.3386		8.94	10.0	-10.6	50.0
Cyclohexane	Ave	0.4519	0.3613		8.00	10.0	-20.0	50.0
1,1-Dichloropropene	Ave	0.3321	0.2995		9.02	10.0	-9.8	50.0
Carbon tetrachloride	Ave	0.3085	0.3044		9.87	10.0	-1.3	50.0
1,2-Dichloroethane	Ave	0.3765	0.2891		7.68	10.0	-23.2	50.0
Benzene	Ave	0.9837	0.8956		9.10	10.0	-9.0	50.0
Trichloroethene	Ave	0.2275	0.2360		10.4	10.0	3.7	50.0
1,2-Dichloropropane	Ave	0.2359	0.1958		8.30	10.0	-17.0	20.0
Methylcyclohexane	Ave	0.3465	0.3344		9.65	10.0	-3.5	50.0
1,4-Dioxane	Qua		0.0013		418	500	-16.4	50.0
Dibromomethane	Ave	0.1303	0.1182		9.07	10.0	-9.3	50.0
Bromodichloromethane	Ave	0.3148	0.2671		8.48	10.0	-15.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCVIS 240-56575/2 Calibration Date: 09/04/2012 10:42

Instrument ID: A3UX10 Calib Start Date: 08/02/2012 16:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/02/2012 17:47

Lab File ID: UXX8665.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1220	0.1015		16.6	20.0	-16.8	50.0
cis-1,3-Dichloropropene	Ave	0.3427	0.3046		8.89	10.0	-11.1	50.0
4-Methyl-2-pentanone	Ave	0.2139	0.1506		14.1	20.0	(-29.6)	50.0
Toluene	Ave	1.505	1.335		8.87	10.0	-11.3	20.0
trans-1,3-Dichloropropene	Ave	0.4806	0.3821		7.95	10.0	(-20.5)	50.0
Ethyl methacrylate	Lin1		0.3097		7.38	10.0	-26.2	50.0
1,1,2-Trichloroethane	Ave	0.2821	0.2429		8.61	10.0	-13.9	50.0
1,3-Dichloropropane	Ave	0.5264	0.4245		8.06	10.0	-19.4	50.0
Tetrachloroethene	Ave	0.2807	0.2785		9.92	10.0	-0.8	50.0
2-Hexanone	Ave	0.2065	0.1352		13.1	20.0	(-34.5)	50.0
Dibromochloromethane	Ave	0.3034	0.2966		9.77	10.0	-2.3	50.0
1,2-Dibromoethane	Ave	0.2672	0.2423		9.07	10.0	-9.3	50.0
Chlorobenzene	Ave	0.8773	0.8547	0.3000	9.74	10.0	-2.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3168	0.3248		10.3	10.0	2.5	50.0
Ethylbenzene	Ave	0.4885	0.4470		9.15	10.0	-8.5	20.0
m-Xylene & p-Xylene	Ave	0.5996	0.5689		19.0	20.0	-5.1	50.0
o-Xylene	Ave	0.5905	0.5684		9.63	10.0	-3.7	50.0
Styrene	Ave	0.9164	0.9049		9.87	10.0	-1.3	50.0
Bromoform	Ave	0.1755	0.1779	0.1000	10.1	10.0	1.4	50.0
Isopropylbenzene	Ave	1.467	1.461		9.95	10.0	-0.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6978	0.5447	0.3000	7.81	10.0	(-21.9)	50.0
Bromobenzene	Ave	0.6771	0.6238		9.21	10.0	-7.9	50.0
1,2,3-Trichloropropane	Ave	0.2313	0.1856		8.02	10.0	-19.8	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1318		5.63	10.0	-43.7	50.0
n-Propylbenzene	Ave	0.7053	0.6359		9.02	10.0	-9.8	50.0
2-Chlorotoluene	Ave	0.6283	0.5924		9.43	10.0	-5.7	50.0
1,3,5-Trimethylbenzene	Ave	2.271	2.075		9.13	10.0	-8.7	50.0
4-Chlorotoluene	Ave	0.6496	0.6064		9.33	10.0	-6.7	50.0
tert-Butylbenzene	Ave	1.911	1.952		10.2	10.0	2.2	50.0
1,2,4-Trimethylbenzene	Ave	2.307	2.120		9.19	10.0	-8.1	50.0
sec-Butylbenzene	Ave	2.388	2.266		9.49	10.0	-5.1	50.0
1,3-Dichlorobenzene	Ave	1.249	1.182		9.46	10.0	-5.4	50.0
p-Isopropyltoluene	Ave	1.991	2.030		10.2	10.0	2.0	50.0
1,4-Dichlorobenzene	Ave	1.287	1.235		9.60	10.0	-4.0	50.0
n-Butylbenzene	Ave	1.662	1.544		9.29	10.0	-7.1	50.0
1,2-Dichlorobenzene	Ave	1.224	1.209		9.88	10.0	-1.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1175	0.1163		9.90	10.0	-1.0	50.0
1,3,5-Trichlorobenzene	Ave	0.7334	0.8083		11.0	10.0	10.2	50.0
1,2,4-Trichlorobenzene	Ave	0.6438	0.7105		11.0	10.0	10.4	50.0
Hexachlorobutadiene	Qua		0.2645		11.6	10.0	15.5	50.0
Naphthalene	Ave	1.493	1.713		11.5	10.0	14.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCVIS 240-56575/2 Calibration Date: 09/04/2012 10:42

Instrument ID: A3UX10 Calib Start Date: 08/02/2012 16:00

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/02/2012 17:47

Lab File ID: UXX8665.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,3-Trichlorobenzene	Ave	0.5657	0.6236		11.0	10.0	10.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2070	0.2064		12.0	12.0	-0.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3300	0.2465		8.99	12.0	-25.3	50.0
Toluene-d8 (Surr)	Ave	1.256	1.134		10.9	12.0	-9.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4190	0.3838		11.0	12.0	-8.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-56575/3 Calibration Date: 09/04/2012 11:04

Instrument ID: A3UX10 Calib Start Date: 08/02/2012 18:08

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 08/02/2012 19:56

Lab File ID: UXX8666.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorofluoromethane	Ave	0.3872	0.4171		10.8	10.0	7.7	50.0
Ethyl ether	Ave	0.1962	0.1938		9.88	10.0	-1.2	50.0
3-Chloro-1-propene	Ave	0.1394	0.1336		9.58	10.0	-4.2	50.0
Diisopropyl ether	Ave	0.2244	0.2259		50.3	50.0	0.7	50.0
2-Chloro-1,3-butadiene	Ave	0.4701	0.3675		7.82	10.0	-21.8	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7909	0.6645		8.40	10.0	-16.0	50.0
Propionitrile	Ave	0.0301	0.0219		14.5	20.0	-27.3	50.0
Ethyl acetate	Ave	0.2037	0.1389		13.6	20.0	-31.8	50.0
Methacrylonitrile	Ave	0.1560	0.1034		6.63	10.0	-33.7	50.0
Isobutyl alcohol	Ave	0.0102	0.0056		109	200	-45.4	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.6421	0.6099		9.50	10.0	-5.0	50.0
n-Heptane	Ave	0.0373	0.0403		10.8	10.0	8.0	50.0
n-Butanol	Ave	0.0070	0.0050		143	200	-28.5	50.0
Methyl methacrylate	Ave	0.1869	0.1309		7.00	10.0	-30.0	50.0
2-Nitropropane	Ave	0.0521	0.0363		13.9	20.0	-30.4	50.0
Cyclohexanone	Ave	0.0211	0.0278		132	100	31.7	50.0
1,2,3-Trimethylbenzene	Ave	2.424	2.247		9.27	10.0	-7.3	50.0
2-Methylnaphthalene	Ave	0.6676	0.7114		21.3	20.0	6.6	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab File ID: UXX8668.D Lab Sample ID: MB 240-56575/5

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX10 Date Analyzed: 09/04/2012 11:48

GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-56575/4	UXX8667.D	09/04/2012 11:26
	240-14427-E-1 MS	UXX8675.D	09/04/2012 14:27
	240-14427-E-1 MSD	UXX8676.D	09/04/2012 14:49
TB-082212	240-14454-1	UXX8679.D	09/04/2012 15:54
MT-MW07S-082212	240-14454-2	UXX8680.D	09/04/2012 16:15
MT-MW08S-082212	240-14454-3	UXX8681.D	09/04/2012 16:37
MT-MW10S-082212	240-14454-4	UXX8682.D	09/04/2012 16:59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-56575/5

Matrix: Water Lab File ID: UXX8668.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.23
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.22
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18
76-13-1	1,1,2-Trichloro-1,2,2-trichfluoroeth ane	1.0	U	1.0	0.28
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.15
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.19
563-58-6	1,1-Dichloropropene	1.0	U	1.0	0.13
87-61-6	1,2,3-Trichlorobenzene	0.325	J	1.0	0.17
96-18-4	1,2,3-Trichloropropane	1.0	U	1.0	0.43
526-73-8	1,2,3-Trimethylbenzene	5.0	U	5.0	0.0059
120-82-1	1,2,4-Trichlorobenzene	0.219	J	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	1.0	U	1.0	0.12
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.13
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.22
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.18
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.14
142-28-9	1,3-Dichloropropane	1.0	U	1.0	0.16
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
110-75-8	2-Chloroethyl vinyl ether	10	U	10	0.99
95-49-8	2-Chlorotoluene	1.0	U	1.0	0.11
591-78-6	2-Hexanone	10	U	10	0.41
108-86-1	Bromobenzene	1.0	U	1.0	0.13
74-97-5	Bromochloromethane	1.0	U	1.0	0.29
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
99-87-6	p-Isopropyltoluene	1.0	U	1.0	0.12
67-64-1	Acetone	10	U	10	1.1
71-43-2	Benzene	1.0	U	1.0	0.13
75-25-2	Bromoform	1.0	U	1.0	0.64
74-83-9	Bromomethane	1.0	U	1.0	0.41
75-15-0	Carbon disulfide	1.0	U	1.0	0.13
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
75-00-3	Chloroethane	1.0	U	1.0	0.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-56575/5

Matrix: Water Lab File ID: UXX8668.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	1.0	U	1.0	0.16
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
87-68-3	Hexachlorobutadiene	0.540	J	1.0	0.30
74-95-3	Dibromomethane	1.0	U	1.0	0.28
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.31
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
108-20-3	Diisopropyl ether	10	U	10	1.5
91-20-3	Naphthalene	0.246	J	1.0	0.24
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
103-65-1	n-Propylbenzene	1.0	U	1.0	0.14
78-93-3	2-Butanone	10	U	10	0.57
108-10-1	4-Methyl-2-pentanone	10	U	10	0.32
135-98-8	sec-Butylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
994-05-8	Tert-amyl-methyl ether (TAME)	5.0	U	5.0	0.067
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
95-47-6	o-Xylene	1.0	U	1.0	0.14
100-42-5	Styrene	1.0	U	1.0	0.11
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
98-06-6	tert-Butylbenzene	1.0	U	1.0	0.13
127-18-4	Tetrachloroethene	1.0	U	1.0	0.29
108-88-3	Toluene	1.0	U	1.0	0.13
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.19
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.19
79-01-6	Trichloroethene	1.0	U	1.0	0.17
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.21
108-05-4	Vinyl acetate	2.0	U	2.0	0.19
75-01-4	Vinyl chloride	1.0	U	1.0	0.22
75-65-0	tert-Butyl alcohol	50	U	50	3.9
1330-20-7	Xylenes, Total	2.0	U	2.0	0.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-56575/5

Matrix: Water Lab File ID: UXX8668.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	71		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
2037-26-5	Toluene-d8 (Surr)	86		74-115
1868-53-7	Dibromofluoromethane (Surr)	101		75-121

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-56575/5

Matrix: Water Lab File ID: UXX8668.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 09/04/2012 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 56575 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q
	Tentatively Identified Compound		None	

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX8667.D

Lab ID: LCS 240-56575/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	10.0	100	72-116	
1,1,1-Trichloroethane	10.0	8.67	87	74-118	
1,1,2,2-Tetrachloroethane	10.0	7.61	76	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	10.0	12.1	121	74-151	
1,1-Dichloroethane	10.0	8.34	83	82-115	
1,1-Dichloroethene	10.0	10.3	103	78-131	
1,1-Dichloropropene	10.0	8.88	89	83-114	
1,2,3-Trichlorobenzene	10.0	9.91	99	54-126	
1,2,3-Trichloropropane	10.0	8.05	80	73-129	
1,2,3-Trimethylbenzene	10.0	8.53	85	70-130	
1,2,4-Trichlorobenzene	10.0	9.50	95	48-135	
1,2,4-Trimethylbenzene	10.0	8.79	88	76-120	
1,2-Dibromo-3-Chloropropane	10.0	9.34	93	42-136	
1,2-Dichlorobenzene	10.0	9.39	94	81-110	
1,2-Dichloroethane	10.0	7.77	78	71-127	
1,2-Dichloropropane	10.0	8.26	83	81-115	
1,3-Dichlorobenzene	10.0	9.22	92	80-110	
1,3-Dichloropropane	10.0	8.10	81	79-116	
1,4-Dichlorobenzene	10.0	9.22	92	82-110	
2,2-Dichloropropane	10.0	9.00	90	50-129	
2-Chloroethyl vinyl ether	10.0	7.55 J	76	52-131	
2-Chlorotoluene	10.0	9.42	94	76-116	
2-Hexanone	20.0	12.6	63	55-133	
Bromobenzene	10.0	9.07	91	76-115	
Bromochloromethane	10.0	10.3	103	77-120	
4-Chlorotoluene	10.0	9.23	92	77-115	
p-Isopropyltoluene	10.0	9.72	97	74-120	
Acetone	20.0	14.0	70	43-136	
Benzene	10.0	9.00	90	83-112	
Bromoform	10.0	10.0	100	40-131	
Bromomethane	10.0	10.4	104	11-185	
Carbon disulfide	10.0	8.31	83	62-142	
Carbon tetrachloride	10.0	9.60	96	66-128	
Chlorobenzene	10.0	9.65	96	85-110	
Chloroethane	10.0	8.96	90	25-153	
Chloroform	10.0	8.32	83	79-117	
Chloromethane	10.0	7.32	73	44-126	
cis-1,2-Dichloroethene	10.0	9.63	96	80-113	
cis-1,3-Dichloropropene	10.0	8.12	81	61-115	
Hexachlorobutadiene	10.0	9.17	92	36-134	
Dibromomethane	10.0	9.22	92	81-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX8667.D

Lab ID: LCS 240-56575/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Bromodichloromethane	10.0	8.40	84	72-121	
Dichlorodifluoromethane	10.0	6.59	66	19-129	
Ethylbenzene	10.0	8.89	89	83-112	
1,2-Dibromoethane	10.0	8.89	89	79-113	
Diisopropyl ether	10.0	9.13 J	91	77-118	
Naphthalene	10.0	10.4	104	32-141	
m-Xylene & p-Xylene	20.0	18.6	93	83-113	
n-Butylbenzene	10.0	8.54	85	66-125	
Isopropylbenzene	10.0	9.61	96	75-114	
n-Propylbenzene	10.0	9.01	90	74-121	
2-Butanone	20.0	12.5	63	60-126	
4-Methyl-2-pentanone	20.0	13.5	68	63-128	
sec-Butylbenzene	10.0	8.80	88	70-117	
Methyl tert-butyl ether	10.0	8.48	85	52-144	
Methylene Chloride	10.0	8.50	85	66-131	
o-Xylene	10.0	9.47	95	83-113	
Styrene	10.0	9.74	97	79-114	
tert-Butylbenzene	10.0	9.65	97	71-115	
Tetrachloroethene	10.0	9.51	95	79-114	
Toluene	10.0	8.53	85	84-111	
trans-1,2-Dichloroethene	10.0	9.32	93	83-117	
trans-1,3-Dichloropropene	10.0	7.80	78	58-117	
Trichloroethene	10.0	10.7	107	76-117	
Trichlorofluoromethane	10.0	10.6	106	49-157	
Vinyl acetate	10.0	11.1	111	46-161	
Vinyl chloride	10.0	9.16	92	53-127	
tert-Butyl alcohol	200	145	72	70-130	
Xylenes, Total	30.0	28.1	94	83-112	
Dibromochloromethane	10.0	9.34	93	64-119	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX8675.D

Lab ID: 240-14427-E-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	33.3	3.3 U	34.3	103	64-118	
1,1,1-Trichloroethane	33.3	3.3 U	29.8	89	68-121	
1,1,2,2-Tetrachloroethane	33.3	3.3 U	24.7	74	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	33.3	3.3 U	44.3	133	70-152	
1,1-Dichloroethane	33.3	3.3 U	28.5	85	79-116	
1,1-Dichloroethene	33.3	3.3 U	35.1	105	74-135	
1,1-Dichloropropene	33.3	3.3 U	31.2	94	80-114	
1,2,3-Trichlorobenzene	33.3	3.3 U	35.7	107	45-129	
1,2,3-Trichloropropane	33.3	3.3 U	26.1	78	67-132	
1,2,3-Trimethylbenzene	33.3	8.9 J	39.1	91	70-130	
1,2,4-Trichlorobenzene	33.3	3.3 U	35.0	105	38-138	
1,2,4-Trimethylbenzene	33.3	21	51.9	93	67-124	
1,2-Dibromo-3-Chloropropane	33.3	6.7 U	31.6	95	32-139	
1,2-Dichlorobenzene	33.3	3.3 U	32.3	97	75-111	
1,2-Dichloroethane	33.3	3.3 U	28.1	84	68-129	
1,2-Dichloropropane	33.3	3.3 U	27.7	83	78-115	
1,3-Dichlorobenzene	33.3	3.3 U	31.1	93	73-110	
1,3-Dichloropropane	33.3	3.3 U	26.8	80	74-118	
1,4-Dichlorobenzene	33.3	3.3 U	31.2	94	75-110	
2,2-Dichloropropane	33.3	3.3 U	30.2	91	38-127	
2-Chloroethyl vinyl ether	33.3	33 U	33 U	0	10-150	F
2-Chlorotoluene	33.3	3.3 U	31.0	93	69-117	
2-Hexanone	66.7	33 U	43.8	66	47-139	
Bromobenzene	33.3	3.3 U	29.0	87	71-116	
Bromochloromethane	33.3	3.3 U	35.3	106	73-121	
4-Chlorotoluene	33.3	3.3 U	29.6	89	71-116	
p-Isopropyltoluene	33.3	3.3 U	34.4	103	64-122	
Acetone	66.7	33 U	56.4	85	33-145	
Benzene	33.3	98	128	91	72-121	
Bromoform	33.3	3.3 U	31.7	95	32-128	
Bromomethane	33.3	3.3 U	26.5	80	10-186	
Carbon disulfide	33.3	3.3 U	29.3	88	57-147	
Carbon tetrachloride	33.3	3.3 U	33.2	100	59-129	
Chlorobenzene	33.3	3.3 U	32.1	96	80-110	
Chloroethane	33.3	3.3 U	27.0	81	21-165	
Chloroform	33.3	3.3 U	28.2	85	76-118	
Chloromethane	33.3	3.3 U	22.0	66	33-132	
cis-1,2-Dichloroethene	33.3	3.3 U	32.4	97	70-120	
cis-1,3-Dichloropropene	33.3	3.3 U	26.3	79	51-110	
Hexachlorobutadiene	33.3	3.3 U	34.0	102	27-132	
Dibromomethane	33.3	3.3 U	30.4	91	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX8675.D

Lab ID: 240-14427-E-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Bromodichloromethane	33.3	3.3 U	28.3	85	67-120	
Dichlorodifluoromethane	33.3	3.3 U	24.8	74	17-128	
Ethylbenzene	33.3	51	83.2	97	75-116	
1,2-Dibromoethane	33.3	3.3 U	28.8	86	74-113	
Diisopropyl ether	33.3	33 U	30.7 J	92	73-118	
Naphthalene	33.3	9.0	50.4	124	15-158	
m-Xylene & p-Xylene	66.7	110	177	98	75-117	
n-Butylbenzene	33.3	3.3 U	31.4	94	56-127	
Isopropylbenzene	33.3	2.7 J	36.6	102	68-116	
n-Propylbenzene	33.3	2.2 J	32.9	92	64-124	
2-Butanone	66.7	33 U	45.1	68	54-129	
4-Methyl-2-pentanone	66.7	33 U	45.5	68	56-131	
sec-Butylbenzene	33.3	3.3 U	30.8	92	60-119	
Methyl tert-butyl ether	33.3	17 U	28.7	86	46-144	
Methylene Chloride	33.3	3.3 U	29.8	89	63-128	
o-Xylene	33.3	74	110	106	76-116	
Styrene	33.3	3.3 U	35.7	107	71-117	
tert-Butylbenzene	33.3	3.3 U	29.4	88	61-119	
Tetrachloroethene	33.3	3.3 U	33.1	99	70-117	
Toluene	33.3	0.93 J	30.3	88	78-114	
trans-1,2-Dichloroethene	33.3	3.3 U	31.7	95	80-119	
trans-1,3-Dichloropropene	33.3	3.3 U	24.9	75	46-116	
Trichloroethene	33.3	3.3 U	35.8	107	66-120	
Trichlorofluoromethane	33.3	3.3 U	35.4	106	46-157	
Vinyl acetate	33.3	6.7 U	36.9	111	43-157	
Vinyl chloride	33.3	3.3 U	32.0	96	49-130	
tert-Butyl alcohol	667	170 U	612	92	70-130	
Xylenes, Total	100	180	287	103	76-116	
Dibromochloromethane	33.3	3.3 U	29.7	89	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX8676.D

Lab ID: 240-14427-E-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	33.3	32.8	98	5	30	64-118	
1,1,1-Trichloroethane	33.3	28.9	87	3	30	68-121	
1,1,2,2-Tetrachloroethane	33.3	26.1	78	6	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	33.3	42.6	128	4	30	70-152	
1,1-Dichloroethane	33.3	28.3	85	1	30	79-116	
1,1-Dichloroethene	33.3	34.6	104	1	30	74-135	
1,1-Dichloropropene	33.3	30.9	93	1	30	80-114	
1,2,3-Trichlorobenzene	33.3	33.7	101	6	30	45-129	
1,2,3-Trichloropropane	33.3	27.7	83	6	30	67-132	
1,2,3-Trimethylbenzene	33.3	38.4	89	2	30	70-130	
1,2,4-Trichlorobenzene	33.3	32.0	96	9	30	38-138	
1,2,4-Trimethylbenzene	33.3	52.7	95	2	30	67-124	
1,2-Dibromo-3-Chloropropane	33.3	32.8	98	4	30	32-139	
1,2-Dichlorobenzene	33.3	31.5	94	3	30	75-111	
1,2-Dichloroethane	33.3	28.4	85	1	30	68-129	
1,2-Dichloropropane	33.3	28.5	85	3	30	78-115	
1,3-Dichlorobenzene	33.3	31.7	95	2	30	73-110	
1,3-Dichloropropane	33.3	27.7	83	3	30	74-118	
1,4-Dichlorobenzene	33.3	31.9	96	2	30	75-110	
2,2-Dichloropropane	33.3	28.7	86	5	30	38-127	
2-Chloroethyl vinyl ether	33.3	33 U	0	NC	30	10-150	F
2-Chlorotoluene	33.3	31.6	95	2	30	69-117	
2-Hexanone	66.7	46.3	69	5	30	47-139	
Bromobenzene	33.3	30.8	92	6	30	71-116	
Bromochloromethane	33.3	36.1	108	2	30	73-121	
4-Chlorotoluene	33.3	31.4	94	6	30	71-116	
p-Isopropyltoluene	33.3	33.9	102	1	30	64-122	
Acetone	66.7	54.2	81	4	30	33-145	
Benzene	33.3	129	93	1	30	72-121	
Bromoform	33.3	32.6	98	3	30	32-128	
Bromomethane	33.3	25.0	75	6	30	10-186	
Carbon disulfide	33.3	28.5	85	3	30	57-147	
Carbon tetrachloride	33.3	31.6	95	5	30	59-129	
Chlorobenzene	33.3	32.5	98	1	30	80-110	
Chloroethane	33.3	26.8	80	1	30	21-165	
Chloroform	33.3	28.0	84	1	30	76-118	
Chloromethane	33.3	22.1	66	0	30	33-132	
cis-1,2-Dichloroethene	33.3	32.8	98	1	30	70-120	
cis-1,3-Dichloropropene	33.3	27.7	83	5	30	51-110	
Hexachlorobutadiene	33.3	33.0	99	3	30	27-132	
Dibromomethane	33.3	31.6	95	4	30	77-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXX8676.D

Lab ID: 240-14427-E-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Bromodichloromethane	33.3	28.0	84	1	30	67-120	
Dichlorodifluoromethane	33.3	23.9	72	3	30	17-128	
Ethylbenzene	33.3	82.1	93	1	30	75-116	
1,2-Dibromoethane	33.3	30.2	91	5	30	74-113	
Diisopropyl ether	33.3	30.3 J	91	1	30	73-118	
Naphthalene	33.3	47.9	117	5	30	15-158	
m-Xylene & p-Xylene	66.7	176	96	1	30	75-117	
n-Butylbenzene	33.3	30.2	91	4	30	56-127	
Isopropylbenzene	33.3	35.5	98	3	30	68-116	
n-Propylbenzene	33.3	33.6	94	2	30	64-124	
2-Butanone	66.7	47.0	71	4	30	54-129	
4-Methyl-2-pentanone	66.7	47.1	71	4	30	56-131	
sec-Butylbenzene	33.3	30.5	92	1	30	60-119	
Methyl tert-butyl ether	33.3	29.3	88	2	30	46-144	
Methylene Chloride	33.3	29.2	88	2	30	63-128	
o-Xylene	33.3	106	97	3	30	76-116	
Styrene	33.3	36.1	108	1	30	71-117	
tert-Butylbenzene	33.3	31.2	94	6	30	61-119	
Tetrachloroethene	33.3	32.6	98	1	30	70-117	
Toluene	33.3	29.4	85	3	30	78-114	
trans-1,2-Dichloroethene	33.3	30.4	91	4	30	80-119	
trans-1,3-Dichloropropene	33.3	26.0	78	4	30	46-116	
Trichloroethene	33.3	36.8	110	3	30	66-120	
Trichlorofluoromethane	33.3	31.2	93	13	30	46-157	
Vinyl acetate	33.3	39.1	117	6	30	43-157	
Vinyl chloride	33.3	32.1	96	0	30	49-130	
tert-Butyl alcohol	667	654	98	7	30	70-130	
Xylenes, Total	100	282	98	2	30	76-116	
Dibromochloromethane	33.3	30.5	92	3	30	56-118	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Sample No.: STD8260 240-53056/4 Date Analyzed: 08/02/2012 16:43

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX8050.D Heated Purge: (Y/N) N

Calibration ID: 10418

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1668059	5.21	1018723	7.88	497626	10.13
UPPER LIMIT		3336118	5.71	2037446	8.38	995252	10.63
LOWER LIMIT		834030	4.71	509362	7.38	248813	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 240-56575/2		2128679	5.20	1401561	7.88	814490	10.13

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Sample No.: CCVIS 240-56575/2 Date Analyzed: 09/04/2012 10:42

Instrument ID: A3UX10 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXX8665.D Heated Purge: (Y/N) N

Calibration ID: 10420

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2128679	5.20	1401561	7.88	814490	10.13
UPPER LIMIT		4257358	5.70	2803122	8.38	1628980	10.63
LOWER LIMIT		1064340	4.70	700781	7.38	407245	9.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-56575/3		2025314	5.21	1345549	7.88	763329	10.13
LCS 240-56575/4		2124836	5.20	1392156	7.88	809162	10.13
MB 240-56575/5		2167329	5.21	1381849	7.88	767254	10.13
240-14427-E-1 MS		2013531	5.21	1322228	7.88	794283	10.13
240-14427-E-1 MSD		2074957	5.22	1433597	7.89	818578	10.13
240-14454-1	TB-082212	1864327	5.21	1185573	7.88	692442	10.13
240-14454-2	MT-MW07S-082212	1910478	5.22	1221917	7.89	699846	10.13
240-14454-3	MT-MW08S-082212	1947973	5.21	1306899	7.88	733821	10.13
240-14454-4	MT-MW10S-082212	1918688	5.20	1301784	7.88	733584	10.13

FB = Fluorobenzene
FB = Fluorobenzene
CBZ = Chlorobenzene-d5
CBZ = Chlorobenzene-d5
Area Limit = 50%-200% of internal standard area
DCB = 1,4-Dichlorobenzene-d4
RT Limit = ± 0.5 minutes of internal standard RT
DCB = 1,4-Dichlorobenzene-d4

Column used to flag values outside QC limits

FORM VIII 8260B

SDG 240-14454-1

SAMPLE ID MT-MW08S-082212

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST / IS AMOUNT (NG)	Final Volume (ML)	AVE RRF	CONCENTRATION ug/L
1947973	1	201023	10	5	0.7796	1.32
			Sample Volume (ML)		
			5		

Carbon disulfide = 1.3 ug/L

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\NCChrom\ChromData\A3UX10\20120904-12902.b\UXX8681.D
Lims ID: 240-14454-A-3 Client ID: MT-MW08S-082212
Inject. Date: 04-Sep-2012 16:37:30 Dil. Factor: 1.0000
Sample Type: Client
Sample ID: 240-0012902-018
Misc. Info.: P20904A,8260LLUX10,,1904 =P20904A,8260LLUX10,,1904
Operator: 1904 Instrument ID: A3UX10
Vol. Injected: 1.0000 ALS Bottle#: 17
Lims Batch ID: 56575 Lims Sample ID: 18
Detector: MS SCAN

Method: \\NCChrom\ChromData\A3UX10\20120904-12902.b\8260_10.m
Last Update: 05-Sep-2012 08:21:14 Calib Date: 02-Aug-2012 19:56:30
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\NCChrom\ChromData\A3UX10\20120802-12065.b\UXX8059.D
Limit Group: MSV 8260B ICAL
Integrator: RTE ID Type: Deconvolution ID
Process Host: XAWRK005

First Level Reviewer: quayler Date: 05-Sep-2012 08:11:20

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.207	5.205	0.002	99	1947973	10.0	
* 2 Chlorobenzene-d5	117	7.881	7.879	0.002	85	1306899	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.129	10.127	0.002	94	733821	10.0	
$ 5 Dibromofluoromethane (Surr)	113	4.639	4.636	0.003	60	493574	12.2	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	4.923	4.920	0.003	0	569853	8.86	
$ 7 Toluene-d8 (Surr)	98	6.568	6.577	-0.009	93	1723944	10.5	
$ 8 4-Bromofluorobenzene (Surr)	95	8.993	8.991	0.002	91	594943	10.9	
12 Dichlorodifluoromethane	85		1.572					
13 Chloromethane	50	1.704	1.702	0.002	75	25197	0.3726	
14 Vinyl chloride	62		1.808					
16 Bromomethane	94		2.092					9
17 Chloroethane	64		2.175					
19 Trichlorofluoromethane	101		2.400					
23 1,1-Dichloroethene	96		2.814					
24 Acetone	43	2.829	2.826	0.002	95	52525	2.79	
25 1,1,2-Trichloro-1,2,2-trifluoroe	151		2.838					
27 Carbon disulfide	76	3.006	3.015	-0.009	97	201023	1.32	
31 Methylene Chloride	84		3.205					9
32 2-Methyl-2-propanol	59		3.264					
35 Methyl tert-butyl ether	73		3.429					
34 trans-1,2-Dichloroethene	96		3.441					
37 1,1-Dichloroethane	63		3.772					
38 Vinyl acetate	86		3.796					
39 Isopropyl ether	87		3.832					
41 Tert-butyl ethyl ether	59		4.128					
42 2-Butanone (MEK)	43		4.246					
43 cis-1,2-Dichloroethene	96		4.246					
44 2,2-Dichloropropane	77		4.258					
48 Chlorobromomethane	128		4.447					
50 Chloroform	83		4.506					9
51 1,1,1-Trichloroethane	97		4.684					

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
MT-MW07S-082212	240-14454-2	72	69	68	68	73	84
MT-MW08S-082212	240-14454-3	74	70	65	66	80	81
MT-MW10S-082212	240-14454-4	65	63	62	61	71	72
	MB 240-55629/14-A	76	74	71	71	68	88
	LCS 240-55629/15-A	94	93	91	86	100	100

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	10-110
PHL = Phenol-d5 (Surr)	21-110
NBZ = Nitrobenzene-d5 (Surr)	21-110
FBP = 2-Fluorobiphenyl (Surr)	20-110
TBP = 2,4,6-Tribromophenol (Surr)	21-110
TPH = Terphenyl-d14 (Surr)	24-110

Column to be used to flag recovery values

FORM II 8270D

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: A4HP9 Start Date: 09/06/2012 10:52

Analysis Batch Number: 56877 End Date: 09/06/2012 20:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-56877/1		09/06/2012 10:52	1	20906001.D	RXI-5SILMS 0.45(mm)
STD5 240-56877/2 IC		09/06/2012 11:13	1	20906002.D	RXI-5SILMS 0.45(mm)
STD4 240-56877/3 IC		09/06/2012 11:32	1	20906003.D	RXI-5SILMS 0.45(mm)
STD3 240-56877/4 IC		09/06/2012 11:52	1	20906004.D	RXI-5SILMS 0.45(mm)
STD2 240-56877/5 IC		09/06/2012 12:11	1	20906005.D	RXI-5SILMS 0.45(mm)
STD1 240-56877/6 IC		09/06/2012 12:31	1	20906006.D	RXI-5SILMS 0.45(mm)
STD9 240-56877/7 IC		09/06/2012 12:50	1	20906007.D	RXI-5SILMS 0.45(mm)
STD8 240-56877/8 IC		09/06/2012 13:10	1	20906008.D	RXI-5SILMS 0.45(mm)
STD7 240-56877/9 IC		09/06/2012 13:29	1	20906009.D	RXI-5SILMS 0.45(mm)
STD6 240-56877/10 ICIS		09/06/2012 13:49	1	20906010.D	RXI-5SILMS 0.45(mm)
ICV 240-56877/11		09/06/2012 14:36	1	20906011.D	RXI-5SILMS 0.45(mm)
STD5 240-56877/12 IC		09/06/2012 14:57	1		RXI-5SILMS 0.45(mm)
STD4 240-56877/13 IC		09/06/2012 15:16	1		RXI-5SILMS 0.45(mm)
STD3 240-56877/14 IC		09/06/2012 15:36	1		RXI-5SILMS 0.45(mm)
STD2 240-56877/15 IC		09/06/2012 15:56	1		RXI-5SILMS 0.45(mm)
STD6 240-56877/16 IC		09/06/2012 16:15	1		RXI-5SILMS 0.45(mm)
STD7 240-56877/17 IC		09/06/2012 16:35	1		RXI-5SILMS 0.45(mm)
STD8 240-56877/18 IC		09/06/2012 16:54	1		RXI-5SILMS 0.45(mm)
STD9 240-56877/19 IC		09/06/2012 17:14	1		RXI-5SILMS 0.45(mm)
ICV 240-56877/20		09/06/2012 17:34	1		RXI-5SILMS 0.45(mm)
MB 240-55629/14-A		09/06/2012 17:53	1	20906021.D	RXI-5SILMS 0.45(mm)
LCS 240-55629/15-A		09/06/2012 18:13	1	20906022.D	RXI-5SILMS 0.45(mm)
ZZZZZ		09/06/2012 18:52	1		RXI-5SILMS 0.45(mm)
ZZZZZ		09/06/2012 19:11	1		RXI-5SILMS 0.45(mm)
ZZZZZ		09/06/2012 19:31	1		RXI-5SILMS 0.45(mm)
240-14454-2	MT-MW07S-082212	09/06/2012 19:50	1	20906027.D	RXI-5SILMS 0.45(mm)
240-14454-3	MT-MW08S-082212	09/06/2012 20:10	1	20906028.D	RXI-5SILMS 0.45(mm)
240-14454-4	MT-MW10S-082212	09/06/2012 20:29	1	20906029.D	RXI-5SILMS 0.45(mm)

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab File ID: 20906001.D DFTPP Injection Date: 09/06/2012

Instrument ID: A4HP9 DFTPP Injection Time: 10:52

Analysis Batch No.: 56877

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	31.4	
68	Less than 2.0% of mass 69	0.0	(0.0)1
69	Mass 69 relative abundance	51.1	
70	Less than 2.0% of mass 69	0.2	(0.5)1
127	25.0 - 75.0% of mass 198	45.5	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.7	
275	10.0- 30.0% of mass 198	25.5	
365	Greater than 0.75% of mass 198	2.6	
441	Present, but less than mass 443	12.7	
442	40.0 - 110.0% of mass 198	73.4	
443	15.0 - 24.0% of mass 442	14.2	(19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD5 240-56877/2	20906002.D	09/06/2012	11:13
	STD4 240-56877/3	20906003.D	09/06/2012	11:32
	STD3 240-56877/4	20906004.D	09/06/2012	11:52
	STD2 240-56877/5	20906005.D	09/06/2012	12:11
	STD1 240-56877/6	20906006.D	09/06/2012	12:31
	STD9 240-56877/7	20906007.D	09/06/2012	12:50
	STD8 240-56877/8	20906008.D	09/06/2012	13:10
	STD7 240-56877/9	20906009.D	09/06/2012	13:29
	STD6 240-56877/10	20906010.D	09/06/2012	13:49
	ICV 240-56877/11	20906011.D	09/06/2012	14:36
	MB 240-55629/14-A	20906021.D	09/06/2012	17:53
	LCS 240-55629/15-A	20906022.D	09/06/2012	18:13
MT-MW07S-082212	240-14454-2	20906027.D	09/06/2012	19:50
MT-MW08S-082212	240-14454-3	20906028.D	09/06/2012	20:10
MT-MW10S-082212	240-14454-4	20906029.D	09/06/2012	20:29

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-56877/6	20906006.D
Level 2	STD2 240-56877/5	20906005.D
Level 3	STD3 240-56877/4	20906004.D
Level 4	STD4 240-56877/3	20906003.D
Level 5	STD5 240-56877/2	20906002.D
Level 6	STD6 240-56877/10	20906010.D
Level 7	STD7 240-56877/9	20906009.D
Level 8	STD8 240-56877/8	20906008.D
Level 9	STD9 240-56877/7	20906007.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.7770	0.8194 0.7672	0.7786 0.8078	0.7911 0.8221	0.8122	Ave		0.7969				2.7		20.0			
N-Nitrosodimethylamine	1.4062	1.3955 1.4081	1.3529 1.4634	1.4640 1.4420	1.4980	Ave		1.4288				3.3		20.0			
Pyridine	2.1574	2.1450 2.1301	2.1507 2.2912	2.1711 2.2623	2.2960	Ave		2.2005				3.2		20.0			
Ethyl methacrylate	1.8927	2.0414 1.8571	1.9733 1.9275	2.0070 1.9360	2.0121	Ave		1.9559				3.3		20.0			
3-Chloropropionitrile	0.8685	0.9281 0.8610	0.9072 0.8986	0.9189 0.8882	0.9164	Ave		0.8984				2.7		20.0			
Malononitrile	2.3806	2.4456 2.3982	2.5171 2.4840	2.5915 2.4204	2.5867	Ave		2.4780				3.3		20.0			
Benzaldehyde	1.8305 1.2726	1.8884 1.1371	1.8274 1.1518	1.8506 +++++	1.6699	Qua	0.5657	1.3843	-0.014		0.0100				0.9930		0.9900
Benzoic acid	0.2161	+++++ 0.2372	+++++ 0.2364	0.1202 0.2403	0.1970	Qua	-0.539	0.2491	0						1.0000		0.9900
Phenol	2.1831	2.2650 2.2133	2.2272 2.3370	2.2872 2.2810	2.3340	Ave		2.2660			0.8000	2.4		20.0			
Aniline	2.7922	2.8756 2.8271	2.7843 2.9373	2.9065 3.0288	2.9320	Ave		2.8855				2.9		20.0			
Bis(2-chloroethyl)ether	1.7299	1.9191 1.7441	1.8698 1.9679	1.8758 1.8264	1.8977	Ave		1.8538			0.7000	4.5		20.0			
2-Chlorophenol	1.3413	1.4108 1.3461	1.3627 1.4556	1.4643 1.3949	1.4099	Ave		1.3982			0.8000	3.3		20.0			
1,3-Dichlorobenzene	1.5141	1.6399 1.5063	1.5071 1.6001	1.5760 1.5616	1.5843	Ave		1.5612				3.1		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dichlorobenzene	1.4984	1.6394 1.5116	1.5510 1.6118	1.5613 1.5573	1.5600	Ave		1.5614				3.0		20.0			
Benzyl alcohol	1.0600	1.0680 1.0867	1.0479 1.1709	1.1153 1.1307	1.1296	Ave		1.1011				3.9		20.0			
1,2-Dichlorobenzene	1.4245	1.4669 1.4241	1.4269 1.5422	1.4548 1.4891	1.5079	Ave		1.4671				3.0		20.0			
2-Methylphenol	1.4906	1.5154 1.5167	1.5165 1.6011	1.5600 1.5824	1.5778	Ave		1.5451			0.7000	2.6		20.0			
2,2'-oxybis[1-chloropropane]	1.7599	1.9165 1.7338	1.8129 1.8844	1.8430 1.8161	1.8303	Ave		1.8246				3.3		20.0			
3 & 4 Methylphenol	1.6022	1.5855 1.6231	1.5189 1.7083	1.6372 1.6706	1.6846	Ave		1.6288				3.7		20.0			
N-Nitrosodi-n-propylamine	1.5016	1.5858 1.5038	1.5113 1.5961	1.5888 1.5422	1.5965	Ave		1.5533			0.5000	2.8		20.0			
Acetophenone	2.2429	2.3540 2.2681	2.2066 2.4082	2.3531 2.3353	2.3425	Ave		2.3138			0.0100	2.9		20.0			
2,4-Toluene diamine	0.2024	0.3267 0.1645	0.3264 +++++	0.3584 +++++	0.2965	Qua	0.0653	0.3123	-0.010						0.9910		0.9900
Hexachloroethane	0.6096	0.6244 0.6122	0.6243 0.6601	0.6479 0.6501	0.6374	Ave		0.6332			0.3000	2.9		20.0			
Nitrobenzene	0.5422	0.5732 0.5427	0.5493 0.5708	0.5780 0.5569	0.5743	Ave		0.5609			0.2000	2.7		20.0			
Isophorone	0.9513	0.9949 0.9596	0.9390 0.9989	1.0137 0.9555	0.9989	Ave		0.9765			0.4000	2.9		20.0			
2-Nitrophenol	0.1897	0.1741 0.1922	0.1780 0.2006	0.1938 0.1939	0.1978	Ave		0.1900			0.1000	4.9		20.0			
2,4-Dimethylphenol	0.4360	0.4498 0.4383	0.4369 0.4562	0.4627 0.4406	0.4592	Ave		0.4474			0.2000	2.4		20.0			
1,3,5-Trichlorobenzene	0.3265	0.3449 0.3308	0.3286 0.3505	0.3417 0.3387	0.3324	Ave		0.3368				2.5		20.0			
Bis(2-chloroethoxy)methane	0.5110	0.5540 0.5096	0.5096 0.5382	0.5515 0.5183	0.5389	Ave		0.5289			0.3000	3.6		20.0			
2,4-Dichlorophenol	0.2834	0.2836 0.2875	0.2798 0.3008	0.2999 0.2910	0.2946	Ave		0.2901			0.2000	2.7		20.0			
1,2,4-Trichlorobenzene	0.3172	0.3320 0.3233	0.3192 0.3419	0.3336 0.3317	0.3278	Ave		0.3283				2.5		20.0			
Naphthalene	1.0364 1.0399	1.0701 1.0401	1.0123 1.0851	1.0632 1.0572	1.0672	Ave		1.0524			0.7000	2.1		20.0			
4-Chloroaniline	0.4424	0.4617 0.4420	0.4320 0.4475	0.4555 0.4314	0.4773	Ave		0.4487			0.0100	3.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Hexachlorobutadiene	0.1845	0.1859 0.1882	0.1799 0.1971	0.1884 0.1897	0.1870	Ave		0.1876			0.0100	2.6		20.0			
1,2,3-Trichlorobenzene	0.2987	0.3025 0.2978	0.2954 0.3207	0.3057 0.3065	0.3097	Ave		0.3046				2.7		20.0			
Caprolactam	0.1371	0.1238 0.1387	0.1231 0.1457	0.1370 0.1355	0.1411	Ave		0.1352			0.0100	5.9		20.0			
4-Chloro-3-methylphenol	0.3793	0.3742 0.3853	0.3670 0.4040	0.3980 0.3855	0.3954	Ave		0.3861			0.2000	3.2		20.0			
2-Methylnaphthalene	0.6787 0.6695	0.6794 0.6763	0.6518 0.7080	0.6905 0.6786	0.6877	Ave		0.6801			0.4000	2.3		20.0			
2,4-Dinitrophenol	0.2069	+++++ 0.2158	0.1151 0.2240	0.1484 0.2241	0.1908	Qua	-0.256	0.2163	0.0003		0.0100				1.0000		0.9900
1-Methylnaphthalene	0.6420 0.6440	0.6491 0.6497	0.6455 0.6817	0.6666 0.6482	0.6468	Ave		0.6526				2.0		20.0			
1,2,3,5-Tetrachlorobenzene	0.5360	0.5422 0.5461	0.5091 0.5900	0.5439 0.5764	0.5475	Ave		0.5489				4.5		20.0			
Hexachlorocyclopentadiene	0.3661	0.3316 0.3773	0.3355 0.4150	0.3680 0.4053	0.3894	Ave		0.3735			0.0500	8.0		20.0			
2,3,5,6-Tetrachlorophenol	0.3108	+++++ 0.3197	0.2752 0.3455	0.2906 0.3333	0.3186	Ave		0.3134				7.7		20.0			
2,4,6-Trichlorophenol	0.3442	0.3436 0.3583	0.3159 0.3616	0.3346 0.3506	0.3621	Ave		0.3464			0.2000	4.5		20.0			
2,4,5-Trichlorophenol	0.3525	0.3454 0.3469	0.3664 0.3876	0.3655 0.3779	0.3697	Ave		0.3640			0.2000	4.1		20.0			
1,1'-Biphenyl	1.3930 1.3244	1.4253 1.3544	1.3331 1.4494	1.3964 1.4102	1.3817	Ave		1.3853			0.0100	3.0		20.0			
1,2,3,4 -Tetrachlorobenzene	0.5143	0.5272 0.5221	0.5058 0.5597	0.5133 0.5449	0.5219	Ave		0.5262				3.4		20.0			
2-Chloronaphthalene	1.0551 1.0332	1.0847 1.0490	1.0524 1.1144	1.0623 1.0915	1.0716	Ave		1.0683			0.8000	2.3		20.0			
4,6-Dinitro-2-methylphenol	0.1454	+++++ 0.1538	0.1098 0.1654	0.1360 0.1596	0.1556	Ave		0.1465			0.0100	13.0		20.0			
2-Nitroaniline	0.4464	0.4590 0.4592	0.4387 0.4800	0.4617 0.4664	0.4711	Ave		0.4603			0.0100	2.9		20.0			
Dimethyl phthalate	1.2151	1.2629 1.2333	1.2008 1.3017	1.2429 1.2557	1.2581	Ave		1.2463			0.0100	2.5		20.0			
2,6-Dinitrotoluene	0.2890	0.2623 0.2970	0.2557 0.3105	0.2863 0.3009	0.2921	Ave		0.2867				6.5		20.0			
1,2-Dinitrobenzene	0.1436	0.1296 0.1489	0.1350 0.1587	0.1434 0.1528	0.1513	Ave		0.1454				6.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Acenaphthylene	1.7235 1.7378	1.7604 1.7622	1.7275 1.8694	1.7818 1.8176	1.7961	Ave		1.7751			0.9000	2.7		20.0			
3-Nitroaniline	0.3104	0.2914 0.3198	0.2960 0.3355	0.3295 0.3224	0.3264	Ave		0.3164			0.0100	5.0		20.0			
Acenaphthene	1.0332 1.0663	1.1306 1.0773	1.0582 1.1366	1.0880 1.1112	1.1001	Ave		1.0891			0.9000	3.1		20.0			
4-Nitrophenol	0.1967	0.1797 0.2028	0.1983 0.2201	0.2114 0.2116	0.2207	Ave		0.2052				6.7		20.0			
2,4-Dinitrotoluene	0.3906	0.3575 0.4018	0.3610 0.4228	0.3793 0.4065	0.4051	Ave		0.3906			0.2000	5.9		20.0			
Dibenzofuran	1.5449 1.5030	1.5896 1.5289	1.4721 1.6194	1.5459 1.5648	1.5463	Ave		1.5461			0.8000	2.8		20.0			
Diethyl phthalate	1.2067	1.2252 1.2304	1.1808 1.2923	1.2092 1.2547	1.2488	Ave		1.2310			0.0100	2.8		20.0			
4-Chlorophenyl phenyl ether	0.6088	0.6094 0.6302	0.5835 0.6705	0.6069 0.6406	0.6257	Ave		0.6219			0.4000	4.2		20.0			
4-Nitroaniline	0.3341	0.3053 0.3414	0.3186 0.3607	0.3358 0.3548	0.3429	Ave		0.3367			0.0100	5.4		20.0			
Fluorene	1.2316 1.2752	1.2973 1.2906	1.2430 1.3482	1.2928 1.3148	1.3010	Ave		1.2883			0.9000	2.7		20.0			
N-Nitrosodiphenylamine	0.5541	0.5704 0.5614	0.5369 0.6040	0.5604 0.5794	0.5580	Ave		0.5656			0.0100	3.5		20.0			
1,2-Diphenylhydrazine(as Azobenzene)	1.0698	1.1610 1.0794	1.1131 1.1655	1.1582 1.1239	1.1605	Ave		1.1298				3.4		20.0			
Azobenzene	1.0697	1.1610 1.0796	1.1191 1.1653	1.1589 1.1239	1.1609	Ave		1.1298				3.4		20.0			
4-Bromophenyl phenyl ether	0.2041	0.2049 0.2083	0.1918 0.2267	0.2119 0.2183	0.2120	Ave		0.2097			0.1000	4.9		20.0			
Hexachlorobenzene	0.1842 0.1949	0.1925 0.1992	0.1776 0.2146	0.1947 0.2070	0.1957	Ave		0.1956			0.1000	5.6		20.0			
Atrazine	0.1866	0.1900 0.1892	0.1905 0.2022	0.1998 0.1921	0.1983	Ave		0.1936			0.0100	2.9		20.0			
Pentachlorophenol	0.1420	0.0821 0.1550	0.1129 0.1651	0.1226 0.1638	0.1459	Qua	-0.077	0.1437	0.0005		0.0500				0.9990		0.9900
Phenanthrene	1.1287 1.0872	1.1364 1.1056	1.0823 1.2020	1.1378 1.1429	1.1427	Ave		1.1295			0.7000	3.2		20.0			
Anthracene	1.1220 1.1358	1.1466 1.1605	1.1059 1.2591	1.1849 1.2065	1.2007	Ave		1.1691			0.7000	4.1		20.0			
Carbazole	1.0228	1.0499 1.0453	1.0116 1.1263	1.0637 1.0704	1.0702	Ave		1.0575			0.0100	3.3		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Di-n-butyl phthalate	1.2419	1.2257 1.2696	1.1933 1.3724	1.2509 1.3001	1.3093	Ave		1.2704			0.0100	4.4		20.0			
Fluoranthene	1.1671 1.2132	1.1856 1.2423	1.1611 1.3355	1.2455 1.2759	1.2508	Ave		1.2308			0.6000	4.5		20.0			
Benzidine	0.6272	0.5812 0.6329	0.5986 0.6778	0.6959 0.6249	0.6737	Ave		0.6390				6.3		20.0			
Pyrene	1.1815 1.2015	1.2343 1.2168	1.1800 1.3155	1.2883 1.2702	1.2449	Ave		1.2370			0.6000	3.8		20.0			
Butyl benzyl phthalate	0.5283	0.4943 0.5316	0.5101 0.5682	0.5630 0.5563	0.5652	Ave		0.5396			0.0100	5.2		20.0			
3,3'-Dimethoxybenzidine	0.3030	0.2364 0.3177	0.2653 0.3446	0.2985 0.3288	0.3157	Ave		0.3013				12.0		20.0			
Bis(2-ethylhexyl) phthalate	0.7367	0.6946 0.7378	0.7032 0.7934	0.7640 0.7666	0.7832	Ave		0.7474			0.0100	4.8		20.0			
4,4'-Methylene bis(2-chloroaniline)	0.2360	0.2062 0.2363	0.2142 0.2537	0.2428 0.2481	0.2421	Ave		0.2349				7.0		20.0			
3,3'-Dichlorobenzidine	0.4302	0.3958 0.4418	0.4017 0.4762	0.4363 0.4551	0.4401	Ave		0.4346			0.0100	6.1		20.0			
Benzo[a]anthracene	1.2266 1.1816	1.2278 1.2032	1.1825 1.2515	1.2066 1.3113	1.2040	Ave		1.2217			0.8000	3.3		20.0			
Chrysene	1.1139 1.0455	1.0817 1.0817	1.0149 1.1675	1.1252 1.0869	1.0888	Ave		1.0896			0.7000	4.0		20.0			
Di-n-octyl phthalate	1.5078	1.2290 1.5557	1.3472 1.6864	1.5435 1.6102	1.6198	Ave		1.5125			0.0100	10.0		20.0			
Benzo[b]fluoranthene	1.2742 1.4608	1.3257 1.4867	1.3918 1.6178	1.5448 1.6134	1.5525	Ave		1.4742			0.7000	8.3		20.0			
Benzo[k]fluoranthene	1.1829 1.2610	1.2504 1.2859	1.2154 1.4163	1.2595 1.2914	1.2321	Ave		1.2661			0.7000	5.2		20.0			
Benzo[a]pyrene	1.0940 1.2360	1.1280 1.2535	1.1518 1.3695	1.2210 1.3066	1.2588	Ave		1.2244			0.7000	7.2		20.0			
Indeno[1,2,3-cd]pyrene	0.9961 1.3067	1.1845 1.3344	1.1810 1.4604	1.3412 1.3864	1.3460	Ave		1.2818			0.5000	11.0		20.0			
Dibenzo(a,h)anthracene	0.8304 1.0908	0.9400 1.1158	0.9706 1.2233	1.1051 1.1749	1.1277	Ave		1.0643			0.4000	12.0		20.0			
Benzo[g,h,i]perylene	0.8819 1.0850	0.9962 1.1068	0.9868 1.2069	1.1059 1.1401	1.1126	Ave		1.0691			0.5000	9.1		20.0			
2-Fluorophenol (Surr)	1.4461	1.4516 1.4338	1.4294 1.4982	1.4997 1.5189	1.5020	Ave		1.4725				2.4		20.0			
Phenol-d5 (Surr)	2.0014	2.0648 2.0209	2.0036 2.1738	2.0977 2.0976	2.1208	Ave		2.0726				3.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Nitrobenzene-d5 (Surr)	0.5522 0.5547	0.5735 0.5523	0.5654 0.5821	0.5931 0.5674	0.5863	Ave		0.5697				2.7		20.0			
2-Fluorobiphenyl (Surr)	1.2071 1.2289	1.2660 1.2563	1.2386 1.3309	1.2676 1.2950	1.2859	Ave		1.2641				2.9		20.0			
2,4,6-Tribromophenol (Surr)	 0.1405	0.1283 0.1472	0.1183 0.1584	0.1357 0.1530	0.1398	Ave		0.1402				9.3		20.0			
Terphenyl-d14 (Surr)	0.7040 0.7718	0.7537 0.7852	0.7248 0.8464	0.8040 0.8282	0.7931	Ave		0.7790				5.9		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-56877/6	20906006.D
Level 2	STD2 240-56877/5	20906005.D
Level 3	STD3 240-56877/4	20906004.D
Level 4	STD4 240-56877/3	20906003.D
Level 5	STD5 240-56877/2	20906002.D
Level 6	STD6 240-56877/10	20906010.D
Level 7	STD7 240-56877/9	20906009.D
Level 8	STD8 240-56877/8	20906008.D
Level 9	STD9 240-56877/7	20906007.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCB	Ave	419572	23279 624649	43143 665000	79042 874342	203634	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodimethylamine	DCB	Ave	759364	39649 1146388	74963 1204727	146273 1533621	375585	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Pyridine	DCB	Ave	1165046	60941 1734234	119165 1886251	216921 2406079	575659	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Ethyl methacrylate	DCB	Ave	1022071	57998 1511956	109335 1586832	200523 2059043	504480	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3-Chloropropionitrile	DCB	Ave	468974	26367 701007	50268 739746	91813 944605	229776	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Malononitrile	DCB	Ave	1285532	69483 1952520	139469 2044990	258920 2574291	648551	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Benzaldehyde	DCB	Qua	10194 687232	53652 925789	101255 948213	184900 +++++	418701	0.100 10.0	0.500 15.0	1.00 20.0	2.00 +++++	5.00
Benzoic acid	NPT	Qua	921836	+++++ 1533572	+++++ 1569232	92647 2068363	391841	20.0	+++++ 30.0	+++++ 40.0	4.00 50.0	10.0
Phenol	DCB	Ave	1178928	64352 1802014	123406 1923988	228522 2426029	585186	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Aniline	DCB	Ave	1507807	81700 2301680	154273 2418127	290394 3221370	735140	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethyl)ether	DCB	Ave	934152	54523 1419998	103603 1620086	187413 1942486	475810	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Chlorophenol	DCB	Ave	724318	40081 1095968	75506 1198349	146302 1483567	353504	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3-Dichlorobenzene	DCB	Ave	817629	46591 1226397	83505 1317284	157461 1660809	397239	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,4-Dichlorobenzene	DCB	Ave	809166	46577 1230715	85940 1326892	155995 1656271	391136	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Benzyl alcohol	DCB	Ave	572404	30342 884771	58062 963944	111433 1202604	283233	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2-Dichlorobenzene	DCB	Ave	769260	41675 1159466	79063 1269639	145354 1583783	378084	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Methylphenol	DCB	Ave	804956	43055 1234796	84029 1318154	155868 1682962	395591	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,2'-oxybis[1-chloropropane]	DCB	Ave	950387	54449 1411579	100452 1551358	184136 1931561	458907	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
3 & 4 Methylphenol	DCB	Ave	865215	45045 1321453	84157 1406386	163575 1776736	422377	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
N-Nitrosodi-n-propylamine	DCB	Ave	810906	45054 1224348	83740 1313993	158736 1640229	400298	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Acetophenone	DCB	Ave	1211181	66880 1846624	122264 1982559	235103 2483748	587327	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Toluene diamine	NPT	Qua	431732	36448 531706	70317 +++++	138171 +++++	294823	10.0	0.500 15.0	1.00 +++++	2.00 +++++	5.00
Hexachloroethane	DCB	Ave	329194	17740 498404	34591 543446	64736 691370	159819	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Nitrobenzene	NPT	Ave	1156382	63944 1754184	118340 1894368	222827 2396856	571100	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Isophorone	NPT	Ave	2028904	110989 3101555	202304 3315248	390829 4112791	993340	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2-Nitrophenol	NPT	Ave	404532	19425 621321	38344 665598	74733 834630	196662	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dimethylphenol	NPT	Ave	929826	50176 1416590	94113 1513991	178401 1896430	456619	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,3,5-Trichlorobenzene	NPT	Ave	696336	38472 1069280	70791 1163328	131748 1458011	330520	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Bis(2-chloroethoxy)methane	NPT	Ave	1089864	61804 1646903	109785 1786324	212611 2230829	535927	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
2,4-Dichlorophenol	NPT	Ave	604444	31633 929127	60278 998423	115613 1252370	292933	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,4-Trichlorobenzene	NPT	Ave	676502	37040 1044855	68774 1134734	128603 1427887	326017	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Naphthalene	NPT	Ave	22367 2217873	119379 3361803	218082 3601342	409892 4550327	1061263	0.100 10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
4-Chloroaniline	NPT	Ave	943605	51502 1428568	93066 1485266	175594 1856939	474629	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
Hexachlorobutadiene	NPT	Ave	393538	20740 608233	38749 654253	72650 816318	185952	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00
1,2,3-Trichlorobenzene	NPT	Ave	637086	33742 962604	63633 1064314	117850 1319198	307946	10.0	0.500 15.0	1.00 20.0	2.00 25.0	5.00

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Caprolactam	NPT	Ave		13809	26513	52819	140341		0.500	1.00	2.00	5.00
			292310	448314	483480	583001		10.0	15.0	20.0	25.0	
4-Chloro-3-methylphenol	NPT	Ave		41749	79063	153451	393201		0.500	1.00	2.00	5.00
			809051	1245384	1340682	1659155		10.0	15.0	20.0	25.0	
2-Methylnaphthalene	NPT	Ave	14647	75789	140415	266212	683935	0.100	0.500	1.00	2.00	5.00
			1427904	2185853	2349774	2920803		10.0	15.0	20.0	25.0	
2,4-Dinitrophenol	ANT	Qua		+++++	30248	71049	231644		+++++	2.00	4.00	10.0
			546934	865338	907114	1158684		20.0	30.0	40.0	50.0	
1-Methylnaphthalene	NPT	Ave	13855	72406	139071	257000	643242	0.100	0.500	1.00	2.00	5.00
			1373426	2099855	2262323	2789959		10.0	15.0	20.0	25.0	
1,2,3,5-Tetrachlorobenzene	ANT	Ave		36641	66886	130217	332332		0.500	1.00	2.00	5.00
			708492	1095094	1194459	1489897		10.0	15.0	20.0	25.0	
Hexachlorocyclopentadiene	ANT	Ave		22404	44083	88114	236379		0.500	1.00	2.00	5.00
			483983	756591	840124	1047509		10.0	15.0	20.0	25.0	
2,3,5,6-Tetrachlorophenol	ANT	Ave		+++++	36157	69590	193360		+++++	1.00	2.00	5.00
			410843	641192	699443	861565		10.0	15.0	20.0	25.0	
2,4,6-Trichlorophenol	ANT	Ave		23219	41510	80123	219772		0.500	1.00	2.00	5.00
			455026	718602	732011	906326		10.0	15.0	20.0	25.0	
2,4,5-Trichlorophenol	ANT	Ave		23339	48144	87512	224386		0.500	1.00	2.00	5.00
			465979	695713	784698	976766		10.0	15.0	20.0	25.0	
1,1'-Biphenyl	ANT	Ave	18070	96312	175164	334344	838645	0.100	0.500	1.00	2.00	5.00
			1750793	2716043	2934076	3644981		10.0	15.0	20.0	25.0	
1,2,3,4 -Tetrachlorobenzene	ANT	Ave		35627	66457	122896	316757		0.500	1.00	2.00	5.00
			679897	1046976	1133117	1408401		10.0	15.0	20.0	25.0	
2-Chloronaphthalene	ANT	Ave	13686	73296	138278	254359	650437	0.100	0.500	1.00	2.00	5.00
			1365864	2103673	2255902	2821336		10.0	15.0	20.0	25.0	
4,6-Dinitro-2-methylphenol	PHN	Ave		+++++	23767	52416	152772		+++++	1.00	2.00	5.00
			320207	516332	548422	682713		10.0	15.0	20.0	25.0	
2-Nitroaniline	ANT	Ave		31015	57638	110559	285959		0.500	1.00	2.00	5.00
			590097	920772	971673	1205601		10.0	15.0	20.0	25.0	
Dimethyl phthalate	ANT	Ave		85341	157778	297585	763626		0.500	1.00	2.00	5.00
			1606215	2473182	2635126	3245655		10.0	15.0	20.0	25.0	
2,6-Dinitrotoluene	ANT	Ave		17725	33598	68542	177265		0.500	1.00	2.00	5.00
			382091	595541	628574	777738		10.0	15.0	20.0	25.0	
1,2-Dinitrobenzene	ANT	Ave		8757	17741	34336	91841		0.500	1.00	2.00	5.00
			189879	298615	321167	395054		10.0	15.0	20.0	25.0	
Acenaphthylene	ANT	Ave	22357	118955	226976	426626	1090167	0.100	0.500	1.00	2.00	5.00
			2297282	3533944	3784320	4698037		10.0	15.0	20.0	25.0	
3-Nitroaniline	ANT	Ave		19690	38897	78900	198121		0.500	1.00	2.00	5.00
			410362	641308	679100	833279		10.0	15.0	20.0	25.0	
Acenaphthene	ANT	Ave	13403	76397	139043	260506	667716	0.100	0.500	1.00	2.00	5.00
			1409544	2160352	2300796	2872293		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Nitrophenol	ANT	Ave		12145	26061	50626	133954		0.500	1.00	2.00	5.00
			260031	406602	445568	546942		10.0	15.0	20.0	25.0	
2,4-Dinitrotoluene	ANT	Ave		24154	47428	90816	245880		0.500	1.00	2.00	5.00
			516303	805779	855999	1050745		10.0	15.0	20.0	25.0	
Dibenzofuran	ANT	Ave	20040	107417	193420	370151	938582	0.100	0.500	1.00	2.00	5.00
			1986790	3066119	3278305	4044561		10.0	15.0	20.0	25.0	
Diethyl phthalate	ANT	Ave		82788	155145	289531	757979		0.500	1.00	2.00	5.00
			1595115	2467369	2616144	3243054		10.0	15.0	20.0	25.0	
4-Chlorophenyl phenyl ether	ANT	Ave		41180	76667	145319	379756		0.500	1.00	2.00	5.00
			804738	1263720	1357353	1655724		10.0	15.0	20.0	25.0	
4-Nitroaniline	ANT	Ave		20629	41867	80411	208109		0.500	1.00	2.00	5.00
			441672	684675	730213	916964		10.0	15.0	20.0	25.0	
Fluorene	ANT	Ave	15976	87662	163315	309537	789674	0.100	0.500	1.00	2.00	5.00
			1685696	2588039	2729287	3398566		10.0	15.0	20.0	25.0	
N-Nitrosodiphenylamine	PHN	Ave		63414	116230	216005	547948		0.500	1.00	2.00	5.00
			1220312	1884534	2002299	2478537		10.0	15.0	20.0	25.0	
1,2-Diphenylhydrazine(as Azobenzene)	PHN	Ave		129067	240996	446405	1139676		0.500	1.00	2.00	5.00
			2355794	3623759	3863452	4807854		10.0	15.0	20.0	25.0	
Azobenzene	PHN	Ave		129067	242286	446687	1140074		0.500	1.00	2.00	5.00
			2355704	3624350	3862905	4807851		10.0	15.0	20.0	25.0	
4-Bromophenyl phenyl ether	PHN	Ave		22773	41529	81663	208245		0.500	1.00	2.00	5.00
			449463	699234	751527	933776		10.0	15.0	20.0	25.0	
Hexachlorobenzene	PHN	Ave	3872	21395	38446	75042	192190	0.100	0.500	1.00	2.00	5.00
			429279	668803	711332	885739		10.0	15.0	20.0	25.0	
Atrazine	PHN	Ave		21126	41248	77019	194702		0.500	1.00	2.00	5.00
			410916	635294	670348	821919		10.0	15.0	20.0	25.0	
Pentachlorophenol	PHN	Qua		18246	48879	94490	286553		1.00	2.00	4.00	10.0
			625384	1040503	1094390	1401647		20.0	30.0	40.0	50.0	
Phenanthrene	PHN	Ave	23723	126329	234322	438547	1122212	0.100	0.500	1.00	2.00	5.00
			2394261	3711598	3984519	4889276		10.0	15.0	20.0	25.0	
Anthracene	PHN	Ave	23582	127464	239438	456709	1179140	0.100	0.500	1.00	2.00	5.00
			2501232	3895930	4173990	5161355		10.0	15.0	20.0	25.0	
Carbazole	PHN	Ave		116715	219022	409981	1051042		0.500	1.00	2.00	5.00
			2252290	3509318	3733503	4579268		10.0	15.0	20.0	25.0	
Di-n-butyl phthalate	PHN	Ave		136252	258344	482149	1285803		0.500	1.00	2.00	5.00
			2734832	4262096	4549321	5561764		10.0	15.0	20.0	25.0	
Fluoranthene	PHN	Ave	24530	131798	251389	480053	1228325	0.100	0.500	1.00	2.00	5.00
			2671683	4170466	4427146	5458190		10.0	15.0	20.0	25.0	
Benzidine	CRY	Ave		66374	133388	270603	681515		0.500	1.00	2.00	5.00
			1433709	2225058	2343491	2775597		10.0	15.0	20.0	25.0	
Pyrene	CRY	Ave	25434	140970	262950	500932	1259318	0.100	0.500	1.00	2.00	5.00
			2746796	4277543	4548221	5642079		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Butyl benzyl phthalate	CRY	Ave		56449	113668	218917	571774		0.500	1.00	2.00	5.00
			1207712	1868847	1964394	2470869		10.0	15.0	20.0	25.0	
3,3'-Dimethoxybenzidine	CRY	Ave		27002	59131	116075	319384		0.500	1.00	2.00	5.00
			692688	1116775	1191531	1460678		10.0	15.0	20.0	25.0	
Bis(2-ethylhexyl) phthalate	CRY	Ave		79329	156713	297088	792225		0.500	1.00	2.00	5.00
			1684205	2593658	2743125	3405235		10.0	15.0	20.0	25.0	
4,4'-Methylene bis(2-chloroaniline)	CRY	Ave		23546	47734	94394	244886		0.500	1.00	2.00	5.00
			539491	830594	877217	1102210		10.0	15.0	20.0	25.0	
3,3'-Dichlorobenzidine	CRY	Ave		45199	89509	169632	445246		0.500	1.00	2.00	5.00
			983524	1553119	1646297	2021461		10.0	15.0	20.0	25.0	
Benzo[a]anthracene	CRY	Ave	26405	140223	263514	469165	1217942	0.100	0.500	1.00	2.00	5.00
			2701251	4229895	4327109	5824965		10.0	15.0	20.0	25.0	
Chrysene	CRY	Ave	23979	123536	226172	437514	1101409	0.100	0.500	1.00	2.00	5.00
			2390081	3802785	4036567	4827988		10.0	15.0	20.0	25.0	
Di-n-octyl phthalate	PRY	Ave		114335	242887	489992	1344725		0.500	1.00	2.00	5.00
			2849640	4512968	4678127	5894890		10.0	15.0	20.0	25.0	
Benzo[b]fluoranthene	PRY	Ave	22461	123333	250925	490408	1288837	0.100	0.500	1.00	2.00	5.00
			2760781	4312843	4487831	5906433		10.0	15.0	20.0	25.0	
Benzo[k]fluoranthene	PRY	Ave	20853	116321	219119	399833	1022888	0.100	0.500	1.00	2.00	5.00
			2383206	3730499	3928795	4727818		10.0	15.0	20.0	25.0	
Benzo[a]pyrene	PRY	Ave	19285	104938	207658	387613	1045060	0.100	0.500	1.00	2.00	5.00
			2335867	3636440	3799037	4783307		10.0	15.0	20.0	25.0	
Indeno[1,2,3-cd]pyrene	PRY	Ave	17559	110194	212916	425759	1117405	0.100	0.500	1.00	2.00	5.00
			2469446	3870977	4051072	5075560		10.0	15.0	20.0	25.0	
Dibenzo(a,h)anthracene	PRY	Ave	14639	87450	174986	350801	936214	0.100	0.500	1.00	2.00	5.00
			2061451	3237038	3393292	4301300		10.0	15.0	20.0	25.0	
Benzo[g,h,i]perylene	PRY	Ave	15546	92677	177916	351062	923625	0.100	0.500	1.00	2.00	5.00
			2050559	3210740	3347859	4173853		10.0	15.0	20.0	25.0	
2-Fluorophenol (Surr)	DCB	Ave		41241	79201	149837	376587		0.500	1.00	2.00	5.00
			780891	1167311	1233417	1615457		10.0	15.0	20.0	25.0	
Phenol-d5 (Surr)	DCB	Ave		58664	111014	209589	531734		0.500	1.00	2.00	5.00
			1080801	1645372	1789582	2230887		10.0	15.0	20.0	25.0	
Nitrobenzene-d5 (Surr)	NPT	Ave	11917	63981	121800	228666	583093	0.100	0.500	1.00	2.00	5.00
			1183051	1785024	1931810	2442218		10.0	15.0	20.0	25.0	
2-Fluorobiphenyl (Surr)	ANT	Ave	15658	85547	162749	303503	780527	0.100	0.500	1.00	2.00	5.00
			1624557	2519452	2694248	3347310		10.0	15.0	20.0	25.0	
2,4,6-Tribromophenol (Surr)	ANT	Ave		8668	15549	32495	84839		0.500	1.00	2.00	5.00
			185781	295119	320738	395523		10.0	15.0	20.0	25.0	
Terphenyl-d14 (Surr)	CRY	Ave	15155	86078	161522	312617	802250	0.100	0.500	1.00	2.00	5.00
			1764452	2760486	2926421	3678727		10.0	15.0	20.0	25.0	

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 56877

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/06/2012 11:13 Calibration End Date: 09/06/2012 13:49 Calibration ID: 11220

Curve Type Legend:

Ave = Average ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-56877/11 Calibration Date: 09/06/2012 14:36

Instrument ID: A4HP9 Calib Start Date: 09/06/2012 11:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/06/2012 13:49

Lab File ID: 20906011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.7969	0.8107		10.2	10.0	1.7	30.0
N-Nitrosodimethylamine	Ave	1.429	1.434		10.0	10.0	0.4	30.0
Pyridine	Ave	2.200	2.131		9.68	10.0	-3.2	30.0
Ethyl methacrylate	Ave	1.956	1.875		9.59	10.0	-4.1	30.0
3-Chloropropionitrile	Ave	0.8984	0.8742		9.73	10.0	-2.7	30.0
Malononitrile	Ave	2.478	2.371		9.57	10.0	-4.3	30.0
Benzaldehyde	Qua		1.293	0.0100	9.96	10.0	-0.4	30.0
Phenol	Ave	2.266	2.158	0.8000	9.52	10.0	-4.8	30.0
Aniline	Ave	2.885	2.748		9.52	10.0	-4.8	30.0
Bis(2-chloroethyl)ether	Ave	1.854	1.720	0.7000	9.28	10.0	-7.2	30.0
2-Chlorophenol	Ave	1.398	1.338	0.8000	9.57	10.0	-4.3	30.0
1,3-Dichlorobenzene	Ave	1.561	1.485		9.51	10.0	-4.9	30.0
1,4-Dichlorobenzene	Ave	1.561	1.473		9.43	10.0	-5.7	30.0
Benzyl alcohol	Ave	1.101	1.050		9.54	10.0	-4.6	30.0
1,2-Dichlorobenzene	Ave	1.467	1.401		9.55	10.0	-4.5	30.0
2-Methylphenol	Ave	1.545	1.483	0.7000	9.60	10.0	-4.0	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.825	1.747		9.57	10.0	-4.3	30.0
3 & 4 Methylphenol	Ave	1.629	1.572		9.65	10.0	-3.5	30.0
N-Nitrosodi-n-propylamine	Ave	1.553	1.491	0.5000	9.60	10.0	-4.0	30.0
Acetophenone	Ave	2.314	2.190	0.0100	9.47	10.0	-5.3	30.0
Hexachloroethane	Ave	0.6332	0.6040	0.3000	9.54	10.0	-4.6	30.0
Nitrobenzene	Ave	0.5609	0.5326	0.2000	9.49	10.0	-5.1	30.0
Isophorone	Ave	0.9765	0.9209	0.4000	9.43	10.0	-5.7	30.0
2-Nitrophenol	Ave	0.1900	0.1863	0.1000	9.81	10.0	-1.9	30.0
2,4-Dimethylphenol	Ave	0.4474	0.4262	0.2000	9.52	10.0	-4.8	30.0
1,3,5-Trichlorobenzene	Ave	0.3368	0.3151		9.36	10.0	-6.4	30.0
Bis(2-chloroethoxy)methane	Ave	0.5289	0.4946	0.3000	9.35	10.0	-6.5	30.0
Benzoic acid	Qua		0.2111		19.1	20.0	-4.7	30.0
2,4-Dichlorophenol	Ave	0.2901	0.2716	0.2000	9.36	10.0	-6.4	30.0
1,2,4-Trichlorobenzene	Ave	0.3283	0.3086		9.40	10.0	-6.0	30.0
Naphthalene	Ave	1.052	1.005	0.7000	9.55	10.0	-4.5	30.0
4-Chloroaniline	Ave	0.4487	0.4078	0.0100	9.09	10.0	-9.1	30.0
Hexachlorobutadiene	Ave	0.1876	0.1788	0.0100	9.53	10.0	-4.7	30.0
1,2,3-Trichlorobenzene	Ave	0.3046	0.2874		9.44	10.0	-5.6	30.0
Caprolactam	Ave	0.1352	0.1334	0.0100	9.86	10.0	-1.4	30.0
4-Chloro-3-methylphenol	Ave	0.3861	0.3692	0.2000	9.56	10.0	-4.4	30.0
2-Methylnaphthalene	Ave	0.6801	0.6479	0.4000	9.53	10.0	-4.7	30.0
1-Methylnaphthalene	Ave	0.6526	0.6197		9.50	10.0	-5.0	30.0
1,2,3,5-Tetrachlorobenzene	Ave	0.5489	0.5125		9.34	10.0	-6.6	30.0
Hexachlorocyclopentadiene	Ave	0.3735	0.3499	0.0500	9.37	10.0	-6.3	30.0
2,4,6-Trichlorophenol	Ave	0.3464	0.3169	0.2000	9.15	10.0	-8.5	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-56877/11 Calibration Date: 09/06/2012 14:36

Instrument ID: A4HP9 Calib Start Date: 09/06/2012 11:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/06/2012 13:49

Lab File ID: 20906011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4,5-Trichlorophenol	Ave	0.3640	0.3396	0.2000	9.33	10.0	-6.7	30.0
2,4-Toluene diamine	Qua		0.1962		8.42	10.0	-15.8	30.0
1,1'-Biphenyl	Ave	1.385	1.281	0.0100	9.25	10.0	-7.5	30.0
1,2,3,4 -Tetrachlorobenzene	Ave	0.5262	0.4894		9.30	10.0	-7.0	30.0
2-Chloronaphthalene	Ave	1.068	0.9871	0.8000	9.24	10.0	-7.6	30.0
2-Nitroaniline	Ave	0.4603	0.4345	0.0100	9.44	10.0	-5.6	30.0
Dimethyl phthalate	Ave	1.246	1.144	0.0100	9.18	10.0	-8.2	30.0
2,6-Dinitrotoluene	Ave	0.2867	0.2747		9.58	10.0	-4.2	30.0
1,2-Dinitrobenzene	Ave	0.1454	0.1406		9.67	10.0	-3.3	30.0
Acenaphthylene	Ave	1.775	1.662	0.9000	9.36	10.0	-6.4	30.0
3-Nitroaniline	Ave	0.3164	0.2963	0.0100	9.36	10.0	-6.4	30.0
2,4-Dinitrophenol	Qua		0.1887	0.0100	18.2	20.0	-9.0	30.0
Acenaphthene	Ave	1.089	1.007	0.9000	9.24	10.0	-7.6	30.0
4-Nitrophenol	Ave	0.2052	0.1750		8.53	10.0	-14.7	30.0
2,4-Dinitrotoluene	Ave	0.3906	0.3724	0.2000	9.53	10.0	-4.7	30.0
Dibenzofuran	Ave	1.546	1.429	0.8000	9.24	10.0	-7.6	30.0
2,3,5,6-Tetrachlorophenol	Ave	0.3134	0.2909		9.28	10.0	-7.2	30.0
Diethyl phthalate	Ave	1.231	1.137	0.0100	9.24	10.0	-7.6	30.0
4-Chlorophenyl phenyl ether	Ave	0.6219	0.5838	0.4000	9.39	10.0	-6.1	30.0
4-Nitroaniline	Ave	0.3367	0.3225	0.0100	9.58	10.0	-4.2	30.0
Fluorene	Ave	1.288	1.201	0.9000	9.32	10.0	-6.8	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1465	0.1379	0.0100	9.41	10.0	-5.9	30.0
N-Nitrosodiphenylamine	Ave	0.5656	0.5254	0.0100	9.29	10.0	-7.1	30.0
1,2-Diphenylhydrazine(as Azobenzene)	Ave	1.130	1.015		8.99	10.0	-10.1	30.0
Azobenzene	Ave	1.130	1.016		8.99	10.0	-10.1	30.0
4-Bromophenyl phenyl ether	Ave	0.2097	0.1933	0.1000	9.22	10.0	-7.8	30.0
Hexachlorobenzene	Ave	0.1956	0.1810	0.1000	9.25	10.0	-7.5	30.0
Atrazine	Ave	0.1936	0.1767	0.0100	9.13	10.0	-8.7	30.0
Pentachlorophenol	Qua		0.1341	0.0500	18.1	20.0	-9.4	30.0
Phenanthrene	Ave	1.130	1.027	0.7000	9.09	10.0	-9.1	30.0
Anthracene	Ave	1.169	1.079	0.7000	9.23	10.0	-7.7	30.0
Carbazole	Ave	1.058	0.9583	0.0100	9.06	10.0	-9.4	30.0
Di-n-butyl phthalate	Ave	1.270	1.163	0.0100	9.15	10.0	-8.5	30.0
Fluoranthene	Ave	1.231	1.134	0.6000	9.21	10.0	-7.9	30.0
Benzidine	Ave	0.6390	0.5773		9.03	10.0	-9.7	30.0
Pyrene	Ave	1.237	1.130	0.6000	9.14	10.0	-8.6	30.0
Butyl benzyl phthalate	Ave	0.5396	0.4916	0.0100	9.11	10.0	-8.9	30.0
3,3'-Dimethoxybenzidine	Ave	0.3013	0.2817		9.35	10.0	-6.5	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7474	0.6834	0.0100	9.14	10.0	-8.6	30.0
4,4'-Methylene bis(2-chloroaniline)	Ave	0.2349	0.2202		9.37	10.0	-6.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-56877/11 Calibration Date: 09/06/2012 14:36

Instrument ID: A4HP9 Calib Start Date: 09/06/2012 11:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 09/06/2012 13:49

Lab File ID: 20906011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
3,3'-Dichlorobenzidine	Ave	0.4346	0.4022	0.0100	9.25	10.0	-7.5	30.0
Benzo[a]anthracene	Ave	1.222	1.142	0.8000	9.35	10.0	-6.5	30.0
Chrysene	Ave	1.090	0.9417	0.7000	8.64	10.0	-13.6	30.0
Di-n-octyl phthalate	Ave	1.512	1.399	0.0100	9.25	10.0	-7.5	30.0
Benzo[b]fluoranthene	Ave	1.474	1.361	0.7000	9.23	10.0	-7.7	30.0
Benzo[k]fluoranthene	Ave	1.266	1.154	0.7000	9.11	10.0	-8.9	30.0
Benzo[a]pyrene	Ave	1.224	1.133	0.7000	9.25	10.0	-7.5	30.0
Dibenzo(a,h)anthracene	Ave	1.064	0.999	0.4000	9.39	10.0	-6.1	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.282	1.207	0.5000	9.42	10.0	-5.8	30.0
Benzo[g,h,i]perylene	Ave	1.069	0.9872	0.5000	9.23	10.0	-7.7	30.0
2-Fluorophenol (Surr)	Ave	1.472	1.407		9.55	10.0	-4.5	30.0
Phenol-d5 (Surr)	Ave	2.073	1.993		9.61	10.0	-3.9	30.0
Nitrobenzene-d5 (Surr)	Ave	0.5697	0.5415		9.51	10.0	-4.9	30.0
2-Fluorobiphenyl (Surr)	Ave	1.264	1.170		9.25	10.0	-7.5	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1402	0.1334		9.52	10.0	-4.8	30.0
Terphenyl-d14 (Surr)	Ave	0.7790	0.7173		9.21	10.0	-7.9	30.0

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab File ID: 20906021.D Lab Sample ID: MB 240-55629/14-A

Matrix: Water Date Extracted: 08/24/2012 11:11

Instrument ID: A4HP9 Date Analyzed: 09/06/2012 17:53

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-55629/15-A	20906022.D	09/06/2012 18:13
MT-MW07S-082212	240-14454-2	20906027.D	09/06/2012 19:50
MT-MW08S-082212	240-14454-3	20906028.D	09/06/2012 20:10
MT-MW10S-082212	240-14454-4	20906029.D	09/06/2012 20:29

FORM I

GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-55629/14-A

Matrix: Water | Lab File ID: 20906021.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1000(mL) | Date Analyzed: 09/06/2012 17:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	1,1'-Biphenyl	1.0	U	1.0	0.80
123-91-1	1,4-Dioxane	1.0	U	1.0	0.49
88-06-2	2,4,6-Trichlorophenol	5.0	U	5.0	0.80
95-95-4	2,4,5-Trichlorophenol	5.0	U	5.0	0.30
120-83-2	2,4-Dichlorophenol	2.0	U	2.0	0.80
105-67-9	2,4-Dimethylphenol	2.0	U	2.0	0.80
51-28-5	2,4-Dinitrophenol	5.0	U	5.0	2.4
121-14-2	2,4-Dinitrotoluene	5.0	U	5.0	0.27
91-58-7	2-Chloronaphthalene	1.0	U	1.0	0.10
95-57-8	2-Chlorophenol	1.0	U	1.0	0.29
91-57-6	2-Methylnaphthalene	0.20	U	0.20	0.10
95-48-7	2-Methylphenol	1.0	U	1.0	0.80
88-74-4	2-Nitroaniline	2.0	U	2.0	0.80
88-75-5	2-Nitrophenol	2.0	U	2.0	0.28
15831-10-4	3 & 4 Methylphenol	2.0	U	2.0	0.75
91-94-1	3,3'-Dichlorobenzidine	5.0	U	5.0	0.37
99-09-2	3-Nitroaniline	2.0	U	2.0	0.28
534-52-1	4,6-Dinitro-2-methylphenol	5.0	U	5.0	2.4
101-55-3	4-Bromophenyl phenyl ether	2.0	U	2.0	0.80
59-50-7	4-Chloro-3-methylphenol	2.0	U	2.0	0.80
106-47-8	4-Chloroaniline	2.0	U	2.0	0.80
7005-72-3	4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30
100-01-6	4-Nitroaniline	2.0	U	2.0	0.80
83-32-9	Acenaphthene	0.20	U	0.20	0.10
208-96-8	Acenaphthylene	0.20	U	0.20	0.10
98-86-2	Acetophenone	1.0	U	1.0	0.34
120-12-7	Anthracene	0.20	U	0.20	0.10
1912-24-9	Atrazine	1.0	U	1.0	0.34
100-52-7	Benzaldehyde	1.0	U	1.0	0.39
56-55-3	Benzo[a]anthracene	0.20	U	0.20	0.10
50-32-8	Benzo[a]pyrene	0.20	U	0.20	0.10
205-99-2	Benzo[b]fluoranthene	0.20	U	0.20	0.10
191-24-2	Benzo[g,h,i]perylene	0.20	U	0.20	0.10
207-08-9	Benzo[k]fluoranthene	0.20	U	0.20	0.10

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-55629/14-A

Matrix: Water | Lab File ID: 20906021.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3520C | Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1000(mL) | Date Analyzed: 09/06/2012 17:53

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
111-91-1	Bis(2-chloroethoxy)methane	1.0	U	1.0	0.32
111-44-4	Bis(2-chloroethyl)ether	1.0	U	1.0	0.10
117-81-7	Bis(2-ethylhexyl) phthalate	2.0	U	2.0	0.80
85-68-7	Butyl benzyl phthalate	1.0	U	1.0	0.80
105-60-2	Caprolactam	5.0	U	5.0	0.80
86-74-8	Carbazole	1.0	U	1.0	0.28
218-01-9	Chrysene	0.20	U	0.20	0.10
84-74-2	Di-n-butyl phthalate	1.0	U	1.0	0.67
117-84-0	Di-n-octyl phthalate	1.0	U	1.0	0.80
53-70-3	Dibenzo(a,h)anthracene	0.20	U	0.20	0.10
132-64-9	Dibenzofuran	1.0	U	1.0	0.10
84-66-2	Diethyl phthalate	1.0	U	1.0	0.60
131-11-3	Dimethyl phthalate	1.0	U	1.0	0.29
206-44-0	Fluoranthene	0.20	U	0.20	0.10
86-73-7	Fluorene	0.20	U	0.20	0.10
118-74-1	Hexachlorobenzene	0.20	U	0.20	0.10
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.27
77-47-4	Hexachlorocyclopentadiene	10	U	10	0.80
67-72-1	Hexachloroethane	1.0	U	1.0	0.80
193-39-5	Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10
78-59-1	Isophorone	1.0	U	1.0	0.27
621-64-7	N-Nitrosodi-n-propylamine	1.0	U	1.0	0.80
62-75-9	N-Nitrosodimethylamine	1.0	U	1.0	0.31
86-30-6	N-Nitrosodiphenylamine	1.0	U	1.0	0.31
91-20-3	Naphthalene	0.20	U	0.20	0.10
98-95-3	Nitrobenzene	1.0	U	1.0	0.040
87-86-5	Pentachlorophenol	5.0	U	5.0	2.4
85-01-8	Phenanthrene	0.20	U	0.20	0.10
108-95-2	Phenol	1.0	U	1.0	0.60
129-00-0	Pyrene	0.20	U	0.20	0.10
108-60-1	2,2'-oxybis[1-chloropropane]	1.0	U	1.0	0.40
606-20-2	2,6-Dinitrotoluene	5.0	U	5.0	0.80
100-02-7	4-Nitrophenol	5.0	U	5.0	2.4

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-55629/14-A

Matrix: Water Lab File ID: 20906021.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3520C Date Extracted: 08/24/2012 11:11

Sample wt/vol: 1000(mL) Date Analyzed: 09/06/2012 17:53

Con. Extract Vol.: 2(mL) Dilution Factor: 1

Injection Volume: 1(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 56877 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	88		24-110
4165-62-2	Phenol-d5 (Surr)	74		21-110
4165-60-0	Nitrobenzene-d5 (Surr)	71		21-110
367-12-4	2-Fluorophenol (Surr)	76		10-110
321-60-8	2-Fluorobiphenyl (Surr)	71		20-110
118-79-6	2,4,6-Tribromophenol (Surr)	68		21-110

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20906022.D

Lab ID: LCS 240-55629/15-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1'-Biphenyl	20.0	19.1	95	43-110	
1,4-Dioxane	20.0	17.4	87	27-110	
2,4,6-Trichlorophenol	20.0	19.3	97	45-110	
2,4,5-Trichlorophenol	20.0	20.4	102	48-110	
2,4-Dichlorophenol	20.0	19.1	95	41-110	
2,4-Dimethylphenol	20.0	14.1	71	32-110	
2,4-Dinitrophenol	20.0	17.5	87	10-110	
2,4-Dinitrotoluene	20.0	20.4	102	53-110	
2-Chloronaphthalene	20.0	18.4	92	43-110	
2-Chlorophenol	20.0	19.1	96	29-110	
2-Methylnaphthalene	20.0	18.5	93	45-110	
2-Methylphenol	20.0	18.7	93	42-110	
2-Nitroaniline	20.0	20.1	101	54-110	
2-Nitrophenol	20.0	18.9	95	40-110	
3 & 4 Methylphenol	40.0	38.3	96	44-110	
3,3'-Dichlorobenzidine	20.0	10.1	50	22-110	
3-Nitroaniline	20.0	19.1	95	53-110	
4,6-Dinitro-2-methylphenol	20.0	20.1	101	31-110	
4-Bromophenyl phenyl ether	20.0	18.9	95	45-110	
4-Chloro-3-methylphenol	20.0	19.5	97	52-110	
4-Chloroaniline	20.0	16.9	84	44-110	
4-Chlorophenyl phenyl ether	20.0	19.2	96	47-110	
4-Nitroaniline	20.0	20.0	100	54-110	
Acenaphthene	20.0	18.9	94	47-110	
Acenaphthylene	20.0	18.8	94	49-110	
Acetophenone	20.0	19.6	98	46-110	
Anthracene	20.0	19.3	96	52-110	
Atrazine	20.0	24.5	123	66-126	
Benzaldehyde	20.0	26.7	134	38-110	*
Benzo[a]anthracene	20.0	18.3	92	52-110	
Benzo[a]pyrene	20.0	16.4	82	44-110	
Benzo[b]fluoranthene	20.0	19.7	99	48-110	
Benzo[g,h,i]perylene	20.0	19.1	96	50-110	
Benzo[k]fluoranthene	20.0	17.7	89	49-110	
Bis(2-chloroethoxy)methane	20.0	18.7	94	43-110	
Bis(2-chloroethyl)ether	20.0	19.0	95	40-110	
Bis(2-ethylhexyl) phthalate	20.0	20.1	100	39-116	
Butyl benzyl phthalate	20.0	19.8	99	55-110	
Caprolactam	20.0	21.0	105	45-111	
Carbazole	20.0	19.6	98	55-110	
Chrysene	20.0	20.8	104	55-110	
Di-n-butyl phthalate	20.0	20.8	104	57-110	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 20906022.D

Lab ID: LCS 240-55629/15-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Di-n-octyl phthalate	20.0	18.0	90	40-110	
Dibenzo(a,h)anthracene	20.0	19.2	96	49-110	
Dibenzofuran	20.0	18.9	94	51-110	
Diethyl phthalate	20.0	20.2	101	58-110	
Dimethyl phthalate	20.0	20.0	100	57-110	
Fluoranthene	20.0	20.2	101	54-110	
Fluorene	20.0	19.4	97	52-110	
Hexachlorobenzene	20.0	19.6	98	50-110	
Hexachlorobutadiene	20.0	16.1	80	33-110	
Hexachlorocyclopentadiene	20.0	7.36 J	37	10-110	
Hexachloroethane	20.0	16.9	84	35-110	
Indeno[1,2,3-cd]pyrene	20.0	19.1	95	50-110	
Isophorone	20.0	20.1	101	49-110	
N-Nitrosodi-n-propylamine	20.0	20.1	100	47-110	
N-Nitrosodimethylamine	20.0	19.5	97	40-110	
N-Nitrosodiphenylamine	20.0	19.1	96	50-110	
Naphthalene	20.0	18.5	93	44-110	
Nitrobenzene	20.0	18.6	93	42-110	
Pentachlorophenol	20.0	20.4	102	18-110	
Phenanthrene	20.0	19.8	99	53-110	
Phenol	20.0	19.1	95	33-110	
Pyrene	20.0	18.7	94	52-110	
2,2'-oxybis[1-chloropropane]	20.0	19.5	98	37-110	
2,6-Dinitrotoluene	20.0	20.3	102	54-110	
4-Nitrophenol	20.0	17.7	88	33-112	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Sample No.: STD6 240-56877/10 Date Analyzed: 09/06/2012 13:49

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20906010.D Heated Purge: (Y/N) N

Calibration ID: 11220

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		216005	3.85	853119	4.81	528765	6.10
UPPER LIMIT		432010	4.35	1706238	5.31	1057530	6.60
LOWER LIMIT		108003	3.35	426560	4.31	264383	5.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-56877/11		257431	3.85	1036701	4.81	650765	6.11
MB 240-55629/14-A		170227	3.84	660165	4.81	419099	6.10
LCS 240-55629/15-A		161344	3.85	655983	4.80	414445	6.10
240-14454-2	MT-MW07S-082212	161558	3.85	618391	4.81	400998	6.10
240-14454-3	MT-MW08S-082212	183063	3.84	727072	4.81	455497	6.10
240-14454-4	MT-MW10S-082212	188316	3.84	710870	4.81	463898	6.10

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Sample No.: STD6 240-56877/10 Date Analyzed: 09/06/2012 13:49

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 20906010.D Heated Purge: (Y/N) N

Calibration ID: 11220

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		880859	7.19	914424	9.17	755962	10.56
UPPER LIMIT		1761718	7.69	1828848	9.67	1511924	11.06
LOWER LIMIT		440430	6.69	457212	8.67	377981	10.06
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-56877/11		1094416	7.20	1142381	9.23	948282	10.63
MB 240-55629/14-A		683551	7.19	723026	9.15	578419	10.54
LCS 240-55629/15-A		687772	7.19	742661	9.15	611824	10.53
240-14454-2	MT-MW07S-082212	672129	7.19	699224	9.15	595966	10.54
240-14454-3	MT-MW08S-082212	760592	7.19	822919	9.15	702773	10.54
240-14454-4	MT-MW10S-082212	792752	7.19	852468	9.14	708260	10.53

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Batch Number: 55629 Batch Start Date: 08/24/12 13:20 Batch Analyst: Matthews, Brandon

Batch Method: 3520C Batch End Date: 08/25/12 07:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	InitialAmount	FinalAmount	FirstAdjustpH	EXBNALCS1 00026	EXBNASURRW 00017
240-14454-L-2	MT-MW07S-082212	3520C, 8270D	T	7 SU	1020 mL	2 mL	2 SU		1 mL
240-14454-J-3	MT-MW08S-082212	3520C, 8270D	T	7 SU	1050 mL	2 mL	2 SU		1 mL
240-14454-I-4	MT-MW10S-082212	3520C, 8270D	T	7 SU	1050 mL	2 mL	2 SU		1 mL
MB 240-55629/14		3520C, 8270D		7 SU	1000 mL	2 mL	2 SU		1 mL
LCS 240-55629/15		3520C, 8270D		7 SU	1000 mL	2 mL	2 SU	1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	EXRESTEKSPKW 00013					
240-14454-L-2	MT-MW07S-082212	3520C, 8270D	T						
240-14454-J-3	MT-MW08S-082212	3520C, 8270D	T						
240-14454-I-4	MT-MW10S-082212	3520C, 8270D	T						
MB 240-55629/14		3520C, 8270D							
LCS 240-55629/15		3520C, 8270D		1 mL					

Batch Notes	
Acid used for pH adjust Lot #	178762
Person's name who did the concentration	cc/lh
Filter Paper Lot Number	337125
Na2SO4 Lot Number	275335
Prep Solvent Lot #	611566

Basis	Basis Description
T	Total/NA

SAMPLE ID MT-MW08S-082212

SAMPLE CALC IS AREA	DILUTION	COMPOUND OF INTEREST	IS AMOUNT (NG)	Final Extract Volume (UL)	AVE RRF	CONCENTRATION PPB
727072	1	10047	4	2000	0.1352	0.78
			Amt. inj	**Sample Volume (ML)**		
			1	1050		

Caprolactum = 0.8 ug/L

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A4HP9\20120906-12973.b\20906028.D		
Lims ID:	240-14454-J-3-A	Client ID:	MT-MW08S-082212
Inject. Date:	06-Sep-2012 20:10:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0012973-028		
Misc. Info.:	240-14454-J-3-A =240-14454-J-3-A		
Operator:	001574	Instrument ID:	A4HP9
Vol. Injected:	1.0000	ALS Bottle#:	28
Lims Batch ID:	56877	Lims Sample ID:	28
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A4HP9\20120906-12973.b\8270 _9.m		
Last Update:	07-Sep-2012 09:48:47	Calib Date:	06-Sep-2012 17:14:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A4HP9\20120906-12973.b\20906019.D		
Limit Group:	MSS 8270D ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	XAWRK021		
First Level Reviewer: ulmanm		Date:	07-Sep-2012 09:40:44

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	3.844	3.844	0.0	96	183063	4.00	
* 2 Naphthalene-d8	136	4.805	4.805	0.0	99	727072	4.00	
* 3 Acenaphthene-d10	164	6.104	6.103	0.001	86	455497	4.00	
* 4 Phenanthrene-d10	188	7.188	7.188	0.0	98	760592	4.00	
* 5 Chrysene-d12	240	9.149	9.175	-0.026	77	822919	4.00	
* 6 Perylene-d12	264	10.537	10.575	-0.038	92	702773	4.00	
$ 7 2-Fluorophenol	112	2.845	2.849	-0.004	94	746257	11.1	
$ 8 Phenol-d5	99	3.523	3.528	-0.005	0	995110	10.5	
$ 9 Nitrobenzene-d5	82	4.255	4.259	-0.004	84	677605	6.54	
$ 10 2-Fluorobiphenyl (Surr)	172	5.591	5.590	0.001	99	945392	6.57	
$ 11 2,4,6-Tribromophenol	330	6.675	6.679	-0.004	83	191685	12.0	
$ 12 Terphenyl-d14	244	8.326	8.335	-0.009	99	1290746	8.05	
25 1,4-Dioxane	88		1.743					
26 N-Nitrosodimethylamine	74		1.920					
41 Benzaldehyde	77		3.517					9
43 Phenol	94		3.538					9
69 Bis(2-chloroethyl)ether	93		3.624					9
46 2-Chlorophenol	128		3.688					
51 2-Methylphenol	108		4.003					9
53 2,2'-oxybis[1-chloropropane]	45		4.030					9
21 3 & 4 Methylphenol	108		4.115					
57 N-Nitrosodi-n-propylamine	70		4.131					9
58 Acetophenone	105		4.142					
61 Hexachloroethane	117		4.243					
62 Nitrobenzene	77		4.275					
64 Isophorone	82		4.446					9
66 2-Nitrophenol	139		4.516					9
65 2,4-Dimethylphenol	107		4.521					9
70 Bis(2-chloroethoxy)methane	93		4.591					9
73 2,4-Dichlorophenol	162		4.687					
75 Naphthalene	128		4.826					9

Compound	Sig	RT	ADJ RT	DLT RT	Q	Response	On-Col Amt ng/ul	Flags
76 4-Chloroaniline	127		4.847					9
79 Hexachlorobutadiene	225		4.911					
84 Caprolactam	113	5.083	5.109	-0.026	59	10047	0.4087	
86 4-Chloro-3-methylphenol	107		5.189					
87 2-Methylnaphthalene	142		5.333					9
89 Hexachlorocyclopentadiene	237		5.451					
92 2,4,6-Trichlorophenol	196		5.531					
93 2,4,5-Trichlorophenol	196		5.563					
98 1,1'-Biphenyl	154		5.670					
100 2-Chloronaphthalene	162		5.696					
102 2-Nitroaniline	65		5.755					9
105 Dimethyl phthalate	163		5.873					9
107 2,6-Dinitrotoluene	165		5.921					9
109 Acenaphthylene	152		6.006					9
110 3-Nitroaniline	138		6.054					
111 2,4-Dinitrophenol	184		6.124					
112 Acenaphthene	153		6.129					9
113 4-Nitrophenol	109		6.150					9
114 2,4-Dinitrotoluene	165		6.220					9
116 Dibenzofuran	168		6.252					
121 Diethyl phthalate	149		6.375					
123 4-Chlorophenyl phenyl ether	204		6.482					
125 4-Nitroaniline	138		6.498					9
126 Fluorene	166		6.503					9
128 4,6-Dinitro-2-methylphenol	198		6.519					
131 N-Nitrosodiphenylamine	169		6.567					9
139 4-Bromophenyl phenyl ether	248		6.845					
141 Hexachlorobenzene	284		6.914					
142 Atrazine	200		6.930					
143 Pentachlorophenol	266		7.048					
148 Phenanthrene	178		7.208					9
149 Anthracene	178		7.246					9
151 Carbazole	167		7.347					
154 Di-n-butyl phthalate	149	7.551	7.555	-0.004	99	47398	0.1962	
159 Fluoranthene	202		8.079					9
161 Pyrene	202		8.255					
168 Butyl benzyl phthalate	149		8.672					9
173 Bis(2-ethylhexyl) phthalate	149	9.068	9.089	-0.021	95	63618	0.4137	
175 3,3'-Dichlorobenzidine	252		9.115					
177 Benzo[a]anthracene	228		9.158					9
178 Chrysene	228		9.190					9
180 Di-n-octyl phthalate	149		9.618					9
182 Benzo[b]fluoranthene	252		10.136					9
183 Benzo[k]fluoranthene	252		10.157					9
184 Benzo[a]pyrene	252		10.504					9
188 Indeno[1,2,3-cd]pyrene	276		12.075					
189 Dibenz(a,h)anthracene	278		12.075					
190 Benzo[g,h,i]perylene	276		12.529					

Method 8015C - GRO

Nonhalogenated Organics using GC/FID - Modified (Gasoline Range Organics) by Method 8015C

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low

GC Column (2): RTX-VRX 0.45 (mm)

Client Sample ID	Lab Sample ID	TFT2 #
MT-MW07S-082212	240-14454-2	54
MT-MW08S-082212	240-14454-3	71
MT-MW10S-082212	240-14454-4	55
	MB 240-55983/11	56
	LCS 240-55983/12	86
MT-MW07S-082212 MS	240-14454-2 MS	57
MT-MW07S-082212 MSD	240-14454-2 MSD	68

	QC LIMITS
TFT = Trifluorotoluene (Surr)	10-150

Column to be used to flag recovery values

FORM II 8015C

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Sample No.: CCV 240-55983/4 Date Analyzed: 08/28/2012 14:06

Instrument ID: O GC Column: RTX-VRX ID: 0.45(mm)

Lab File ID (Standard): O1082804.D Heated Purge: (Y/N) N

Calibration ID: 10715

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFT RT #		
CONTINUING CALIBRATION SURROGATE				9.06		
UPPER LIMIT				9.16		
LOWER LIMIT				8.96		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCV 240-55983/4 CCVRT		08/28/2012 14:06	O1082804.D	9.06		
MB 240-55983/11		08/28/2012 18:58	O1082811.D	9.05		
LCS 240-55983/12		08/28/2012 19:33	O1082812.D	9.06		
CCV 240-55983/13		08/28/2012 20:07	O1082813.D	9.05		
240-14454-2	MT-MW07S-082212	08/28/2012 20:42	O1082814.D	9.04		
240-14454-2 MS	MT-MW07S-082212 MS	08/28/2012 21:16	O1082815.D	9.06		
240-14454-2 MSD	MT-MW07S-082212 MSD	08/28/2012 21:51	O1082816.D	9.06		
240-14454-3	MT-MW08S-082212	08/28/2012 22:26	O1082817.D	9.04		
240-14454-4	MT-MW10S-082212	08/28/2012 23:01	O1082818.D	9.04		
CCV 240-55983/19		08/28/2012 23:35	O1082819.D	9.05		

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII 8015C

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: O Start Date: 08/20/2012 09:11

Analysis Batch Number: 54955 End Date: 08/20/2012 14:25

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		08/20/2012 09:11	1		RTX-VRX 0.45(mm)
ZZZZZ		08/20/2012 10:20	1		RTX-VRX 0.45(mm)
STD1 240-54955/4 IC		08/20/2012 10:55	1	O1082004.D	RTX-VRX 0.45(mm)
STD2 240-54955/5 IC		08/20/2012 11:30	1	O1082005.D	RTX-VRX 0.45(mm)
STD3 240-54955/6 IC		08/20/2012 12:05	1	O1082006.D	RTX-VRX 0.45(mm)
STD4 240-54955/7 ICRT		08/20/2012 12:40	1	O1082007.D	RTX-VRX 0.45(mm)
STD5 240-54955/8 IC		08/20/2012 13:15	1	O1082008.D	RTX-VRX 0.45(mm)
STD6 240-54955/9 IC		08/20/2012 13:50	1	O1082009.D	RTX-VRX 0.45(mm)
ICV 240-54955/10		08/20/2012 14:25	1	O1082010.D	RTX-VRX 0.45(mm)

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 54955

SDG No.:

Instrument ID: O GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/20/2012 10:55 Calibration End Date: 08/20/2012 13:50 Calibration ID: 10715

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54955/4	O1082004.D
Level 2	STD2 240-54955/5	O1082005.D
Level 3	STD3 240-54955/6	O1082006.D
Level 4	STD4 240-54955/7	O1082007.D
Level 5	STD5 240-54955/8	O1082008.D
Level 6	STD6 240-54955/9	O1082009.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Total Petroleum Hydrocarbons (C6-C10)	11.876	11.876	11.876	11.876	11.876	11.876					4.276 - 19.477	11.876
C6-C12	13.087	13.087	13.087	13.087	13.087	13.087					4.376 - 21.798	13.087
Trifluorotoluene (Surr)	9.046	9.045	9.055	9.055	9.061	9.072					8.798 - 9.298	9.056

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 54955

SDG No.:

Instrument ID: O GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/20/2012 10:55 Calibration End Date: 08/20/2012 13:50 Calibration ID: 10715

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54955/4	O1082004.D
Level 2	STD2 240-54955/5	O1082005.D
Level 3	STD3 240-54955/6	O1082006.D
Level 4	STD4 240-54955/7	O1082007.D
Level 5	STD5 240-54955/8	O1082008.D
Level 6	STD6 240-54955/9	O1082009.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Total Petroleum Hydrocarbons (C6-C10)	193301 184557	170535 181905	170811	180009	Ave		180186.409				4.8		20.0			
C6-C12	244005 195860	193925 192996	185044	189767	Ave		200266.055				11.0		20.0			
Trifluorotoluene (Surr)	81823 104739	80221 108915	92127	78406	Ave		91038.5000				14.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 54955

SDG No.:

Instrument ID: O GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/20/2012 10:55 Calibration End Date: 08/20/2012 13:50 Calibration ID: 10715

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54955/4	O1082004.D
Level 2	STD2 240-54955/5	O1082005.D
Level 3	STD3 240-54955/6	O1082006.D
Level 4	STD4 240-54955/7	O1082007.D
Level 5	STD5 240-54955/8	O1082008.D
Level 6	STD6 240-54955/9	O1082009.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Total Petroleum Hydrocarbons (C6-C10)	Ave	19330067 291047893	34107035	68324473	144007424	221468658	100 1600	200	400	800	1200
C6-C12	Ave	24400487 308793894	38784941	74017433	151813635	235031932	100 1600	200	400	800	1200
Trifluorotoluene (Surr)	Ave	818231 1089147	802207	921271	784063	1047391	10.0 10.0	10.0	10.0	10.0	10.0

Curve Type Legend:
Ave = Average

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-54955/10 Calibration Date: 08/20/2012 14:25

Instrument ID: O Calib Start Date: 08/20/2012 10:55

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/20/2012 13:50

Lab File ID: O1082010.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	180186	207009		919	800	14.9	20.0
C6-C12	Ave	200266	220249		880	800	10.0	20.0
Trifluorotoluene (Surr)	Ave	91039	106067		11.7	10.0	16.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-54955/10 Calibration Date: 08/20/2012 14:25

Instrument ID: O Calib Start Date: 08/20/2012 10:55

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/20/2012 13:50

Lab File ID: O1082010.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.88	4.28	19.48
C6-C12	13.09	4.38	21.80
Trifluorotoluene (Surr)	9.06	8.81	9.31

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: O Start Date: 08/28/2012 12:22

Analysis Batch Number: 55983 End Date: 08/28/2012 23:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		08/28/2012 12:22	1		RTX-VRX 0.45(mm)
ZZZZZ		08/28/2012 12:56	1		RTX-VRX 0.45(mm)
ZZZZZ		08/28/2012 13:31	1		RTX-VRX 0.45(mm)
CCV 240-55983/4 CCVRT		08/28/2012 14:06	1	O1082804.D	RTX-VRX 0.45(mm)
MB 240-55983/11		08/28/2012 18:58	1	O1082811.D	RTX-VRX 0.45(mm)
LCS 240-55983/12		08/28/2012 19:33	1	O1082812.D	RTX-VRX 0.45(mm)
CCV 240-55983/13		08/28/2012 20:07	1	O1082813.D	RTX-VRX 0.45(mm)
240-14454-2	MT-MW07S-082212	08/28/2012 20:42	1	O1082814.D	RTX-VRX 0.45(mm)
240-14454-2 MS	MT-MW07S-082212 MS	08/28/2012 21:16	1	O1082815.D	RTX-VRX 0.45(mm)
240-14454-2 MSD	MT-MW07S-082212 MSD	08/28/2012 21:51	1	O1082816.D	RTX-VRX 0.45(mm)
240-14454-3	MT-MW08S-082212	08/28/2012 22:26	1	O1082817.D	RTX-VRX 0.45(mm)
240-14454-4	MT-MW10S-082212	08/28/2012 23:01	1	O1082818.D	RTX-VRX 0.45(mm)
CCV 240-55983/19		08/28/2012 23:35	1	O1082819.D	RTX-VRX 0.45(mm)

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55983/4 Calibration Date: 08/28/2012 14:06

Instrument ID: O Calib Start Date: 08/20/2012 10:55

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/20/2012 13:50

Lab File ID: O1082804.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	180186	194263		862	800	7.8	20.0
C6-C12	Ave	200266	216341		864	800	8.0	20.0
Trifluorotoluene (Surr)	Ave	91039	80950		8.89	10.0	-11.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55983/4 Calibration Date: 08/28/2012 14:06

Instrument ID: O Calib Start Date: 08/20/2012 10:55

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/20/2012 13:50

Lab File ID: O1082804.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.31	4.27	18.35
C6-C12	13.13	4.37	21.90
Trifluorotoluene (Surr)	9.06	8.81	9.31

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55983/13 Calibration Date: 08/28/2012 20:07

Instrument ID: O Calib Start Date: 08/20/2012 10:55

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/20/2012 13:50

Lab File ID: O1082813.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	180186	184525		819	800	2.4	20.0
C6-C12	Ave	200266	200692		802	800	0.2	20.0
Trifluorotoluene (Surr)	Ave	91039	82586		9.07	10.0	-9.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55983/13 Calibration Date: 08/28/2012 20:07

Instrument ID: O Calib Start Date: 08/20/2012 10:55

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/20/2012 13:50

Lab File ID: O1082813.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.31	4.27	18.35
C6-C12	13.13	4.37	21.90
Trifluorotoluene (Surr)	9.05	8.80	9.30

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55983/19 Calibration Date: 08/28/2012 23:35

Instrument ID: O Calib Start Date: 08/20/2012 10:55

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/20/2012 13:50

Lab File ID: O1082819.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Total Petroleum Hydrocarbons (C6-C10)	Ave	180186	176993		786	800	-1.8	20.0
C6-C12	Ave	200266	193020		771	800	-3.6	20.0
Trifluorotoluene (Surr)	Ave	91039	75754		8.32	10.0	-16.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55983/19 Calibration Date: 08/28/2012 23:35

Instrument ID: O Calib Start Date: 08/20/2012 10:55

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 08/20/2012 13:50

Lab File ID: O1082819.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		TO	FROM
Total Petroleum Hydrocarbons (C6-C10)	11.31	4.27	18.35
C6-C12	13.13	4.37	21.90
Trifluorotoluene (Surr)	9.05	8.80	9.30

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: MB 240-55983/11

Matrix: Water Date Extracted: 08/28/2012 18:58

Lab File ID:(1) Lab File ID:(2) O1082811.D

Date Analyzed:(1) Date Analyzed:(2) 08/28/2012 18:58

Instrument ID:(1) Instrument ID:(2) O

GC Column:(1) ID: GC Column:(2) RTX-VRX ID: 0.45(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-55983/12		08/28/2012 19:33
MT-MW07S-082212	240-14454-2		08/28/2012 20:42
MT-MW07S-082212 MS	240-14454-2 MS		08/28/2012 21:16
MT-MW07S-082212 MSD	240-14454-2 MSD		08/28/2012 21:51
MT-MW08S-082212	240-14454-3		08/28/2012 22:26
MT-MW10S-082212	240-14454-4		08/28/2012 23:01

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-55983/11

Matrix: Water Lab File ID: O1082811.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/28/2012 18:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 55983 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
8006-61-9	Total Petroleum Hydrocarbons (C6-C10)	32.0	J	100	25

CAS NO.	SURROGATE	%REC	Q	LIMITS
98-08-8	Trifluorotoluene (Surr)	56		10-150

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O1082812.D

Lab ID: LCS 240-55983/12 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	912	114	72-140	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 01082815.D

Lab ID: 240-14454-2 MS Client ID: MT-MW07S-082212 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	36 J	916	110	63-143	

Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O1082816.D

Lab ID: 240-14454-2 MSD Client ID: MT-MW07S-082212 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Total Petroleum Hydrocarbons (C6-C10)	800	929	112	1	20	63-143	

Column to be used to flag recovery and RPD values

FORM III 8015C

Method 8015C - DRO

Nonhalogenated Organics using GC/FID - Modified (Diesel Range Organics) by Method 8015C

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-5 ID: 0.53 (mm)

Client Sample ID	Lab Sample ID	C91 #
MT-MW07S-082212	240-14454-2	46
MT-MW08S-082212	240-14454-3	36
MT-MW10S-082212	240-14454-4	54
	MB 240-55631/7-A	37
	LCS 240-55631/8-A	64

	QC LIMITS
C9 = n-Nonane	10-110

Column to be used to flag recovery values

FORM II 8015C

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: MB 240-55631/7-A

Matrix: Water Date Extracted: 08/24/2012 11:18

Lab File ID:(1) P6F82805.D Lab File ID:(2)

Date Analyzed:(1) 08/28/2012 13:31 Date Analyzed:(2)

Instrument ID:(1) A2HP6F Instrument ID:(2)

GC Column:(1) RTX-5 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-55631/8-A	08/28/2012 14:02	
MT-MW07S-082212	240-14454-2	08/28/2012 16:06	
MT-MW10S-082212	240-14454-4	08/28/2012 17:08	
MT-MW08S-082212	240-14454-3	08/29/2012 14:10	

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-55631/7-A

Matrix: Water | Lab File ID: P6F82805.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3520C | Date Extracted: 08/24/2012 11:18

Sample wt/vol: 1000(mL) | Date Analyzed: 08/28/2012 13:31

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RTX-5 ID: 0.53(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 55969 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00141	Total Petroleum Hydrocarbons (C10-C32)	348	J	500	240

CAS NO.	SURROGATE	%REC	Q	LIMITS
111-84-2	n-Nonane	37		10-110

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Matrix: Water Level: Low Lab File ID: P6F82806.D

Lab ID: LCS 240-55631/8-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Diesel	2500	2400	96	36-124	

Column to be used to flag recovery and RPD values

FORM III 8015C

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: A2HP5F Start Date: 08/16/2012 17:45

Analysis Batch Number: 54709 End Date: 08/16/2012 23:22

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-54709/12 IC		08/16/2012 17:45	1	P5F81612.D	
STD2 240-54709/13 IC		08/16/2012 18:16	1	P5F81613.D	
STD3 240-54709/14 ICRT		08/16/2012 18:47	1	P5F81614.D	
STD4 240-54709/15 IC		08/16/2012 19:17	1	P5F81615.D	
STD5 240-54709/16 IC		08/16/2012 19:48	1	P5F81616.D	
ICV 240-54709/17		08/16/2012 20:19	1	P5F81617.D	
STD1 240-54709/18 IC		08/16/2012 20:49	1		
STD2 240-54709/19 IC		08/16/2012 21:20	1		
STD3 240-54709/20 ICRT		08/16/2012 21:50	1		
STD4 240-54709/21 IC		08/16/2012 22:21	1		
STD5 240-54709/22 IC		08/16/2012 22:52	1		
ICV 240-54709/23		08/16/2012 23:22	1		

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 54709

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2012 17:45 Calibration End Date: 08/16/2012 19:48 Calibration ID: 10687

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54709/12	P5F81612.D
Level 2	STD2 240-54709/13	P5F81613.D
Level 3	STD3 240-54709/14	P5F81614.D
Level 4	STD4 240-54709/15	P5F81615.D
Level 5	STD5 240-54709/16	P5F81616.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	8.779	8.779	8.779	8.779	8.779						4.530 - 13.026	8.779
n-Nonane	3.214	3.212	3.210	3.212	3.217						3.144 - 3.284	3.213

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 54709

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2012 17:45 Calibration End Date: 08/16/2012 19:48 Calibration ID: 10687

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54709/12	P5F81612.D
Level 2	STD2 240-54709/13	P5F81613.D
Level 3	STD3 240-54709/14	P5F81614.D
Level 4	STD4 240-54709/15	P5F81615.D
Level 5	STD5 240-54709/16	P5F81616.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel	Ave	22105355	43007714	112576295	221980288	449064974	100	200	500	1000	2000
n-Nonane	Ave	2313072	4533811	11902707	23634265	47204698	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 54709

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 08/16/2012 17:45 Calibration End Date: 08/16/2012 19:48 Calibration ID: 10687

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-54709/12	P5F81612.D
Level 2	STD2 240-54709/13	P5F81613.D
Level 3	STD3 240-54709/14	P5F81614.D
Level 4	STD4 240-54709/15	P5F81615.D
Level 5	STD5 240-54709/16	P5F81616.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	221054 224532	215039	225153	221980	Ave		221551.497				1.8		20.0			
n-Nonane	231307 236023	226691	238054	236343	Ave		233683.606				2.0		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-54709/17 Calibration Date: 08/16/2012 20:19

Instrument ID: A2HP5F Calib Start Date: 08/16/2012 17:45

GC Column: ID: Calib End Date: 08/16/2012 19:48

Lab File ID: P5F81617.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	221551	220960		499	500	-0.3	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-54709/17 Calibration Date: 08/16/2012 20:19

Instrument ID: A2HP5F Calib Start Date: 08/16/2012 17:45

GC Column: ID: Calib End Date: 08/16/2012 19:48

Lab File ID: P5F81617.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	8.78	4.53	13.03

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: A2HP5F Start Date: 08/29/2012 13:40

Analysis Batch Number: 56105 End Date: 08/29/2012 14:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-56105/4 CCVRT		08/29/2012 13:40	1	P5F82904.D	
240-14454-3	MT-MW08S-082212	08/29/2012 14:10	1	P5F82905.D	
CCV 240-56105/6		08/29/2012 14:41	1	P5F82906.D	

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-56105/4 Calibration Date: 08/29/2012 13:40

Instrument ID: A2HP5F Calib Start Date: 08/16/2012 17:45

GC Column: ID: Calib End Date: 08/16/2012 19:48

Lab File ID: P5F82904.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	221551	208735		471	500	-5.8	20.0
n-Nonane	Ave	233684	217338		46.5	50.0	-7.0	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-56105/4 Calibration Date: 08/29/2012 13:40

Instrument ID: A2HP5F Calib Start Date: 08/16/2012 17:45

GC Column: ID: Calib End Date: 08/16/2012 19:48

Lab File ID: P5F82904.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	8.77	4.53	13.02
n-Nonane	3.20	3.13	3.27

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-56105/6 Calibration Date: 08/29/2012 14:41

Instrument ID: A2HP5F Calib Start Date: 08/16/2012 17:45

GC Column: ID: Calib End Date: 08/16/2012 19:48

Lab File ID: P5F82906.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	221551	213758		482	500	-3.5	20.0
n-Nonane	Ave	233684	220750		47.2	50.0	-5.5	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-56105/6 Calibration Date: 08/29/2012 14:41

Instrument ID: A2HP5F Calib Start Date: 08/16/2012 17:45

GC Column: ID: Calib End Date: 08/16/2012 19:48

Lab File ID: P5F82906.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	8.77	4.53	13.02
n-Nonane	3.20	3.13	3.27

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: A2HP6F Start Date: 07/30/2012 13:26

Analysis Batch Number: 52483 End Date: 07/30/2012 18:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD1 240-52483/4 IC		07/30/2012 13:26	1	P6F73004.D	RTX-5 0.53(mm)
STD2 240-52483/5 IC		07/30/2012 13:57	1	P6F73005.D	RTX-5 0.53(mm)
STD3 240-52483/6 ICRT		07/30/2012 14:28	1	P6F73006.D	RTX-5 0.53(mm)
STD4 240-52483/7 IC		07/30/2012 14:59	1	P6F73007.D	RTX-5 0.53(mm)
STD5 240-52483/8 IC		07/30/2012 15:30	1	P6F73008.D	RTX-5 0.53(mm)
ICV 240-52483/9		07/30/2012 16:02	1	P6F73009.D	RTX-5 0.53(mm)
STD1 240-52483/10 IC		07/30/2012 16:33	1		RTX-5 0.53(mm)
STD2 240-52483/11 IC		07/30/2012 17:04	1		RTX-5 0.53(mm)
STD3 240-52483/12 ICRT		07/30/2012 17:34	1		RTX-5 0.53(mm)
STD4 240-52483/13 IC		07/30/2012 18:05	1		RTX-5 0.53(mm)
STD5 240-52483/14 IC		07/30/2012 18:36	1		RTX-5 0.53(mm)

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 52483

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 13:26 Calibration End Date: 07/30/2012 15:30 Calibration ID: 10355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-52483/4	P6F73004.D
Level 2	STD2 240-52483/5	P6F73005.D
Level 3	STD3 240-52483/6	P6F73006.D
Level 4	STD4 240-52483/7	P6F73007.D
Level 5	STD5 240-52483/8	P6F73008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5						RT WINDOW	AVG RT
Diesel	9.398	9.398	9.398	9.398	9.398						5.181 - 13.615	9.398
n-Nonane	4.174	4.175	4.175	4.174	4.176						4.124 - 4.224	4.175

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 52483

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 13:26 Calibration End Date: 07/30/2012 15:30 Calibration ID: 10355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-52483/4	P6F73004.D
Level 2	STD2 240-52483/5	P6F73005.D
Level 3	STD3 240-52483/6	P6F73006.D
Level 4	STD4 240-52483/7	P6F73007.D
Level 5	STD5 240-52483/8	P6F73008.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
		LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
Diesel	Ave	19801734	39012577	91491572	164937593	329731459	100	200	500	1000	2000
n-Nonane	Ave	1789719	3897586	9745006	18001099	36743063	10.0	20.0	50.0	100	200

Curve Type Legend:
Ave = Average

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14454-1 Analy Batch No.: 52483

SDG No.:

Instrument ID: A2HP6F GC Column: RTX-5 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/30/2012 13:26 Calibration End Date: 07/30/2012 15:30 Calibration ID: 10355

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-52483/4	P6F73004.D
Level 2	STD2 240-52483/5	P6F73005.D
Level 3	STD3 240-52483/6	P6F73006.D
Level 4	STD4 240-52483/7	P6F73007.D
Level 5	STD5 240-52483/8	P6F73008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2	LVL 3	LVL 4		B	M1	M2								
Diesel	198017 164866	195063	182983	164938	Ave		181173.338				8.8		20.0			
n-Nonane	178972 183715	194879	194900	180011	Ave		186495.525				4.2		20.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-52483/9 Calibration Date: 07/30/2012 16:02

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F73009.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181173	183339		506	500	1.2	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICV 240-52483/9 Calibration Date: 07/30/2012 16:02

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F73009.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.40	5.18	13.62

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: A2HP6F Start Date: 08/28/2012 13:00

Analysis Batch Number: 55969 End Date: 08/28/2012 17:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 240-55969/4 CCVRT		08/28/2012 13:00	1	P6F82804.D	RTX-5 0.53(mm)
MB 240-55631/7-A		08/28/2012 13:31	1	P6F82805.D	RTX-5 0.53(mm)
LCS 240-55631/8-A		08/28/2012 14:02	1	P6F82806.D	RTX-5 0.53(mm)
ZZZZZ		08/28/2012 14:33	1		RTX-5 0.53(mm)
ZZZZZ		08/28/2012 15:04	1		RTX-5 0.53(mm)
ZZZZZ		08/28/2012 15:35	1		RTX-5 0.53(mm)
240-14454-2	MT-MW07S-082212	08/28/2012 16:06	1	P6F82810.D	RTX-5 0.53(mm)
ZZZZZ		08/28/2012 16:37	1		RTX-5 0.53(mm)
240-14454-4	MT-MW10S-082212	08/28/2012 17:08	1	P6F82812.D	RTX-5 0.53(mm)
CCV 240-55969/13		08/28/2012 17:39	1	P6F82813.D	RTX-5 0.53(mm)

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55969/4 Calibration Date: 08/28/2012 13:00

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F82804.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181173	183218		506	500	1.1	20.0
n-Nonane	Ave	186496	215459		57.8	50.0	15.5	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55969/4 Calibration Date: 08/28/2012 13:00

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F82804.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.39	5.18	13.61
n-Nonane	4.17	4.12	4.22

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55969/13 Calibration Date: 08/28/2012 17:39

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F82813.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Diesel	Ave	181173	186932		516	500	3.2	20.0
n-Nonane	Ave	186496	221057		59.3	50.0	18.5	20.0

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: CCV 240-55969/13 Calibration Date: 08/28/2012 17:39

Instrument ID: A2HP6F Calib Start Date: 07/30/2012 13:26

GC Column: RTX-5 ID: 0.53(mm) Calib End Date: 07/30/2012 15:30

Lab File ID: P6F82813.D

Analyte	RT	RT WINDOW	
		TO	FROM
Diesel	9.39	5.18	13.61
n-Nonane	4.17	4.12	4.22

DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Batch Number: 55631 Batch Start Date: 08/24/12 13:20 Batch Analyst: Matthews, Brandon

Batch Method: 3520C Batch End Date: 08/25/12 07:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	EXDIESELSPKW 00019	EXTPHSURR 00015
240-14454-I-2	MT-MW07S-082212	3520C, 8015C	T	1010 mL	5 mL	7	2		1 mL
240-14454-I-3	MT-MW08S-082212	3520C, 8015C	T	1010 mL	5 mL	7	2		1 mL
240-14454-J-4	MT-MW10S-082212	3520C, 8015C	T	1050 mL	5 mL	7	2		1 mL
MB 240-55631/7		3520C, 8015C		1000 mL	5 mL	7	2		1 mL
LCS 240-55631/8		3520C, 8015C		1000 mL	5 mL	7	2	1 mL	1 mL

Batch Notes	
Person's name who did the concentration	cc/lh
Filter Paper Lot Number	337128
Na2SO4 Lot Number	275338
Prep Solvent Lot #	611572

Basis	Basis Description
T	Total/NA

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG No.:

Project: MSA Main Terminal Groundwater Sampling

Client Sample ID	Lab Sample ID
MT-MW07S-082212	240-14454-2
MT-MW08S-082212	240-14454-3
MT-MW10S-082212	240-14454-4

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

ICV Source: MTMSICVW_00016 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00047

Analyte	ICV 240-57039/5 09/06/2012 10:16				CCV 240-57039/11 09/06/2012 10:52				CCV 240-57039/23 09/06/2012 12:02			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	81.6		80.0	102	100		100	100	99.8		100	100
Arsenic	80.0		80.0	100	98.1		100	98	99.2		100	99
Barium	79.0		80.0	99	96.8		100	97	97.0		100	97
Beryllium	82.0		80.0	103	99.3		100	99	97.4		100	97
Cadmium	82.5		80.0	103	101		100	101	101		100	101
Chromium	82.0		80.0	102	100		100	100	100		100	100
Cobalt	81.6		80.0	102	101		100	101	101		100	101
Copper	83.9		80.0	105	103		100	103	104		100	104
Lead	79.4		80.0	99	97.8		100	98	97.4		100	97
Molybdenum	80.8		80.0	101	106		100	106	103		100	103
Nickel	83.1		80.0	104	103		100	103	102		100	102
Selenium	80.3		80.0	100	99.6		100	100	99.6		100	100
Silver	83.6		80.0	105	103		100	103	103		100	103
Thallium	79.3		80.0	99	97.8		100	98	96.9		100	97
Vanadium	81.1		80.0	101	99.3		100	99	99.2		100	99
Zinc	84.0		80.0	105	102		100	102	102		100	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

ICV Source: MTMSICVW_00016 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00047

Analyte	CCV 240-57039/35 09/06/2012 13:09											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	101		100	101								
Arsenic	99.1		100	99								
Barium	99.1		100	99								
Beryllium	98.4		100	98								
Cadmium	102		100	102								
Chromium	101		100	101								
Cobalt	101		100	101								
Copper	103		100	103								
Lead	98.7		100	99								
Molybdenum	103		100	103								
Nickel	102		100	102								
Selenium	101		100	101								
Silver	103		100	103								
Thallium	97.7		100	98								
Vanadium	99.4		100	99								
Zinc	102		100	102								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

ICV Source: MTHGICVW_00374 Concentration Units: ug/L

CCV Source: MTHGCALW_00241

Analyte	ICV 240-56462/7-A 08/31/2012 09:08				CCVL 240-56462/10-A 08/31/2012 09:13				CCV 240-56462/11-A 08/31/2012 09:30			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.31		2.50	92	5.15		5.00	103	5.24		5.00	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

ICV Source: MTHGICVW_00374 Concentration Units: ug/L

CCV Source: MTHGCALW_00241

Analyte	CCV 240-56462/11-A 08/31/2012 09:48				CCV 240-56462/11-A 08/31/2012 10:06							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.41		5.00	108	5.38		5.00	108				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Method: 6020A Instrument ID: I8

Lab Sample ID: CRI 240-57039/8 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00003

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.07		104	70-130
Arsenic	5.00	4.68	J	94	70-130
Barium	5.00	4.93	J	99	70-130
Beryllium	1.00	1.05		105	70-130
Cadmium	1.00	1.13		113	70-130
Chromium	2.00	2.05		103	70-130
Cobalt	1.00	1.07		107	70-130
Copper	2.00	2.36		118	70-130
Lead	1.00	1.05		105	70-130
Molybdenum	10.0	10.4		104	70-130
Nickel	2.00	2.37		119	70-130
Selenium	5.00	5.40		108	70-130
Silver	1.00	1.12		112	70-130
Thallium	2.00	2.04		102	70-130
Vanadium	5.00	5.04	J	101	70-130
Zinc	20.0	22.8		114	70-130

Lab Sample ID: CRI 240-57039/43 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00003

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.06		103	70-130
Arsenic	5.00	4.76	J	95	70-130
Barium	5.00	4.90	J	98	70-130
Beryllium	1.00	1.05		105	70-130
Cadmium	1.00	1.05		105	70-130
Chromium	2.00	2.10		105	70-130
Cobalt	1.00	1.08		108	70-130
Copper	2.00	2.34		117	70-130
Lead	1.00	1.05		105	70-130
Molybdenum	10.0	9.97	J	100	70-130
Nickel	2.00	2.13		107	70-130
Selenium	5.00	4.78	J	96	70-130
Silver	1.00	1.14		114	70-130
Thallium	2.00	1.90	J	95	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Method: 6020A Instrument ID: I8

Lab Sample ID: CRI 240-57039/43 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRI6020AW_00003

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	5.00	4.97	J	99	70-130
Zinc	20.0	22.8		114	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Method: 7470A Instrument ID: H1

Lab Sample ID: CRA 240-56462/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00241

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.176	J	88	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICSA 240-57039/9 Instrument ID: I8

Lab File ID: I8090612A.csv ICS Source: MTMSICSAW_00017

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.164**	
Arsenic		**0.303**	
Barium		**0.172**	
Beryllium		**0.0270**	
Cadmium		**-0.138**	
Chromium		**0.585**	
Cobalt		**0.0930**	
Copper		**0.291**	
Lead		**0.117**	
Molybdenum	**1000**	**1014**	**101**
Nickel		**0.449**	
Selenium		**0.114**	
Silver		**0.0420**	
Thallium		**0.158**	
Vanadium		**0.233**	
Zinc		**1.54**	
Aluminum	*50000*	*50930*	*102*
Boron		*-0.0910*	
Calcium	*50000*	*52880*	*106*
Iron	*50000*	*51590*	*103*
Magnesium	*50000*	*52630*	*105*
Manganese		*0.193*	
Potassium	*50000*	*53350*	*107*
Sodium	*50000*	*52780*	*106*
Strontium		*0.242*	
Tin		*0.126*	
Titanium	*1000*	*1052*	*105*
Tungsten		*0.353*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Lab Sample ID: ICSAB 240-57039/10 Instrument ID: I8

Lab File ID: I8090612A.csv ICS Source: MTMSICSABW_00017

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**101**	**101**
Arsenic	**100**	**97.1**	**97**
Barium	**100**	**98.5**	**98**
Beryllium	**100**	**102**	**102**
Cadmium	**100**	**100**	**100**
Chromium	**100**	**104**	**104**
Cobalt	**100**	**101**	**101**
Copper	**100**	**101**	**101**
Lead	**100**	**99.6**	**100**
Molybdenum	**1100**	**1122**	**102**
Nickel	**100**	**102**	**102**
Selenium	**100**	**98.2**	**98**
Silver	**100**	**103**	**103**
Thallium	**100**	**99.7**	**100**
Vanadium	**100**	**103**	**103**
Zinc	**100**	**104**	**104**
Aluminum	*50000*	*51150*	*102*
Boron	*100*	*98.6*	*99*
Calcium	*50000*	*52880*	*106*
Iron	*50000*	*52530*	*105*
Magnesium	*50000*	*53580*	*107*
Manganese	*100*	*106*	*106*
Potassium	*50000*	*53560*	*107*
Sodium	*50000*	*53670*	*107*
Strontium	*100*	*95.4*	*95*
Tin	*100*	*101*	*101*
Titanium	*1100*	*1177*	*107*
Tungsten	*100*	*107*	*107*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-56218/1-A

Instrument Code: I8 Batch No.: 57039

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	2.0	U		6020A
7440-38-2	Arsenic	5.0	U		6020A
7440-39-3	Barium	0.678	J		6020A
7440-41-7	Beryllium	1.0	U		6020A
7440-43-9	Cadmium	1.0	U		6020A
7440-47-3	Chromium	2.0	U		6020A
7440-48-4	Cobalt	1.0	U		6020A
7440-50-8	Copper	0.514	J		6020A
7439-92-1	Lead	1.0	U		6020A
7439-98-7	Molybdenum	0.557	J		6020A
7440-02-0	Nickel	2.0	U		6020A
7782-49-2	Selenium	5.0	U		6020A
7440-22-4	Silver	1.0	U		6020A
7440-28-0	Thallium	0.225	J		6020A
7440-62-2	Vanadium	20	U		6020A
7440-66-6	Zinc	6.90	J		6020A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-56220/1-A

Instrument Code: H1 Batch No.: 56469

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-57039/6 09/06/2012 10:23		CCB 240-57039/12 09/06/2012 10:59		CCB 240-57039/24 09/06/2012 12:09		CCB 240-57039/36 09/06/2012 13:16	
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Arsenic	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Barium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Beryllium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Chromium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Cobalt	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Copper	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Lead	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Molybdenum	10	0.400	J	1.08	J	0.420	J	0.370	J
Nickel	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	1.0	1.0	U	1.0	U	1.0	U	1.0	U
Thallium	2.0	0.386	J	0.376	J	0.351	J	0.299	J
Vanadium	20	20	U	20	U	20	U	20	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-56462/8-A 08/31/2012 09:10		CCB 240-56462/12-A 08/31/2012 09:15		CCB 240-56462/12-A 08/31/2012 09:31		CCB 240-56462/12-A 08/31/2012 09:50	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-56462/12-A 08/31/2012 10:07							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-56218/2-A

Lab Name: TestAmerica Canton Job No.: 240-14454-1

Sample Matrix: Water LCS Source: MTICPMSB_00009

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	93.9		94	80	120		6020A
Arsenic	1000	926		93	80	120		6020A
Barium	1000	897		90	80	120		6020A
Beryllium	1000	954		95	80	120		6020A
Cadmium	1000	967		97	80	120		6020A
Chromium	1000	948		95	80	120		6020A
Cobalt	1000	902		90	80	120		6020A
Copper	1000	1000		100	80	120		6020A
Lead	1000	864		86	80	120		6020A
Molybdenum	100	92.0		92	80	120		6020A
Nickel	1000	962		96	80	120		6020A
Selenium	1000	945		94	80	120		6020A
Silver	100	101		101	80	120		6020A
Thallium	250	211		84	80	120		6020A
Vanadium	1000	920		92	80	120		6020A
Zinc	1000	1010		101	80	120		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-56220/2-A

Lab Name: TestAmerica Canton Job No.: 240-14454-1

Sample Matrix: Water LCS Source: MTHGICVW_00373

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.86		97	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: MT-MW10S-082212 MS
Lab ID: 240-14454-4 MS
Lab Name: TestAmerica Canton
Job No.: 240-14454-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.950		0.20	U	1.00	95	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-14408-H-2-C MS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Antimony	96.2		1.9	J	100	94	44-153		6020A
Arsenic	922		0.60	J	1000	92	82-123		6020A
Barium	968		59		1000	91	45-144		6020A
Beryllium	929		1.8		1000	93	77-124		6020A
Cadmium	970		1.0	U	1000	97	78-117		6020A
Chromium	957		1.8	J	1000	96	72-110		6020A
Cobalt	906		7.6		1000	90	67-114		6020A
Copper	987		2.2		1000	98	60-123		6020A
Lead	886		0.79	J	1000	89	73-115		6020A
Molybdenum	94.0		1.9	J	100	92	80-110		6020A
Nickel	959		12		1000	95	72-111		6020A
Selenium	922		0.62	J	1000	92	72-148		6020A
Silver	100		1.0	U	100	100	10-139		6020A
Thallium	216		0.57	J	250	86	69-117		6020A
Vanadium	931		0.84	J	1000	93	70-112		6020A
Zinc	1020		43		1000	98	49-156		6020A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

6-IN
DUPLICATES
METALS

Client ID: MT-MW10S-082212 DU | Lab ID: 240-14454-4 DU

Lab Name: TestAmerica Canton | Job No.: 240-14454-1

SDG No.:

% Solids for Sample: | % Solids for Duplicate:

Matrix: Water | Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury	0.20	0.20	U	0.20	U	NC		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

6-IN
DUPLICATES
METALS - TOTAL RECOVERABLE

Client ID: _____ Lab ID: 240-14408-H-2-B DU

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.: _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Matrix: Water Concentration Units: ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony	2.0	1.9	J	1.90	J	2		6020A
Arsenic	5.0	0.60	J	0.513	J	16		6020A
Barium	5.0	59		57.9		1		6020A
Beryllium	1.0	1.8		1.85		5		6020A
Cadmium	1.0	1.0	U	1.0	U	NC		6020A
Chromium	2.0	1.8	J	2.28		24		6020A
Cobalt	1.0	7.6		7.41		2		6020A
Copper	2.0	2.2		2.35		5		6020A
Lead	1.0	0.79	J	0.757	J	4		6020A
Molybdenum	10	1.9	J	1.67	J	15		6020A
Nickel	2.0	12		12.7		4		6020A
Selenium	5.0	0.62	J	5.0	U	NC		6020A
Silver	1.0	1.0	U	1.0	U	NC		6020A
Thallium	2.0	0.57	J	0.255	J	77		6020A
Vanadium	20	0.84	J	0.596	J	34		6020A
Zinc	20	43		46.2		8		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-14408-H-2-A SD ^5

SDG No:

Lab Name: TestAmerica Canton Job No: 240-14454-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	1.9	J	2.11	J	NC		6020A
Arsenic	0.60	J	25	U	NC		6020A
Barium	59		58.6		NC		6020A
Beryllium	1.8		2.10	J	NC		6020A
Cadmium	1.0	U	5.0	U	NC		6020A
Chromium	1.8	J	10	U	NC		6020A
Cobalt	7.6		7.57		NC		6020A
Copper	2.2		2.84	J	NC		6020A
Lead	0.79	J	0.945	J	NC		6020A
Molybdenum	1.9	J	2.85	J	NC		6020A
Nickel	12		12.9		NC		6020A
Selenium	0.62	J	25	U	NC		6020A
Silver	1.0	U	5.0	U	NC		6020A
Thallium	0.57	J	1.46	J	NC		6020A
Vanadium	0.84	J	100	U	NC		6020A
Zinc	43		50.4	J	NC		6020A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020A MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN

CALIBRATION BLANK DETECTION LIMITS

METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020A XMDL Date: 02/09/2010 15:53

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020A MDL Date: 02/09/2010 15:53

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG Number:

Matrix: Water Instrument ID: I8

Method: 6020A XMDL Date: 02/09/2010 15:53

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Antimony	121.00	2	0.13
Arsenic	75.00	5	0.4
Barium	137.00	5	0.19
Beryllium	9.00	1	0.2
Cadmium	111.00	1	0.13
Chromium	52.00	2	0.71
Cobalt	59.00	1	0.058
Copper	65.00	2	0.29
Lead	208.00	1	0.18
Molybdenum	95.00	10	0.093
Nickel	60.00	2	0.2
Selenium	78.00	5	0.57
Silver	107.00	1	0.08
Thallium	205.00	2	0.14
Vanadium	51.00	20	0.44
Zinc	66.00	20	2.3

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14454-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-14454-1

SDG No.:

Instrument ID: I8 Date: 06/18/2012 15:26

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Antimony		2000	6020A
Arsenic		10000	6020A
Barium		10000	6020A
Beryllium		10000	6020A
Cadmium		10000	6020A
Chromium		10000	6020A
Cobalt		10000	6020A
Copper		10000	6020A
Lead		10000	6020A
Molybdenum		2000	6020A
Nickel		10000	6020A
Selenium		10000	6020A
Silver		2000	6020A
Thallium		10000	6020A
Vanadium		10000	6020A
Zinc		10000	6020A

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-14454-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Mercury		10	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-56218/1-A	08/30/2012 07:45	56218		50	50
LCS 240-56218/2-A	08/30/2012 07:45	56218		50	50
240-14408-H-2-B DU	08/30/2012 07:45	56218		50	50
240-14408-H-2-C MS	08/30/2012 07:45	56218		50	50
240-14454-2	08/30/2012 07:45	56218		50	50
240-14454-2	08/30/2012 07:45	56218		50	50
240-14454-3	08/30/2012 07:45	56218		50	50
240-14454-3	08/30/2012 07:45	56218		50	50
240-14454-4	08/30/2012 07:45	56218		50	50
240-14454-4	08/30/2012 07:45	56218		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-56220/1-A	08/30/2012 14:00	56220		100	100
LCS 240-56220/2-A	08/30/2012 14:00	56220		100	100
240-14454-2	08/30/2012 14:00	56220		100	100
240-14454-2	08/30/2012 14:00	56220		100	100
240-14454-3	08/30/2012 14:00	56220		100	100
240-14454-3	08/30/2012 14:00	56220		100	100
240-14454-4	08/30/2012 14:00	56220		100	100
240-14454-4 DU	08/30/2012 14:00	56220		100	100
240-14454-4 MS	08/30/2012 14:00	56220		100	100
240-14454-4	08/30/2012 14:00	56220		100	100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: I8 Method: 6020A

Start Date: 09/06/2012 09:53 End Date: 09/06/2012 17:32

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
ICIS 240-57039/1			09:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
STD2 240-57039/2 IC	1		09:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
STD3 240-57039/3 IC	1		10:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
STD4 240-57039/4 IC	1		10:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICV 240-57039/5	1		10:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB 240-57039/6	1		10:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CRI 240-57039/7			10:28																				
CRI 240-57039/8	1		10:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSA 240-57039/9	1		10:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB 240-57039/10	1		10:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCV 240-57039/11	1		10:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-57039/12	1		10:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
MB 240-56218/1-A	1	R	11:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCS 240-56218/2-A	1	R	11:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			11:16																				
240-14408-H-2-A SD ^5	5	R	11:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-H-2-B DU	1	R	11:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14408-H-2-C MS	1	R	11:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			11:40																				
ZZZZZZ			11:45																				
ZZZZZZ			11:51																				
ZZZZZZ			11:57																				
CCV 240-57039/23	1		12:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-57039/24	1		12:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			12:15																				
ZZZZZZ			12:20																				
240-14454-2	1	R	12:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14454-2	1	D	12:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14454-3	1	R	12:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14454-3	1	D	12:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14454-4	1	R	12:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
240-14454-4	1	D	12:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			12:58																				
ZZZZZZ			13:04																				
CCV 240-57039/35	1		13:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB 240-57039/36	1		13:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			13:22																				
ZZZZZZ			13:27																				
ZZZZZZ			13:33																				
ZZZZZZ			13:38																				
ZZZZZZ			13:44																				
ZZZZZZ			13:49																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: I8 Method: 6020A

Start Date: 09/06/2012 09:53 End Date: 09/06/2012 17:32

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mo	Ni	Pb	Sb	Se	Tl	V	Zn				
CRI 240-57039/43	1		13:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ			14:00																				
CCV 240-57039/45			14:07																				
CCB 240-57039/46			14:14																				
ZZZZZZ			14:20																				
ZZZZZZ			14:25																				
CCV 240-57039/49			14:33																				
CCB 240-57039/50			14:40																				
ZZZZZZ			14:45																				
ZZZZZZ			14:51																				
ZZZZZZ			14:56																				
ZZZZZZ			15:03																				
ZZZZZZ			15:10																				
ZZZZZZ			15:16																				
ZZZZZZ			15:21																				
ZZZZZZ			15:27																				
ZZZZZZ			15:32																				
ZZZZZZ			15:38																				
CCV 240-57039/61			15:43																				
CCB 240-57039/62			15:51																				
ZZZZZZ			15:56																				
ZZZZZZ			16:02																				
ZZZZZZ			16:07																				
ZZZZZZ			16:13																				
ZZZZZZ			16:18																				
ZZZZZZ			16:24																				
ZZZZZZ			16:29																				
ZZZZZZ			16:35																				
ZZZZZZ			16:40																				
ZZZZZZ			16:46																				
CCV 240-57039/73			16:51																				
CCB 240-57039/74			16:58																				
ZZZZZZ			17:03																				
ZZZZZZ			17:09																				
ZZZZZZ			17:14																				
ZZZZZZ			17:20																				
CCV 240-57039/79			17:25																				
CCB 240-57039/80			17:32																				

Prep Types
D = Dissolved
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/31/2012 09:00 End Date: 08/31/2012 11:40

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
IC 240-56462/1-A			09:00	X																			
IC 240-56462/2-A			09:01	X																			
IC 240-56462/3-A			09:02	X																			
IC 240-56462/4-A			09:03	X																			
IC 240-56462/5-A			09:05	X																			
IC 240-56462/6-A			09:07	X																			
ICV 240-56462/7-A	1		09:08	X																			
ICB 240-56462/8-A	1		09:10	X																			
CRA 240-56462/9-A	1		09:11	X																			
CCVL 240-56462/10-A	1		09:13	X																			
CCB 240-56462/12-A	1		09:15	X																			
ZZZZZZ			09:16																				
ZZZZZZ			09:17																				
ZZZZZZ			09:19																				
ZZZZZZ			09:20																				
MB 240-56220/1-A	1	T	09:21	X																			
LCS 240-56220/2-A	1	T	09:23	X																			
ZZZZZZ			09:24																				
ZZZZZZ			09:25																				
ZZZZZZ			09:27																				
ZZZZZZ			09:28																				
CCV 240-56462/11-A	1		09:30	X																			
CCB 240-56462/12-A	1		09:31	X																			
ZZZZZZ			09:32																				
ZZZZZZ			09:34																				
ZZZZZZ			09:36																				
ZZZZZZ			09:37																				
ZZZZZZ			09:39																				
ZZZZZZ			09:40																				
ZZZZZZ			09:42																				
ZZZZZZ			09:44																				
ZZZZZZ			09:45																				
ZZZZZZ			09:47																				
CCV 240-56462/11-A	1		09:48	X																			
CCB 240-56462/12-A	1		09:50	X																			
240-14454-2	1	T	09:51	X																			
240-14454-2	1	D	09:53	X																			
240-14454-3	1	T	09:54	X																			
240-14454-3	1	D	09:56	X																			
240-14454-4	1	T	09:57	X																			
240-14454-4 DU	1	T	09:59	X																			
240-14454-4 MS	1	T	10:00	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/31/2012 09:00 End Date: 08/31/2012 11:40

Lab Sample ID	D / F	Type	Time	Analytes
				Hg
240-14454-4	1	D	10:01	X
ZZZZZZ			10:03	
ZZZZZZ			10:05	
CCV 240-56462/11-A	1		10:06	X
CCB 240-56462/12-A	1		10:07	X
ZZZZZZ			10:09	
ZZZZZZ			10:11	
ZZZZZZ			10:12	
ZZZZZZ			10:14	
ZZZZZZ			10:16	
ZZZZZZ			10:17	
ZZZZZZ			10:19	
ZZZZZZ			10:21	
ZZZZZZ			10:22	
ZZZZZZ			10:23	
CCV 240-56462/11-A			10:25	
CCB 240-56462/12-A			10:27	
ZZZZZZ			10:28	
ZZZZZZ			10:30	
ZZZZZZ			10:32	
ZZZZZZ			10:34	
ZZZZZZ			10:35	
ZZZZZZ			10:37	
ZZZZZZ			10:38	
ZZZZZZ			10:40	
ZZZZZZ			10:41	
ZZZZZZ			10:42	
CCV 240-56462/11-A			10:44	
CCB 240-56462/12-A			10:45	
ZZZZZZ			10:47	
ZZZZZZ			10:48	
ZZZZZZ			10:50	
ZZZZZZ			10:51	
ZZZZZZ			10:53	
ZZZZZZ			10:54	
ZZZZZZ			10:56	
ZZZZZZ			10:57	
ZZZZZZ			10:59	
ZZZZZZ			11:00	
CCV 240-56462/11-A			11:02	
CCB 240-56462/12-A			11:03	
ZZZZZZ			11:05	

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 08/31/2012 09:00 End Date: 08/31/2012 11:40

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			11:06																					
ZZZZZZ			11:08																					
ZZZZZZ			11:09																					
ZZZZZZ			11:11																					
ZZZZZZ			11:13																					
ZZZZZZ			11:14																					
ZZZZZZ			11:15																					
ZZZZZZ			11:17																					
ZZZZZZ			11:19																					
CCV 240-56462/11-A			11:21																					
CCB 240-56462/12-A			11:22																					
ZZZZZZ			11:24																					
ZZZZZZ			11:25																					
ZZZZZZ			11:27																					
ZZZZZZ			11:28																					
ZZZZZZ			11:29																					
ZZZZZZ			11:31																					
CCV 240-56462/11-A			11:33																					
CCB 240-56462/12-A			11:34																					
ZZZZZZ			11:35																					
ZZZZZZ			11:37																					
ZZZZZZ			11:38																					
ZZZZZZ			11:40																					

Prep Types
D = Dissolved
T = Total/NA

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 09/06/2012 End Date: 09/06/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
STD2 240-57039/2 IC	09:58	96		94		95		93		95	
STD3 240-57039/3 IC	10:05	88		89		92		87		91	
STD4 240-57039/4 IC	10:11	93		88		88		91		93	
ICV 240-57039/5	10:16	95		91		91		90		93	
ICB 240-57039/6	10:23	99		87		87		89		91	
CRI 240-57039/8	10:32	100		93		92		91		95	
ICSA 240-57039/9	10:38	92		85		89		90		92	
ICSAB 240-57039/10	10:43	87		85		90		92		93	
CCV 240-57039/11	10:52	104		94		93		92		94	
CCB 240-57039/12	10:59	107		93		91		93		95	
MB 240-56218/1-A	11:04	106		93		91		93		95	
LCS 240-56218/2-A	11:09	100		91		92		92		95	
240-14408-H-2-A SD	11:22	111		98		94		97		98	
240-14408-H-2-B DU	11:27	110		97		95		97		97	
240-14408-H-2-C MS	11:32	108		94		93		95		96	
CCV 240-57039/23	12:02	100		94		94		92		95	
CCB 240-57039/24	12:09	111		96		93		93		96	
240-14454-2	12:26	109		99		99		102		101	
240-14454-2	12:31	116		104		102		104		102	
240-14454-3	12:36	113		102		99		101		100	
240-14454-3	12:42	115		103		99		101		100	
240-14454-4	12:47	111		99		95		96		96	
240-14454-4	12:53	108		96		93		94		95	
CCV 240-57039/35	13:09	101		97		97		94		97	
CCB 240-57039/36	13:16	111		96		94		94		96	
CRI 240-57039/43	13:54	103		89		86		87		90	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 09/06/2012 End Date: 09/06/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD2 240-57039/2 IC	09:58					90					
STD3 240-57039/3 IC	10:05					83					
STD4 240-57039/4 IC	10:11					97					
ICV 240-57039/5	10:16					91					
ICB 240-57039/6	10:23					96					
CRI 240-57039/8	10:32					99					
ICSA 240-57039/9	10:38					89					
ICSAB 240-57039/10	10:43					91					
CCV 240-57039/11	10:52					93					
CCB 240-57039/12	10:59					100					
MB 240-56218/1-A	11:04					101					
LCS 240-56218/2-A	11:09					100					
240-14408-H-2-A SD	11:22					102					
240-14408-H-2-B DU	11:27					100					
240-14408-H-2-C MS	11:32					99					
CCV 240-57039/23	12:02					94					
CCB 240-57039/24	12:09					102					
240-14454-2	12:26					105					
240-14454-2	12:31					106					
240-14454-3	12:36					103					
240-14454-3	12:42					103					
240-14454-4	12:47					99					
240-14454-4	12:53					98					
CCV 240-57039/35	13:09					96					
CCB 240-57039/36	13:16					102					
CRI 240-57039/43	13:54					97					

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Batch Number: 56218 Batch Start Date: 08/30/12 07:45 Batch Analyst: McGall, Lisa

Batch Method: 3005A Batch End Date: 08/30/12 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTHCL 00038	MTHNO3 00032	MTICPMS2 00009	MTICPMSA 00009
MB 240-56218/1		3005A, 6020A		50 mL	50 mL	2.5 mL	1 mL		
LCS 240-56218/2		3005A, 6020A		50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-14408-H-2 DU		3005A, 6020A	R	50 mL	50 mL	2.5 mL	1 mL		
240-14408-H-2 MS		3005A, 6020A	R	50 mL	50 mL	2.5 mL	1 mL	0.5 mL	0.5 mL
240-14454-G-2	MT-MW07S-082212	3005A, 6020A	R	50 mL	50 mL	2.5 mL	1 mL		
240-14454-H-2	MT-MW07S-082212	3005A, 6020A	D	50 mL	50 mL	2.5 mL	1 mL		
240-14454-G-3	MT-MW08S-082212	3005A, 6020A	R	50 mL	50 mL	2.5 mL	1 mL		
240-14454-H-3	MT-MW08S-082212	3005A, 6020A	D	50 mL	50 mL	2.5 mL	1 mL		
240-14454-G-4	MT-MW10S-082212	3005A, 6020A	R	50 mL	50 mL	2.5 mL	1 mL		
240-14454-H-4	MT-MW10S-082212	3005A, 6020A	D	50 mL	50 mL	2.5 mL	1 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICPMSB 00009					
MB 240-56218/1		3005A, 6020A							
LCS 240-56218/2		3005A, 6020A		0.5 mL					
240-14408-H-2 DU		3005A, 6020A	R						
240-14408-H-2 MS		3005A, 6020A	R	0.5 mL					
240-14454-G-2	MT-MW07S-082212	3005A, 6020A	R						
240-14454-H-2	MT-MW07S-082212	3005A, 6020A	D						
240-14454-G-3	MT-MW08S-082212	3005A, 6020A	R						
240-14454-H-3	MT-MW08S-082212	3005A, 6020A	D						
240-14454-G-4	MT-MW10S-082212	3005A, 6020A	R						
240-14454-H-4	MT-MW10S-082212	3005A, 6020A	D						

Batch Notes	
Filter Paper Lot Number	6637617
Pipette ID	383363
Digestion Tube/Cup Lot #	1207159

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Batch Number: 56218 Batch Start Date: 08/30/12 07:45 Batch Analyst: McGall, Lisa

Batch Method: 3005A Batch End Date: 08/30/12 16:00

Basis	Basis Description
R	Total Recoverable
D	Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Batch Number: 56220 Batch Start Date: 08/30/12 14:00 Batch Analyst: McGall, Lisa

Batch Method: 7470A Batch End Date: 08/30/12 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTH2S04 00009	MTHGICVW 00373	MTHNO3 00032	MTK2S2O8Liq 00003
MB 240-56220/1		7470A, 7470A		100 mL	100 mL	5 mL		2.5 mL	8 mL
LCS 240-56220/2		7470A, 7470A		100 mL	100 mL	5 mL	1 mL	2.5 mL	8 mL
240-14454-G-2	MT-MW07S-082212	7470A, 7470A	T	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-14454-H-2	MT-MW07S-082212	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-14454-G-3	MT-MW08S-082212	7470A, 7470A	T	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-14454-H-3	MT-MW08S-082212	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-14454-G-4	MT-MW10S-082212	7470A, 7470A	T	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-14454-G-4 DU	MT-MW10S-082212	7470A, 7470A	T	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-14454-G-4 MS	MT-MW10S-082212	7470A, 7470A	T	100 mL	100 mL	5 mL	0.2 mL	2.5 mL	8 mL
240-14454-H-4	MT-MW10S-082212	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00030
MB 240-56220/1		7470A, 7470A		15 mL
LCS 240-56220/2		7470A, 7470A		15 mL
240-14454-G-2	MT-MW07S-082212	7470A, 7470A	T	15 mL
240-14454-H-2	MT-MW07S-082212	7470A, 7470A	D	15 mL
240-14454-G-3	MT-MW08S-082212	7470A, 7470A	T	15 mL
240-14454-H-3	MT-MW08S-082212	7470A, 7470A	D	15 mL
240-14454-G-4	MT-MW10S-082212	7470A, 7470A	T	15 mL
240-14454-G-4 DU	MT-MW10S-082212	7470A, 7470A	T	15 mL
240-14454-G-4 MS	MT-MW10S-082212	7470A, 7470A	T	15 mL
240-14454-H-4	MT-MW10S-082212	7470A, 7470A	D	15 mL

Batch Notes	
Pipette ID	432085 383364

Basis	Basis Description
T	Total/NA
D	Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-14454-1

SDG No.:

Batch Number: 56462 Batch Start Date: 08/30/12 12:00 Batch Analyst: Davies, Brian

Batch Method: 7470A Batch End Date: 08/30/12 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTH2S04 00009	MTHGCALW 00241	MTHGICVW 00374	MTHNO3 00032
ICV 240-56462/7		7470A, 7470A		100 mL	100 mL	5 mL		0.5 mL	2.5 mL
ICB 240-56462/8		7470A, 7470A		100 mL	100 mL	5 mL			2.5 mL
CRA 240-56462/9		7470A, 7470A		100 mL	100 mL	5 mL	0.2 mL		2.5 mL
CCVL 240-56462/10		7470A, 7470A		100 mL	100 mL	5 mL	5 mL		2.5 mL
CCV 240-56462/11		7470A, 7470A		100 mL	100 mL	5 mL	5 mL		2.5 mL
CCB 240-56462/12		7470A, 7470A		100 mL	100 mL	5 mL			2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTK2S2O8Liq 00003	MTKMN04W 00030				
ICV 240-56462/7		7470A, 7470A		8 mL	15 mL				
ICB 240-56462/8		7470A, 7470A		8 mL	15 mL				
CRA 240-56462/9		7470A, 7470A		8 mL	15 mL				
CCVL 240-56462/10		7470A, 7470A		8 mL	15 mL				
CCV 240-56462/11		7470A, 7470A		8 mL	15 mL				
CCB 240-56462/12		7470A, 7470A		8 mL	15 mL				

Batch Notes	

Basis	Basis Description

MT-MW075-052012

240-14454-g-2-a, 9/6/2012 12:26:03 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B
		ppb	ppb	ppb
x		109.422%	2.983	30.770
%RSD		2.587	1.230	1.262
Run	Time	23Na	25Mg	27Al
		ppb	ppb	ppb
x		5661.000	862.100	514.400
%RSD		1.242	1.098	0.742
Run	Time	35Cl	39K	43Ca
		ppb	ppb	ppb
x		r0.000	r1043.000	3652.000
%RSD		r0.000	r1.134	1.349
Run	Time	45Sc	45Sc	47Ti
		ppb	ppb	ppb
x		r99.425%	99.142%	11.210
%RSD		r0.956	1.813	10.410
Run	Time	51V	52Cr	53Cl O
		ppb	ppb	ppb
x		2.433	5.186	12.760
%RSD		11.910	1.363	17.190
Run	Time	55Mn	56Fe	59Co
		ppb	ppb	ppb
x		79.430	1908.000	19.950
%RSD		0.727	0.920	1.209
Run	Time	60Ni	65Cu	66Zn
		ppb	ppb	ppb
x		30.690	3.387	53.430
%RSD		1.341	1.898	1.046
Run	Time	72Ge	75As	77Ar Cl
		ppb	ppb	ppb
x		102.192%	0.121	0.244
%RSD		0.780	32.430	13.700
Run	Time	78Se	88Sr	95Mo
		ppb	ppb	ppb
x		0.109	38.480	0.222
%RSD		77.980	0.634	11.810
Run	Time	105Pd	107Ag	108Mo O
		ppb	ppb	ppb
x		0.000	0.006	-0.492
%RSD		0.000	50.690	115.700
Run	Time	111Cd	115In	118Sn
		ppb	ppb	ppb
x		0.028	101.047%	0.207
%RSD		45.700	1.061	4.864
Run	Time	121Sb	137Ba	159Tb
		ppb	ppb	ppb
x		0.169	20.020	0.000
%RSD		9.139	1.115	0.000
Run	Time	165Ho	182W	205Tl
		ppb	ppb	ppb
x		0.000	0.200	0.163
%RSD		0.000	5.657	1.082
Run	Time	208Pb	209Bi	
		ppb	ppb	
x		0.554	104.923%	
%RSD		0.162	0.724	

Ba = 20 ug/L

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**A. APANAVAGE**	**DATE:**	**MAY 21, 2012**
FROM:	**TERRI L. SOLOMON**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – HEXAVALENT CHROMIUM**
MARTIN STATE AIRPORT – GROUNDWATER
SAMPLE DELIVERY GROUP (SDG) – R1202581

SAMPLES: 2/Aqueous/

MT-MW04S-042412 MT-MW06S-042412

Overview

The sample set for Martin State Airport – Groundwater, SDG R1202581, consists of two (2) aqueous environmental samples. No field duplicate pairs were included in this SDG.

All samples were analyzed for hexavalent chromium. The samples were collected by Tetra Tech on April 24, 2012 and analyzed by Columbia Analytical Services, Inc. Hexavalent chromium analyses were conducted using EPA method 218.6.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, continuing calibration recoveries, laboratory method / preparation blank results, laboratory control sample recoveries, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems –None.

Minor Problems

- The 24 hour hold time for hexavalent chromium was exceeded by 1 day for samples MT-MW04S-042412 and MT-MW06S-042412 due to high baseline bias. The nondetected results reported for the affected samples were qualified as estimated, "UJ".

Notes

All samples were filtered in the laboratory and preserved by the laboratory to a pH of 9.3-9.7.

Nondetected results are reported to the method reporting limit.

Positive results for hexavalent chromium were present in the continuing calibrations blanks (0.026 ug/L, 0.020 ug/L) affecting the samples. However, no validation actions were warranted as the sample results were nondetects.

Executive Summary

Laboratory Performance: The 24 hour hold time was exceeded by 1 day for samples MT-MW04S-042412 and MT-MW06S-042412.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to Region III modifications to the "National Functional Guidelines for Inorganic Data Validation", April 1993.

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Terri L. Solomon
Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	MT-MW04S-042412			MT-MW06S-042412		
SDG: R1202581	LAB_ID	R1202581-001			R1202581-002		
FRACTION: MISC	SAMP_DATE	4/24/2012			4/24/2012		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.02	UJ	H	0.02	UJ	H

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1202581
Project:	MSA Groundwater/112IC04021- 02	**Date Collected:**	4/24/12 1215
Sample Matrix:	Water	**Date Received:**	4/25/12
Sample Name:	MT-MW04S-042412		
Lab Code:	R1202581-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6	0.020	U	µg/L	0.020	0.004	1	NA	4/26/12 14:14	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1202581
Project:	MSA Groundwater/112IC04021- 02	**Date Collected:**	4/24/12 1457
Sample Matrix:	Water	**Date Received:**	4/25/12
Sample Name:	MT-MW06S-042412		
Lab Code:	R1202581-002	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6	0.020	U	µg/L	0.020	0.004	1	NA	4/26/12 14:23	

APPENDIX C
SUPPORT DOCUMENTATION

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1202581
Project:	MSA Groundwater	**Project Number:**	112IC04021 - 02
Sample Matrix:	Water	**Date Received:**	4/25/12

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Water samples were collected on 4/24/12 and received at CAS in good condition at a cooler temperature of 1.4 °C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the CAS CLP Batching sheets for a cross-reference between Client ID and CAS Job # and analyses requested.

Hexavalent Chromium Analysis – 218.6

Two samples were analyzed for CR+6 by EPA method 218.6, low level. Values detected between the MDL and PQL have been flagged with a "J" as estimated.

Note: samples MT-MW04S-042412 and MT-MW-06S-042412 were done outside the 24 hour holding time due to a high baseline bias caused by instrument issues. The samples were analyzed as soon as possible after the problem was corrected.

All the initial and continuing calibration criteria were met.

The Blank Spike (LCS) recovery was within QC limits.

The Laboratory Blank associated with these samples was free of contamination.

No other analytical or QC problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Columbia Analytical Services™ CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

1565 Jefferson Rd., Bldg. 300, Suite 360, Rochester, NY 14623 | 585.288.5380 | 800.695.7222 | 585.288.8475 (fax) PAGE 1 OF 1

Project Name: MSA Ground Water Sampling	Project Number: 112IC04021-02
Project Manager: Tony Apanavage	Report CC:
Company/Address: Tetra Tech INC. 20251 Century Blvd STE 200 Germantown MD 20874	
Phone #: 301 528-3021	E-mail:
Sampler's Signature:	Sampler's Printed Name: Matt Payne

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 0

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐8260 ☐624 ☐CLP	GC/MS SVOA's ☐8270 ☐625	GC VOA's ☐8021 ☐601/602	PESTICIDES ☐8081 ☐608	PCB's ☐8082 ☐608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Hex Chrom							REMARKS/ ALTERNATE DESCRIPTION
MT-MW04S-042412		4.24.12	1215	Water	1								X							
MT-MW06S-042412		↓	1457	↓	1								X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals 24 TAT

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED:

TURNAROUND REQUIREMENTS
X RUSH (SURCHARGES APPLY)
X 1 day ___ 2 day ___ 3 day
___ 4 day ___ 5 day
___ Standard

REQUESTED REPORT DATE

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data

Edata ___ Yes ___ No

INVOICE INFORMATION
PO #:
BILL TO:

R1202581 5
Tetra Tech NUS,Inc.
MSA Groundwater

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	
Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: Matt Payne	Printed Name: Amy Henschke	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Firm: TT INC.	Firm: AS	Firm:	Firm:	Firm:	Firm:
Date/Time: 4.24.12 / 1800	Date/Time: 4/25/12 0955	Date/Time:	Date/Time:	Date/Time:	Date/Time:

Distribution: White - Lab Copy; Yellow - Return To Originator

SCOC Rev. 7/2011

HOLDTIME

SDG R1202557

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MT-MW06S-042412	R1202581-002	NM	4/24/2012	4/26/2012	4/26/2012	2	0	2
CR6	UG/L	MT-MW05S-042512	R1202604-003	NM	4/25/2012	4/26/2012	4/26/2012	1	0	1
CR6	UG/L	MT-MW04S-042412	R1202581-001	NM	4/24/2012	4/26/2012	4/26/2012	2	0	2
CR6	UG/L	MT-MW03S-042512	R1202604-002	NM	4/25/2012	4/26/2012	4/26/2012	1	0	1
CR6	UG/L	MT-MW01S-042512	R1202604-001	NM	4/25/2012	4/26/2012	4/26/2012	1	0	1
CR6	UG/L	MSA-MW35S-042312	R1202557-006	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW20S-042312	R1202557-001	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW20I-042312	R1202557-002	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW20D-042312	R1202557-003	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW17S-042312	R1202557-004	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW17I-042312	R1202557-005	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	GSP-MW3-042612	R1202652-003	NM	4/26/2012	4/27/2012	4/27/2012	1	0	1
CR6	UG/L	GSP-MW2-042612	R1202652-001	NM	4/26/2012	4/27/2012	4/27/2012	1	0	1
CR6	UG/L	GSP-MW1-042612	R1202652-002	NM	4/26/2012	4/27/2012	4/27/2012	1	0	1

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
4/20/12 0755	R1202486-004	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/19/12 1240	~~Yes~~ No Field	Millex HV R1SA546004	—	5.94	9.36	AMW 4/20/12 0932	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
↓	R1202486-005	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/19/12 1245	~~Yes~~ No Field		—	5.22	9.39	AMW 4/20/12 0934	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
—	Filter Blank for 4/20/12	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	—	~~Yes~~ No Field	↓	—	5.69	9.53	AMW 4/20/12 0935	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
4/24/12 0950	R1202557-001	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1530	~~Yes~~ No Field	Millex HV R1SA546004	—	5.84	9.36 *	AMW 4/24/12 1255	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
↓	R1202557-002	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1535	~~Yes~~ No Field	↓	—	6.20	9.31 *	AMW 4/24/12 1257	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	R1202557-003	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1540	~~Yes~~ No Field		—	5.22	9.43	AMW 4/12/24 1300	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	R1202557-004	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1510	~~Yes~~ No Field		—	7.16	9.32	AMW 4/24/12 1301	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
↓	R1202557-005	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1515	~~Yes~~ No Field	↓	—	5.35	9.46	AMW 4/24/12 1303	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

*Green PPT formed

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
4/24/12	R1202557-006	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	4/23/12 1555	(Yes) No Field	Millex HV R1SA5462ZK	—	4.66	9.37	CMW 4/24/12 1304	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032783
↓	Filter Blank for 4/24/12	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	—	(Yes) No Field	↓	—	5.73	9.59	CMW 4/24/12 1305	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
4/25/12 0955	R1202581-001	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	4/24/12 1215	(Yes) No Field	Millex HV R1SA5462ZK	—	5.16	9.39	CMW 4/25/12 1054	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
↓	R1202581-002	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	4/24/12 1457	(Yes) No Field	↓	—	4.73	9.52	CMW 4/25/12 1055	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
↓	Filter Blank for 4/25/12	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	—	(Yes) No Field	↓	—	5.69	9.39	CMW 4/25/12 1057	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
4/25/12 1010	R1202582 -003	(7199) 218.6 RL 218.6 LL 218.7	(Water) Drinking Water	4/24/12 1530	Yes (No) Field	—	—	8.22	9.45	CMW 4/25/12 1217	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
4/26/12 1000	R1202604 -001	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	4/25/12 1335	(Yes) No Field	Millex HV R1SA5462ZK	—	6.56	9.34	CMW 4/26/12 1129	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
↓	R1202604 -002	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	4/25/12 1450	(Yes) No Field	↓	—	7.09	9.42	CMW 4/26/12 1131	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
4/26/12 1000	R1202604 -003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/25/12 1530	Yes No Field	R1SA54620K Millex HV	—	4.51	9.36	CMW 4/26/12 1133	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC103278I
—	Filter Blank for 4/26/12	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/25/12 —	Yes No Field		—	8.40	9.39	CMW 4/26/12 1135	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC103278I
4/26/12 1000	R1202582 -010	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/25/12 1600	Yes No Field	—	—	5.51	9.46	CMW 4/26/12 1455	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC103278I
	R1202582 -012	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/25/12 1605	Yes No Field	—	—	5.63	9.39	CMW 4/26/12 1458	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC103278I
4/27/12 0925	Filter Blank For 4/27/12	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	—	Yes No Field	Millex HV R1SA54620K	—	7.65	9.33	CMW 4/27/12 1004	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112022E
	MW1 R1202652-002	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/26/12 1325	Yes No Field		—	6.60	9.38	CMW 4/27/12 1005	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112022E
	MW2 R1202652 -001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/26/12 1320	Yes No Field		—	5.31	9.63	CMW 4/27/12 1007	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112022E
	MW3 R1202652 -003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/26/12 1440	Yes No Field		—	6.01	9.67	CMW 4/27/12 1008	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC112022E

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

H:\SMODOCS\Forms\cr+6SMO log

Instrument Name: R-IC-05 **Analyst:** CWOODS **Analysis Lot:** 289198 **Method/Testcode:** 218.6/Cr6 D

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1204265-05	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 µg/L	10 mL	0.499 µg/L	1					4/26/12 12:08:00	N	IV
RQ1204265-08	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:17:00	N	IV
RQ1204265-09	Chromium, Hexavalent, Dissolved	MB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:17:00	N	IV
RQ1204265-10	Chromium, Hexavalent, Dissolved	LCS		Water	0.20 µg/L	10 mL	0.197 µg/L	1	0.004	0.020	99		4/26/12 12:25:00	N	IV
R1202604-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:42:00	N	IV
R1202604-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:50:00	N	IV
R1202604-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:59:00	N	IV
RQ1204265-01	Chromium, Hexavalent, Dissolved	DUP	R1202604-003	Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020		NC	4/26/12 13:07:00	N	IV
RQ1204265-02	Chromium, Hexavalent, Dissolved	MS	R1202604-003	Water	0.20 µg/L	10 mL	0.201 µg/L	1	0.004	0.020	100		4/26/12 13:16:00	N	IV
R1202557-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 13:32:00	N	IV
R1202557-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 13:41:00	N	IV
RQ1204265-04	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 µg/L	10 mL	0.515 µg/L	1					4/26/12 13:49:00	N	IV
RQ1204265-06	Chromium, Hexavalent, Dissolved	CCB		Water	0.03 µg/L	10 mL	0.026 µg/L	1	0.004	0.020			4/26/12 13:57:00	N	IV
R1202581-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 14:14:00	N	IV
R1202581-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 14:23:00	N	IV
RQ1204265-03	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 µg/L	10 mL	0.520 µg/L	1					4/26/12 14:52:00	N	IV
RQ1204265-07	Chromium, Hexavalent, Dissolved	CCB		Water	0.02 µg/L	10 mL	0.020 µg/L J	1	0.004	0.020			4/26/12 15:01:00	N	IV

00017

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1202581
Project:	MSA Groundwater/112IC04021- 02	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1202581-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6	0.020	U	µg/L	0.020	0.004	1	NA	4/26/12 12:17	

Client: Tetra Tech NUS, Inc.
Project: MSA Groundwater/112IC04021- 02
Sample Matrix: Water

Service Request: R1202581
Date Analyzed: 4/26/12

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1202581-LCS Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6	0.197	0.200	99	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Tetra Tech NUS, Inc. **Service Request:** R1202581
Project: MSA Groundwater/112IC04021- 02

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 **Units:** µg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	289198	RQ1204265-05	4/26/12 12:08	0.500	0.499	100	95 - 105
CCV2	289198	RQ1204265-04	4/26/12 13:49	0.500	0.515	103	95 - 105
CCV3	289198	RQ1204265-03	4/26/12 14:52	0.500	0.520	104	95 - 105

Client: Tetra Tech NUS, Inc. **Service Request:** R1202581
Project: MSA Groundwater/112IC04021- 02

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 **Units:** µg/L

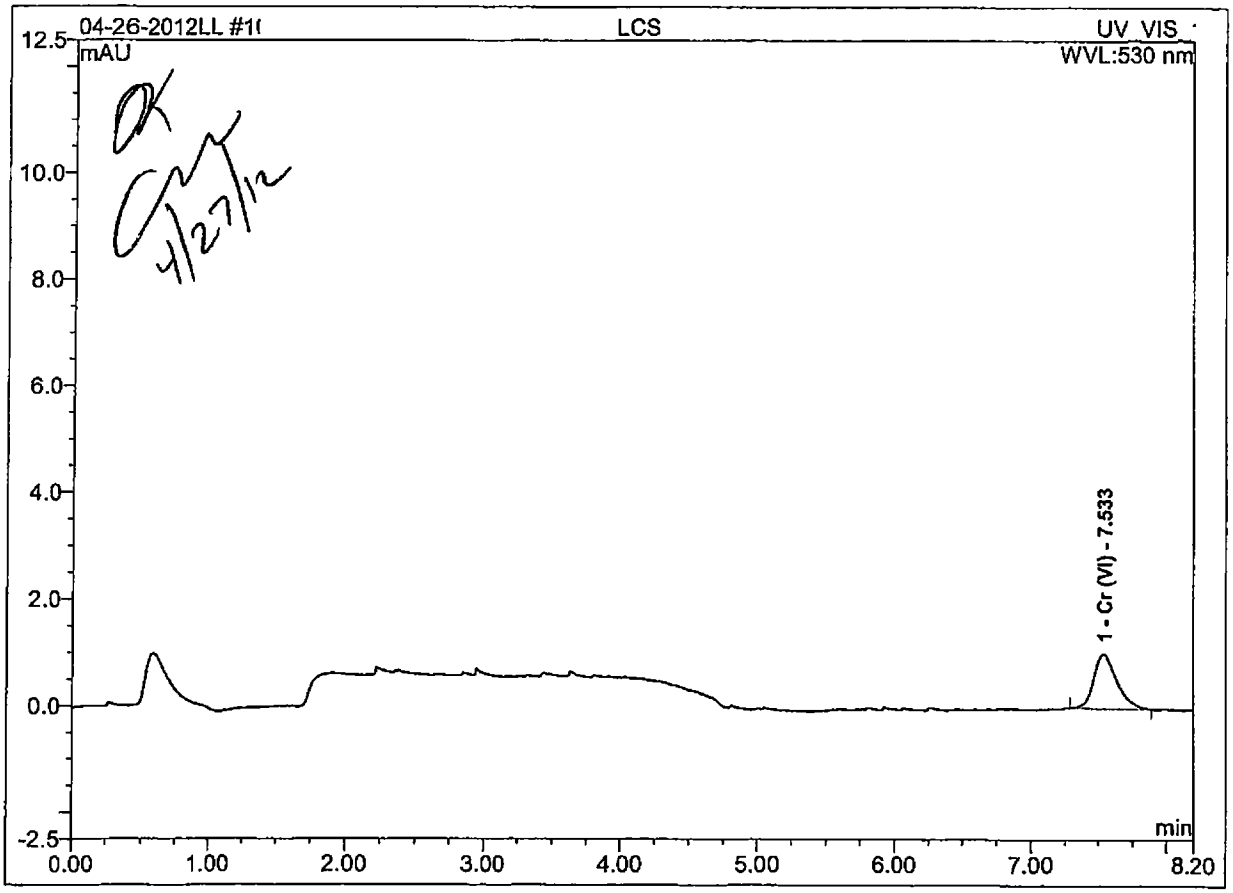
	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	289198	RQ1204265-08	4/26/12 12:17	0.004	0.020	0.020	U
CCB2	289198	RQ1204265-06	4/26/12 13:57	0.004	0.020	**0.026**	
CCB3	289198	RQ1204265-07	4/26/12 15:01	0.004	0.020	**0.020**	J

LCS rep result 0.197 ug/L

10 LCS

218.6 LL

Sample Name:	**LCS**	*Injection Volume:*	**2000.0**
Vial Number:	**34**	*Channel:*	**UV_VIS_1**
Sample Type:	**unknown**	*Dilution Factor:*	**1**
Control Program:	**Fast Hexavalent Chromium LL**	*Sample Weight:*	**1.0000**
Quantif. Method:	**5-042612CLL**	*Sample Amount:*	**1.0000**
Recording Time:	**4/26/2012 12:25**		



4/27/12

No.	Ret.Time min	Peak Name	Height mAU	Area mAU*min	Rel.Area %	Amount ppb	Type
1	7.533	Cr (VI)	1.023	0.201	100.00	0.19736	BMB
Total:			1.023	0.201	100.00	0.197	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR11 Build 3161 (184582)

Tetra Tech **INTERNAL CORRESPONDENCE**

TO:	**A. APANAVAGE**	**DATE:**	**MAY 21, 2012**
FROM:	**TERRI L. SOLOMON**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – HEXAVALENT CHROMIUM**
MARTIN STATE AIRPORT – GROUNDWATER
SAMPLE DELIVERY GROUP (SDG) – R1202604

SAMPLES: 3/Aqueous/

MT-MW01S-042512 MT-MW03S-042512
MT-MW05S-042512

Overview

The sample set for Martin State Airport – Groundwater, SDG R1202604, consists of three (3) aqueous environmental samples. No field duplicate pairs were included in this SDG.

All samples were analyzed for hexavalent chromium. The samples were collected by Tetra Tech on April 25, 2012 and analyzed by Columbia Analytical Services, Inc. Hexavalent chromium analyses were conducted using EPA method 218.6.

The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, continuing calibration recoveries, laboratory method / preparation blank results, laboratory control sample recoveries, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems –None.

Minor Problems- None.

Notes

All samples were filtered in the laboratory and preserved by the laboratory to a pH of 9.3-9.7.

Nondetected results are reported to the method reporting limit.

Positive results for hexavalent chromium were present in the continuing calibrations blanks (0.026 ug/L, 0.020 ug/L) affecting the samples. However, no validation actions were warranted as the sample results were nondetects.

Executive Summary

Laboratory Performance: None.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to Region III modifications to the "National Functional Guidelines for Inorganic Data Validation", April 1993.

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Terri L. Solomon
Environmental Scientist

Tetra Tech
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 sigma deviation is less than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	MT-MW01S-042512			MT-MW03S-042512			MT-MW05S-042512		
SDG: R1202604	LAB_ID	R1202604-001			R1202604-002			R1202604-003		
FRACTION: MISC	SAMP_DATE	4/25/2012			4/25/2012			4/25/2012		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
HEXAVALENT CHROMIUM		0.02	U		0.02	U		0.02	U	

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1202604
Project:	MSA Groundwater/112IC04021- 02	**Date Collected:**	4/25/12 1335
Sample Matrix:	Water	**Date Received:**	4/26/12
Sample Name:	MT-MW01S-042512		
Lab Code:	R1202604-001	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6	0.020	U	µg/L	0.020	0.004	1	NA	4/26/12 12:42	

Client: Tetra Tech NUS, Inc.
Project: MSA Groundwater/112IC04021- 02
Sample Matrix: Water

Service Request: R1202604
Date Collected: 4/25/12 1450
Date Received: 4/26/12

Sample Name: MT-MW03S-042512
Lab Code: R1202604-002

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6	0.020	U	µg/L	0.020	0.004	1	NA	4/26/12 12:50	

Client: Tetra Tech NUS, Inc.
Project: MSA Groundwater/112IC04021- 02
Sample Matrix: Water

Service Request: R1202604
Date Collected: 4/25/12 1530
Date Received: 4/26/12

Sample Name: MT-MW05S-042512
Lab Code: R1202604-003

Basis: NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6	0.020	U	µg/L	0.020	0.004	1	NA	4/26/12 12:59	

APPENDIX C
SUPPORT DOCUMENTATION

COLUMBIA ANALYTICAL SERVICES, INC.
Now part of the ALS Group

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1202604
Project:	MSA Groundwater	**Project Number:**	112IC04021 - 02
Sample Matrix:	Water	**Date Received:**	4/26/12

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV deliverables. When appropriate to the method, method blank and LCS results have been reported with each analytical test.

Sample Receipt

Water samples were collected on 4/25/12 and received at CAS in good condition at a cooler temperature of 1.6 °C as noted on the cooler receipt and preservation check form. The samples were stored in a refrigerator at 1 - 6 °C upon receipt at the laboratory. See the CAS CLP Batching sheets for a cross-reference between Client ID and CAS Job # and analyses requested.

Hexavalent Chromium Analysis – 218.6

Three water samples were analyzed for CR+6 by EPA method 218.6, low level. Values detected between the MDL and PQL have been flagged with a "J" as estimated.

All samples were analyzed within 24 hours of sampling.

All the initial and continuing calibration criteria were met.

The Blank Spike (LCS) recovery was within QC limits.

The Laboratory Blank associated with these samples was free of contamination.

No other analytical or QC problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the details conditioned above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Columbia Analytical Services — CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

1565 Jefferson Rd., Bldg. 300, Suite 360, Rochester, NY 14623 | 585.288.5380 | 800.695.7222 | 585.288.8475 (fax) PAGE 1 OF 1

Project Name: MSA Ground Water Sampling	Project Number: 112IC04021-02
Project Manager: Tony Apanavage	Report CC:
Company/Address: Tetra Tech INC. 20251 Century Blvd STE 200 Germantown MD 20874	
Phone #: 301 528-3021	E-mail:
Sampler's Signature:	Sampler's Printed Name: Walt Payon

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: D

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES ☐ 8081 ☐ 608	PCB's ☐ 8082 ☐ 608	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	Hex Chrom							REMARKS/ ALTERNATE DESCRIPTION
MT-MW01s-042512		4-25-12	1335	Water	1								X							
MT-MW03s-042512		↓	1450	↓	1								X							
MT-MW05s-042512		↓	1530	↓	1								X							

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals 24 TAT

See QAPP ☐

TURNAROUND REQUIREMENTS
X RUSH (SURCHARGES APPLY)
X 1 day ___ 2 day ___ 3 day
___ 4 day ___ 5 day
___ Standard

REQUESTED REPORT DATE

REPORT REQUIREMENTS
___ I. Results Only
___ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
___ III. Results + QC and Calibration Summaries
___ IV. Data Validation Report with Raw Data

Edata ___ Yes ___ N

INVOICE INFORMATION
PO #:
BILL TO:

R1202604 5
Tetra Tech NUS,Inc.
MSA Groundwater

STATE WHERE SAMPLES WERE COLLECTED:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	
Signature:	Signature:	Signature	Signature	Signature	Signature
Printed Name: Walt Payon	Printed Name: Gregory O. Esmerian	Printed Name	Printed Name	Printed Name	Printed Name
Firm: TT INC.	Firm: ALS	Firm	Firm	Firm	Firm
Date/Time: 4-25-12 / 1900	Date/Time: 4-26-12 10:00	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Lab Copy; Yellow - Return To Originator

SCOC Rev. 7/2011

HOLD TIME

SDG R1202557

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MT-MW06S-042412	R1202581-002	NM	4/24/2012	4/26/2012	4/26/2012	2	0	2
CR6	UG/L	MT-MW05S-042512	R1202604-003	NM	4/25/2012	4/26/2012	4/26/2012	1	0	1
CR6	UG/L	MT-MW04S-042412	R1202581-001	NM	4/24/2012	4/26/2012	4/26/2012	2	0	2
CR6	UG/L	MT-MW03S-042512	R1202604-002	NM	4/25/2012	4/26/2012	4/26/2012	1	0	1
CR6	UG/L	MT-MW01S-042512	R1202604-001	NM	4/25/2012	4/26/2012	4/26/2012	1	0	1
CR6	UG/L	MSA-MW35S-042312	R1202557-006	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW20S-042312	R1202557-001	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW20I-042312	R1202557-002	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW20D-042312	R1202557-003	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW17S-042312	R1202557-004	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	MSA-MW17I-042312	R1202557-005	NM	4/23/2012	4/24/2012	4/24/2012	1	0	1
CR6	UG/L	GSP-MW3-042612	R1202652-003	NM	4/26/2012	4/27/2012	4/27/2012	1	0	1
CR6	UG/L	GSP-MW2-042612	R1202652-001	NM	4/26/2012	4/27/2012	4/27/2012	1	0	1
CR6	UG/L	GSP-MW1-042612	R1202652-002	NM	4/26/2012	4/27/2012	4/27/2012	1	0	1

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
4/20/12 0755	R1202486-004	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/19/12 1240	Yes No Field	Millex HV R1SA546204	—	5.94	9.36	CMW 4/20/12 0932	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	R1202486-005	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/19/12 1245	Yes No Field		—	5.22	9.39	CMW 4/20/12 0934	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
—	Filter Blank for 4/20/12	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	—	Yes No Field		—	5.69	9.53	CMW 4/20/12 0935	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
4/24/12 0950	R1202557-001	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1530	Yes No Field	Millex HV R1SA546204	—	5.84	9.36 *	CMW 4/24/12 1255	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	R1202557-002	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1535	Yes No Field		—	6.20	9.31 *	CMW 4/24/12 1257	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	R1202557-003	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1540	Yes No Field		—	5.22	9.43	CMW 4/12/24 1300	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	R1202557-004	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1510	Yes No Field		—	7.16	9.32	CMW 4/24/12 1301	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	R1202557-005	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	4/23/12 1515	Yes No Field		—	5.35	9.46	CMW 4/24/12 1303	Buffer	WC1032781
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

*Green PPT formed

0025

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
4/24/12	R1202557-006	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	4/23/12 1555	(Yes) No Field	Millex HV R1SA5462QK	—	4.66	9.37	CMW 4/24/12 1304	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032783
↓	Filter Blank for 4/24/12	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	—	(Yes) No Field	↓	—	5.73	9.59	CMW 4/24/12 1305	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
4/25/12 0955	R1202581-001	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	4/24/12 1215	(Yes) No Field	Millex HV R1SA5462QK	—	5.16	9.39	CMW 4/25/12 1054	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
↓	R1202581-002	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	4/24/12 1457	(Yes) No Field	↓	—	4.73	9.52	CMW 4/25/12 1055	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
↓	Filter Blank for 4/25/12	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	—	(Yes) No Field	↓	—	5.69	9.39	CMW 4/25/12 1057	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
4/25/12 1010	R1202582 -003	(7199) 218.6 RL 218.6 LL 218.7	(Water) Drinking Water	4/24/12 1530	Yes (No) Field	—	—	8.22	9.45	CMW 4/25/12 1217	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
4/26/12 1000	R1202604 -001	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	4/25/12 1335	(Yes) No Field	Millex HV R1SA5462QK	—	6.56	9.34	CMW 4/26/12 1129	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032782
↓	R1202604 -002	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	4/25/12 1450	(Yes) No Field	↓	—	7.09	9.42	CMW 4/26/12 1131	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032787

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

Date/Time Received	Sample ID	Analysis	Matrix	Date/Time Sampled	Sample Filtered	Filter Lot ID	Chlorine Residual (mg/L) 218.7 only	pH at Receipt	pH Adjustment	Analyst/ Date/ Time pH Adjustment	Solution Used For PH Adjust	Solution Lot ID
4/26/12 1000	R1202604 -003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/25/12 1530	Yes No Field	R1SA546201 Millex HV	—	4.51	9.36	CMW 4/26/12 1133	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
—	Filter Blank for 4/26/12	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/25/12 —	Yes No Field	↓	—	8.40	9.39	CMW 4/26/12 1135	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
4/26/12 1000	R1202582 -010	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/25/12 1600	Yes No Field	—	—	5.51	9.46	CMW 4/26/12 1455	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
↓	R1202582 -012	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/25/12 1605	Yes No Field	—	—	5.63	9.39	CMW 4/26/12 1458	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1032781
4/27/12 0925	Filter Blank For 4/27/12	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	—	Yes No Field	Millex HV R1SA546201	—	7.65	9.33	CMW 4/27/12 1004	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120226
↓	MW1 R1202652-002	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/26/12 1325	Yes No Field	↓	—	6.60	9.38	CMW 4/27/12 1005	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120226
↓	MW2 R1202652 -001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/26/12 1320	Yes No Field	↓	—	5.31	9.63	CMW 4/27/12 1007	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120226
↓	MW3 R1202652 -003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	4/26/12 1440	Yes No Field	↓	—	6.01	9.67	CMW 4/27/12 1008	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120226

	Drinking water 218.7	Drinking water 218.6	Non-Pot Water 218.6	Water 7199
Filter	No	Required	Required	Optional
pH	>8.0	9.0-9.5	9.3-9.7	unpreserved - adjust to 9.0-9.5
Res Chlorine	<0.1 mg/L	NA	NA	NA
Holding Time	14 days	5 days	28 days	24 hours

00022

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1202604
Project:	MSA Groundwater/112IC04021- 02	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1202604-MB	**Basis:**	NA

General Chemistry Parameters

Analyte Name	Method	Result	Q	Units	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
Chromium, Hexavalent, Dissolved	218.6	0.020	U	µg/L	0.020	0.004	1	NA	4/26/12 12:17	

Client: Tetra Tech NUS, Inc.
Project: MSA Groundwater/112IC04021- 02
Sample Matrix: Water

Service Request: R1202604
Date Analyzed: 4/26/12

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1202604-LCS Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6	0.197	0.200	99	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.
Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Tetra Tech NUS, Inc.
Project: MSA Groundwater/112IC04021- 02

Service Request: R1202604

Continuing Calibration Verification (CCV) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6

Units: µg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	289198	RQ1204265-05	4/26/12 12:08	0.500	0.499	100	95 - 105
CCV2	289198	RQ1204265-04	4/26/12 13:49	0.500	0.515	103	95 - 105
CCV3	289198	RQ1204265-03	4/26/12 14:52	0.500	0.520	104	95 - 105

Client: Tetra Tech NUS, Inc. **Service Request:** R1202604
Project: MSA Groundwater/112IC04021- 02

Continuing Calibration Blank (CCB) Summary
Chromium, Hexavalent, Dissolved

Analytical Method: 218.6 **Units:** µg/L

	Analysis Lot	Lab Code	Date Analyzed	MDL	MRL	Result	Q
CCB1	289198	RQ1204265-08	4/26/12 12:17	0.004	0.020	0.020	U
CCB2	289198	RQ1204265-06	4/26/12 13:57	0.004	0.020	0.026	
CCB3	289198	RQ1204265-07	4/26/12 15:01	0.004	0.020	0.020	

Analytical Results Summary

Instrument Name: R-IC-05 **Analyst:** CWOODS **Analysis Lot:** 289198 **Method/Testcode:** 218.6/Cr6 D

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1204265-05	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 µg/L	10 mL	0.499 µg/L	1					4/26/12 12:08:00	N	IV
RQ1204265-08	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:17:00	N	IV
RQ1204265-09	Chromium, Hexavalent, Dissolved	MB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:17:00	N	IV
RQ1204265-10	Chromium, Hexavalent, Dissolved	LCS		Water	0.20 µg/L	10 mL	0.197 µg/L	1	0.004	0.020	99		4/26/12 12:25:00	N	IV
R1202604-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:42:00	N	IV
R1202604-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:50:00	N	IV
R1202604-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 12:59:00	N	IV
RQ1204265-01	Chromium, Hexavalent, Dissolved	DUP	R1202604-003	Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020		NC	4/26/12 13:07:00	N	IV
RQ1204265-02	Chromium, Hexavalent, Dissolved	MS	R1202604-003	Water	0.20 µg/L	10 mL	0.201 µg/L	1	0.004	0.020	100		4/26/12 13:16:00	N	IV
R1202557-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 13:32:00	N	IV
R1202557-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 13:41:00	N	IV
RQ1204265-04	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 µg/L	10 mL	0.515 µg/L	1					4/26/12 13:49:00	N	IV
RQ1204265-06	Chromium, Hexavalent, Dissolved	CCB		Water	0.03 µg/L	10 mL	0.026 µg/L	1	0.004	0.020			4/26/12 13:57:00	N	IV
R1202581-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 14:14:00	N	IV
R1202581-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.004	0.020			4/26/12 14:23:00	N	IV
RQ1204265-03	Chromium, Hexavalent, Dissolved	CCV		Water	0.52 µg/L	10 mL	0.520 µg/L	1					4/26/12 14:52:00	N	IV
RQ1204265-07	Chromium, Hexavalent, Dissolved	CCB		Water	0.02 µg/L	10 mL	0.020 µg/L J	1	0.004	0.020			4/26/12 15:01:00	N	IV

0001

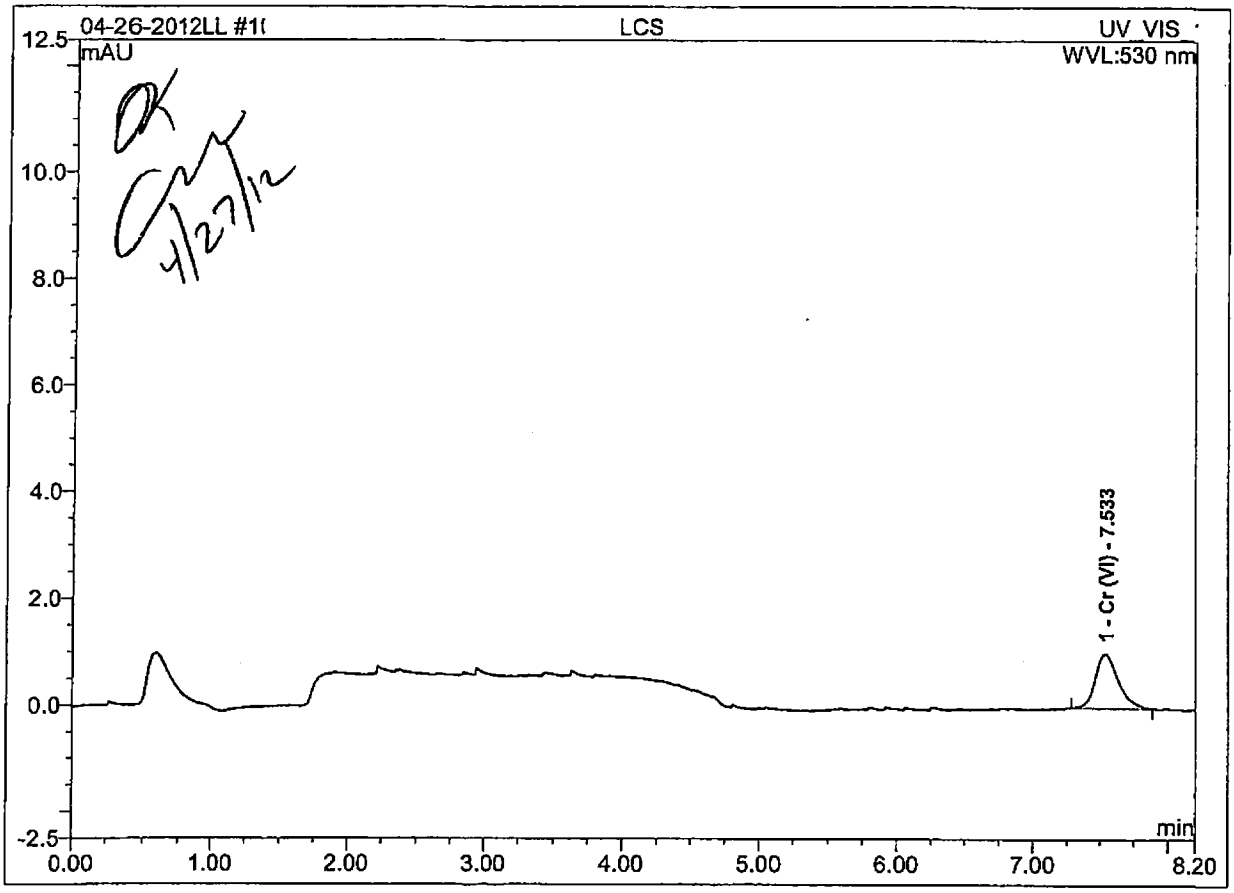
# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

LCS rep result 0.197 ug/L

10 LCS

218.6 LL

Sample Name:	**LCS**	*Injection Volume:*	**2000.0**
Vial Number:	**34**	*Channel:*	**UV_VIS_1**
Sample Type:	**unknown**	*Dilution Factor:*	**1**
Control Program:	**Fast Hexavalent Chromium LL**	*Sample Weight:*	**1.0000**
Quantif. Method:	**5-042612CLL**	*Sample Amount:*	**1.0000**
Recording Time:	**4/26/2012 12:25**		



OK 4/27/12

No.	Ret.Time min	Peak Name	Height mAU	Area mAU*min	Rel.Area %	Amount ppb	Type
1	7.533	Cr (VI)	1.023	0.201	100.00	0.19736	BMB
Total:			1.023	0.201	100.00	0.197	

APPENDIX H—CHEMICAL DATA TABLES

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SB17		MT-SS18		MT-SS19	
SAMPLE ID	MT-SS17-0-2	MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE	20120710	20120710	20120710	20120710	20120709	20120709
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SS	SB
TOP DEPTH	0	8	0	8	0	8
BOTTOM DEPTH	2	10	2	10	2	10
METALS (MG/KG)						
ANTIMONY	0.42 U	0.4 U	0.79 B	0.44 U	0.43 UL	0.46 B
ARSENIC	5.7	2.4 L	6.7	1 J	6.2	6.4
BARIUM	20 J	13 J	9.3 J	10 J	13 J	13 J
BERYLLIUM	2.4	1.8	2.4	0.44 B	1.6	2.7
CADMIUM	0.039 U	0.037 U	0.035 U	0.04 U	0.04 U	0.036 U
CHROMIUM	19	25	29	20	24 L	23 L
COBALT	9.7	4.7	7	1.8 L	7.5	14
COPPER	17	13	36	4.7	33	25
LEAD	7.8	5.2	1.9	1 J	6.7	3.8
MERCURY	0.017 U	0.019 U	0.017 U	0.018 U	0.018 U	0.019 U
MOLYBDENUM	0.29 U	0.55 B	0.26 U	0.3 U	0.77 B	0.41 B
NICKEL	22	17	16	3.3 J	30 J	52 J
SELENIUM	0.48 U	0.46 U	0.98 J	0.5 U	0.5 UL	0.46 UL
SILVER	0.11 UL	0.1 UL	0.096 UL	0.11 UL	0.11 UL	0.1 UL
THALLIUM	0.59 UL	0.56 UL	0.53 UL	0.62 UL	0.61 UL	0.56 UL
VANADIUM	28	46	80	14	43 L	29 L
ZINC	79	17	20	4.9 J	38	72
PCBS (UG/KG)						
AROCLOR-1016	25 U	26 U	25 U	25 U	25 U	24 U
AROCLOR-1221	19 U	20 U	19 U	19 U	19 U	19 U
AROCLOR-1232	17 U	17 U	17 U	17 U	17 U	16 U
AROCLOR-1242	16 U	16 U	16 U	15 U	16 U	15 U
AROCLOR-1248	20 U	21 U	20 U	20 U	20 U	20 U
AROCLOR-1254	20 U	21 U	20 U	20 U	20 U	20 U
AROCLOR-1260	20 U	21 U	20 U	20 U	20 U	20 U
TOTAL AROCLOR	0 U	0 U	0 U	0 U	0 U	0 U
TOTAL AROCLOR HALFND	68.5	71	68.5	68	68.5	67
PETROLEUM HYDROCARBONS (MG/KG)						
TPH (C10-C32)	240	28	11 UJ	11 UJ	11 B	11 U
PETROLEUM HYDROCARBONS (UG/KG)						
TPH (C06-C10)	130	56 U	380	54 U	55 U	54 U
SEMIVOLATILES (UG/KG)						

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SB17		MT-SS18		MT-SS19	
SAMPLE ID	MT-SS17-0-2	MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE	20120710	20120710	20120710	20120710	20120709	20120709
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SS	SB
TOP DEPTH	0	8	0	8	0	8
BOTTOM DEPTH	2	10	2	10	2	10
1,1-BIPHENYL	33 U	32 U	32 U	32 U	33 U	31 U
1,4-DIOXANE	27 U	26 U	26 U	26 U	27 U	26 U
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U	11 U	11 U	11 U	12 U	11 U
2,4,5-TRICHLOROPHENOL	30 U	30 U	29 U	29 U	30 U	29 U
2,4,6-TRICHLOROPHENOL	97 U	96 U	94 U	94 U	97 U	93 U
2,4-DICHLOROPHENOL	24 U	24 U	24 U	23 U	24 U	23 U
2,4-DIMETHYLPHENOL	25 J	24 U	24 U	23 U	24 U	23 U
2,4-DINITROPHENOL	97 U	96 U	94 U	94 U	97 U	93 U
2,4-DINITROTOLUENE	33 U	32 U	32 U	32 U	33 U	31 U
2,6-DINITROTOLUENE	25 U	25 U	25 U	25 U	25 U	24 U
2-CHLORONAPHTHALENE	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
2-CHLOROPHENOL	33 U	32 U	32 U	32 U	33 U	31 U
2-METHYLNAPHTHALENE	18	4 U	3.9 U	3.9 U	4 U	3.8 U
2-METHYLPHENOL	97 U	96 U	94 U	94 U	97 U	93 U
2-NITROANILINE	11 U	11 U	11 U	11 U	11 U	11 U
2-NITROPHENOL	33 U	32 U	32 U	32 U	33 U	31 U
3&4-METHYLPHENOL	24 U	24 U	24 U	23 U	24 U	23 U
3,3'-DICHLOROBENZIDINE	22 U	22 U	21 U	21 U	22 U	21 U
3-NITROANILINE	19 U	19 U	19 U	19 U	19 U	19 U
4,6-DINITRO-2-METHYLPHENOL	97 U	96 U	94 U	94 U	97 U	93 U
4-BROMOPHENYL PHENYL ETHER	16 U	16 U	15 U	15 U	16 U	15 U
4-CHLORO-3-METHYLPHENOL	25 U	25 U	25 U	25 U	25 U	24 U
4-CHLOROANILINE	21 U	20 U	20 U	20 U	21 U	20 U
4-CHLOROPHENYL PHENYL ETHER	16 U	16 U	15 U	15 U	16 U	15 U
4-NITROANILINE	31 U	31 U	31 U	31 U	32 U	30 U
4-NITROPHENOL	97 U	96 U	94 U	94 U	97 U	93 U
ACENAPHTHENE	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
ACENAPHTHYLENE	15	17	3.9 U	3.9 U	4 U	3.8 U
ACETOPHENONE	25 J	11 U	11 U	11 U	11 U	11 U
ANTHRACENE	25	39	3.9 U	3.9 U	4 U	3.8 U
ATRAZINE	11 U	11 U	11 U	11 U	11 U	11 U
BAP EQUIVALENT-HALFND	218.95	465.65	3.9 U	3.9 U	4 U	9.55965
BAP EQUIVALENT-POS	218.95	465.65	3.9 U	3.9 U	4 U	7.279

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SB17		MT-SS18		MT-SS19	
SAMPLE ID	MT-SS17-0-2	MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE	20120710	20120710	20120710	20120710	20120709	20120709
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SS	SB
TOP DEPTH	0	8	0	8	0	8
BOTTOM DEPTH	2	10	2	10	2	10
BENZALDEHYDE	15 U	14 U	14 U	14 U	15 U	14 U
BENZO(A)ANTHRACENE	110	240	3.9 U	3.9 U	4 U	3.8 U
BENZO(A)PYRENE	150	310	3.9 U	3.9 U	4 U	6.6 J
BENZO(B)FLUORANTHENE	190	440	3.9 U	3.9 U	4 U	6.3 J
BENZO(G,H,I)PERYLENE	130	280	3.9 U	3.9 U	4 U	3.8 U
BENZO(K)FLUORANTHENE	99	230	3.9 U	3.9 U	4 U	4.9 J
BIS(2-CHLOROETHOXY)METHANE	27 U	26 U	26 U	26 U	27 U	26 U
BIS(2-CHLOROETHYL)ETHER	2.4 U	2.4 U	2.4 U	2.3 U	2.4 U	2.3 U
BIS(2-ETHYLHEXYL)PHTHALATE	38 J	58 J	34 J	25 J	23 U	26 B
BUTYL BENZYL PHTHALATE	12 U	12 U	12 U	12 U	12 U	12 U
CAPROLACTAM	45 U	45 U	43 U	43 U	45 U	43 U
CARBAZOLE	33 U	32 U	32 U	32 U	33 U	31 U
CHRYSENE	160	350	1.3 U	1.3 U	1.3 U	1.3 U
DIBENZO(A,H)ANTHRACENE	28	62	3.9 U	3.9 U	4 U	3.8 U
DIBENZOFURAN	4 U	4 U	3.9 U	3.9 U	4 U	3.8 U
DIETHYL PHTHALATE	19 U	19 U	19 U	19 U	19 U	19 U
DIMETHYL PHTHALATE	21 U	20 U	20 U	20 U	21 U	20 U
DI-N-BUTYL PHTHALATE	35 J	29 J	20 J	18 U	18 U	34 J
DI-N-OCTYL PHTHALATE	33 U	32 U	32 U	32 U	33 U	31 U
FLUORANTHENE	190	510	8.7	3.9 U	4 U	15
FLUORENE	4 U	10	3.9 U	3.9 U	4 U	3.8 U
HEXACHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.4 U
HEXACHLOROBUTADIENE	33 U	32 U	32 U	32 U	33 U	31 U
HEXACHLOROCYCLOPENTADIENE	33 UR	32 U	32 U	32 U	33 U	31 U
HEXACHLOROETHANE	11 U	11 U	11 U	11 U	11 U	10 U
INDENO(1,2,3-CD)PYRENE	98	230	3.9 U	3.9 U	4 U	3.8 U
ISOPHORONE	16 U	16 U	15 U	15 U	16 U	15 U
NAPHTHALENE	30	4 U	3.9 U	3.9 U	4 U	3.8 U
NITROBENZENE	2.7 U	2.6 U	2.6 U	2.6 U	2.7 U	2.6 U
N-NITROSODIMETHYLAMINE	19 U	19 U	19 U	19 U	19 U	19 U
N-NITROSO-DI-N-PROPYLAMINE	33 U	32 U	32 U	32 U	33 U	31 U
N-NITROSODIPHENYLAMINE	25 U	25 U	25 U	25 U	25 U	24 U
PENTACHLOROPHENOL	97 U	96 U	94 U	94 U	97 U	93 U

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SB17		MT-SS18		MT-SS19	
SAMPLE ID	MT-SS17-0-2	MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE	20120710	20120710	20120710	20120710	20120709	20120709
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SS	SB
TOP DEPTH	0	8	0	8	0	8
BOTTOM DEPTH	2	10	2	10	2	10
PHENANTHRENE	65	150	3.9 U	3.9 U	4 U	3.8 U
PHENOL	37 J	32 U	32 U	32 U	33 U	31 U
PYRENE	210	450	3.9 U	3.9 U	4 U	16
TCLP HERBICIDES (MG/L)						
2,4,5-TP (SILVEX)	NA	NA	NA	NA	NA	NA
2,4-D	NA	NA	NA	NA	NA	NA
TCLP METALS (MG/L)						
ARSENIC	NA	NA	NA	NA	NA	NA
BARIUM	NA	NA	NA	NA	NA	NA
CADMIUM	NA	NA	NA	NA	NA	NA
CHROMIUM	NA	NA	NA	NA	NA	NA
LEAD	NA	NA	NA	NA	NA	NA
MERCURY	NA	NA	NA	NA	NA	NA
SELENIUM	NA	NA	NA	NA	NA	NA
SILVER	NA	NA	NA	NA	NA	NA
TCLP PESTICIDE/PCBS (MG/L)						
CHLORDANE	NA	NA	NA	NA	NA	NA
ENDRIN	NA	NA	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	NA	NA	NA	NA	NA	NA
HEPTACHLOR	NA	NA	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	NA	NA	NA	NA	NA	NA
METHOXYCHLOR	NA	NA	NA	NA	NA	NA
TOXAPHENE	NA	NA	NA	NA	NA	NA
TCLP SEMIVOLATILES (MG/L)						
1,4-DICHLOROBENZENE	NA	NA	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA	NA	NA

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SB17		MT-SS18		MT-SS19	
SAMPLE ID	MT-SS17-0-2	MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE	20120710	20120710	20120710	20120710	20120709	20120709
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SS	SB
TOP DEPTH	0	8	0	8	0	8
BOTTOM DEPTH	2	10	2	10	2	10
NITROBENZENE	NA	NA	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA	NA	NA
PYRIDINE	NA	NA	NA	NA	NA	NA
TCLP VOLATILES (MG/L)						
1,1-DICHLOROETHENE	NA	NA	NA	NA	NA	NA
1,2-DICHLOROETHANE	NA	NA	NA	NA	NA	NA
2-BUTANONE	NA	NA	NA	NA	NA	NA
BENZENE	NA	NA	NA	NA	NA	NA
CARBON TETRACHLORIDE	NA	NA	NA	NA	NA	NA
CHLOROBENZENE	NA	NA	NA	NA	NA	NA
CHLOROFORM	NA	NA	NA	NA	NA	NA
TETRACHLOROETHENE	NA	NA	NA	NA	NA	NA
TRICHLOROETHENE	NA	NA	NA	NA	NA	NA
VINYL CHLORIDE	NA	NA	NA	NA	NA	NA
VOLATILES (UG/KG)						
1,1,1,2-TETRACHLOROETHANE	0.52 U	0.57 U	10 U	0.62 U	0.55 U	0.6 U
1,1,1-TRICHLOROETHANE	0.47 U	0.51 U	24 U	0.56 U	0.5 U	0.55 U
1,1,2,2-TETRACHLOROETHANE	0.29 U	0.31 U	10 U	0.34 U	0.3 U	0.33 U
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U	1.2 U	44 U	1.3 U	1.2 U	1.3 U
1,1,3-TRIMETHYLCYCLOHEXANE	4.4 NJ	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	0.3 U	0.33 U	19 U	0.36 U	0.32 U	0.35 U
1,1-DICHLOROETHENE	0.44 U	0.48 U	20 U	0.52 U	0.46 U	0.51 U
1,1-DICHLOROPROPENE	0.25 U	0.28 U	11 U	0.3 U	0.27 U	0.29 U
1,2,3-TRICHLOROBENZENE	0.32 U	0.35 U	11 U	0.38 U	0.34 U	0.37 U
1,2,3-TRICHLOROPROPANE	0.76 U	0.83 U	24 U	0.9 U	0.8 U	0.88 U
1,2,3-TRIMETHYLBENZENE	1.9 J	0.16 U	33 J	3.9 J	0.15 U	0.17 U
1,2,4-TRICHLOROBENZENE	0.23 U	0.25 U	8.2 U	0.27 U	0.24 U	0.26 U
1,2,4-TRIMETHYLBENZENE	2.3 J	0.6 U	34 J	0.65 U	0.58 U	0.63 U
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U	1.2 U	56 U	1.3 U	1.2 U	1.3 U
1,2-DIBROMOETHANE	0.42 U	0.46 U	11 U	0.5 U	0.45 U	0.49 U
1,2-DICHLOROBENZENE	0.3 U	0.33 U	9.6 U	0.36 U	0.32 U	0.35 U
1,2-DICHLOROETHANE	0.29 U	0.31 U	11 U	0.34 U	0.3 U	0.33 U
1,2-DICHLOROPROPANE	0.58 U	0.63 U	9.2 U	0.69 U	0.61 U	0.67 U

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SB17		MT-SS18		MT-SS19	
SAMPLE ID	MT-SS17-0-2	MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE	20120710	20120710	20120710	20120710	20120709	20120709
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SS	SB
TOP DEPTH	0	8	0	8	0	8
BOTTOM DEPTH	2	10	2	10	2	10
1,3,5-TRIMETHYLBENZENE	1.3 NJ	NA	45 NJ	NA	NA	NA
1,3-DICHLOROBENZENE	0.29 U	0.32 U	5.4 U	0.35 U	0.31 U	0.34 U
1,3-DICHLOROPROPANE	0.29 U	0.31 U	25 U	0.34 U	0.3 U	0.33 U
1,4-DICHLOROBENZENE	0.55 U	0.61 U	9 U	0.66 U	0.59 U	0.64 U
2,2-DICHLOROPROPANE	0.79 U	0.86 U	26 U	0.94 U	0.84 U	0.92 U
2,3,3-TRIMETHYLPENTANE	NA	NA	NA	13 NJ	NA	NA
2,3,4-TRIMETHYLPENTANE	NA	NA	NA	9.7 NJ	NA	NA
2,3-DIMETHYLPENTANE	NA	NA	NA	8.2 NJ	NA	NA
2,4-DIMETHYLPENTANE	NA	NA	NA	8.8 NJ	NA	NA
2-BUTANONE	4.1 J	3 J	48 U	1.4 U	1.2 U	1.4 U
2-CHLOROETHYL VINYL ETHER	1.2 U	1.3 U	48 U	1.4 U	1.2 UR	1.4 UR
2-CHLOROTOLUENE	0.34 U	0.37 U	10 U	0.4 U	0.36 U	0.39 U
2-HEXANONE	0.53 U	0.58 U	22 U	0.63 U	0.56 U	0.61 U
2-METHYLBUTANE	NA	NA	NA	30 NJ	NA	NA
3-METHYLPENTANE	NA	NA	NA	11 NJ	NA	NA
4-CHLOROTOLUENE	0.34 U	0.38 U	11 U	0.41 U	0.36 U	0.4 U
4-ISOPROPYLTOLUENE	1.3 J	0.19 U	26 J	0.21 U	0.19 U	0.2 U
4-METHYL-2-PENTANONE	0.45 U	0.5 U	54 U	0.54 U	0.48 U	0.53 U
ACETONE	42	65	190 U	6.3 U	5.6 U	6.1 U
BENZENE	0.19 U	0.21 U	13 U	5.4	0.2 U	0.22 U
BENZENE, 1-ETHYL-2,3-DIMETHYL-	4.6 NJ	NA	NA	NA	NA	NA
BENZENE, 1-METHYL-2-(1-METHYLETHYL)-	8.2 NJ	NA	NA	NA	NA	NA
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	5.1 NJ	NA	NA	NA	NA	NA
BROMOBENZENE	0.28 U	0.3 U	15 U	0.33 U	0.29 U	0.32 U
BROMOCHLOROMETHANE	0.6 U	0.65 U	15 U	0.71 U	0.63 U	0.69 U
BROMODICHLOROMETHANE	0.23 U	0.26 U	11 U	0.28 U	0.25 U	0.27 U
BROMOFORM	0.28 U	0.3 U	21 U	0.33 U	0.29 U	0.32 U
BROMOMETHANE	0.45 U	0.5 U	33 U	0.54 U	0.48 U	0.53 U
BUTANE, 2,2,3,3-TETRAMETHYL-	NA	NA	NA	26 NJ	NA	NA
CARBON DISULFIDE	3 J	0.4 U	13 U	4.2 J	0.39 U	0.43 U
CARBON TETRACHLORIDE	0.31 U	0.34 U	490	78	0.33 U	0.36 U
CHLOROBENZENE	0.28 U	0.3 U	7.2 U	0.33 U	0.29 U	0.32 U
CHLORODIBROMOMETHANE	0.46 U	0.51 U	13 U	0.55 U	0.49 U	0.54 U

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SB17		MT-SS18		MT-SS19	
SAMPLE ID	MT-SS17-0-2	MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE	20120710	20120710	20120710	20120710	20120709	20120709
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SS	SB
TOP DEPTH	0	8	0	8	0	8
BOTTOM DEPTH	2	10	2	10	2	10
CHLOROETHANE	0.72 U	0.79 U	68 U	0.86 U	0.77 U	0.84 U
CHLOROFORM	0.24 U	0.27 U	55 J	32	0.26 U	0.28 U
CHLOROMETHANE	0.34 U	0.38 U	16 U	0.41 U	0.36 U	0.4 U
CIS-1,2-DICHLOROETHENE	5.2	0.33 U	7.7 U	0.36 U	0.32 U	0.35 U
CIS-1,3-DICHLOROPROPENE	0.29 U	0.31 U	8.9 U	0.34 U	0.3 U	0.33 U
CYCLOHEXANE	NA	0.32 J	140 J	16 J	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	21 R	NA	NA	11 R	11 R	5.3 R
DIBROMOMETHANE	0.53 U	0.58 U	16 U	0.63 U	0.56 U	0.61 U
DICHLORODIFLUOROMETHANE	0.42 U	0.46 U	18 U	0.5 U	0.45 U	0.49 U
DIISOPROPYL ETHER	1.3 U	1.4 U	56 U	1.5 U	1.3 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.18 U	0.2 U	0.25 U	0.22 U	0.2 U	0.21 U
ETHYLBENZENE	0.34 J	0.24 U	27 J	0.26 U	0.23 U	0.25 U
HEXACHLOROBUTADIENE	1 U	1.1 U	16 U	1.2 U	1.1 U	1.2 U
HEXANE	1.2 J	NA	NA	NA	2.6 J	2.6 J
HEXANE, 2,2,4-TRIMETHYL-	NA	NA	NA	6.6 NJ	NA	NA
ISOPROPYLBENZENE	0.24 J	0.15 U	8.3 J	0.95 J	0.14 U	0.16 U
M+P-XYLENES	1 U	1.1 U	67 J	1.2 U	1.1 U	1.2 U
METHYL CYCLOHEXANE	2.6 J	NA	28 J	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.36 U	0.39 U	8 U	0.43 U	0.38 U	0.42 U
METHYLENE CHLORIDE	0.56 U	0.62 U	86 U	0.71 J	1.9 B	3 B
NAPHTHALENE	0.62 B	0.17 U	23 J	1.1 B	0.17 U	1.6 B
N-BUTYLBENZENE	0.19 U	0.21 U	9 U	0.46 B	0.2 U	0.22 U
N-PROPYLBENZENE	0.34 U	0.37 U	16 U	0.4 U	0.36 U	0.39 U
O-XYLENE	0.46 J	0.32 U	49 J	2.5 J	0.31 U	0.34 U
SEC-BUTYLBENZENE	0.64 J	0.17 U	5.3 U	0.54 J	0.16 U	0.18 U
STYRENE	0.13 U	0.14 U	6.3 U	0.15 U	0.13 U	0.15 U
TERT-AMYL METHYL ETHER	0.31 U	0.34 U	0.41 U	0.37 U	0.33 U	0.36 U
TERT-BUTYLBENZENE	0.24 U	0.27 U	7.3 U	0.45 J	0.26 U	0.28 U
TERTIARY-BUTYL ALCOHOL	6.4 UR	7 UR	270 UR	7.6 UR	6.8 UR	7.4 UR
TETRACHLOROETHENE	0.44 U	0.48 U	13 U	0.52 U	0.46 U	0.51 U
TETRAHYDROFURAN	NA	NA	80 NJ	NA	NA	NA
TOLUENE	0.49 J	0.28 J	19 U	0.48 J	0.24 U	0.26 U
TOTAL XYLENES	0.56 U	0.62 U	120 J	2.5 J	0.6 U	0.65 U

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SB17		MT-SS18		MT-SS19	
SAMPLE ID	MT-SS17-0-2	MT-SS17-8-10	MT-SS18-0-2	MT-SS18-8-10	MT-SS19-0-2	MT-SS19-8-10
SAMPLE DATE	20120710	20120710	20120710	20120710	20120709	20120709
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SS	SB
TOP DEPTH	0	8	0	8	0	8
BOTTOM DEPTH	2	10	2	10	2	10
TRANS-1,2-DICHLOROETHENE	0.34 U	0.38 U	10 U	0.41 U	0.36 U	0.4 U
TRANS-1,3-DICHLOROPROPENE	0.45 U	0.5 U	22 U	0.54 U	0.48 U	0.53 U
TRICHLOROETHENE	0.35 U	0.39 U	11 U	0.42 U	0.37 U	0.41 U
TRICHLOROFLUOROMETHANE	0.29 U	0.31 U	18 U	0.34 U	0.3 U	0.33 U
UNKNOWN	6.3 NJ	NA	NA	NA	NA	NA
VINYL ACETATE	0.21 UR	0.23 UR	26 UR	0.25 UR	0.22 UR	0.24 UR
VINYL CHLORIDE	2.5 J	0.36 U	20 U	0.39 U	0.35 U	0.38 U

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SS20		MT-SS21		MT-TCLP
SAMPLE ID	MT-SS20-0-2	MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE	20120709	20120709	20120709	20120709	20120710
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SB
TOP DEPTH	0	8	0	8	8
BOTTOM DEPTH	2	10	2	10	10
METALS (MG/KG)					
ANTIMONY	0.66 B	0.67 B	0.36 UL	0.47 B	NA
ARSENIC	3.9	5	4.4	4.7	NA
BARIUM	19 J	18 J	16 J	12 J	NA
BERYLLIUM	2.9	4	3.8	5.8	NA
CADMIUM	0.035 U	0.037 U	0.033 U	0.038 U	NA
CHROMIUM	20 L	24 L	24 L	21 L	NA
COBALT	14	13	10	14	NA
COPPER	24	38	15	19	NA
LEAD	4.4	6.3	4.1	5.1	NA
MERCURY	0.017 U	0.019 U	0.019 U	0.016 U	NA
MOLYBDENUM	0.38 B	0.58 B	0.31 B	0.34 B	NA
NICKEL	45 J	44 J	34 J	49 J	NA
SELENIUM	0.44 UL	0.47 UL	0.42 UL	0.48 UL	NA
SILVER	0.098 UL	0.1 UL	0.093 UL	0.11 UL	NA
THALLIUM	0.54 UL	0.57 UL	0.51 UL	0.58 UL	NA
VANADIUM	31 L	38 L	36 L	36 L	NA
ZINC	69	73	49	78	NA
PCBS (UG/KG)					
AROCLOR-1016	25 U	26 U	25 U	25 U	NA
AROCLOR-1221	19 U	20 U	19 U	19 U	NA
AROCLOR-1232	16 U	17 U	17 U	16 U	NA
AROCLOR-1242	15 U	16 U	15 U	15 U	NA
AROCLOR-1248	20 U	21 U	20 U	20 U	NA
AROCLOR-1254	20 U	21 U	20 U	20 U	NA
AROCLOR-1260	20 U	21 U	20 U	20 U	NA
TOTAL AROCLOR	0 U	0 U	0 U	0 U	NA
TOTAL AROCLOR HALFND	67.5	71	68	67.5	NA
PETROLEUM HYDROCARBONS (MG/KG)					
TPH (C10-C32)	11 U	11 U	11 U	11 U	NA
PETROLEUM HYDROCARBONS (UG/KG)					
TPH (C06-C10)	54 U	56 U	54 U	54 U	NA
SEMIVOLATILES (UG/KG)					

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SS20		MT-SS21		MT-TCLP
SAMPLE ID	MT-SS20-0-2	MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE	20120709	20120709	20120709	20120709	20120710
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SB
TOP DEPTH	0	8	0	8	8
BOTTOM DEPTH	2	10	2	10	10
1,1-BIPHENYL	32 U	33 U	32 U	32 U	NA
1,4-DIOXANE	26 U	27 U	26 U	26 U	NA
2,2'-OXYBIS(1-CHLOROPROPANE)	11 U	12 U	11 U	11 U	NA
2,4,5-TRICHLOROPHENOL	29 U	30 U	29 U	29 U	NA
2,4,6-TRICHLOROPHENOL	94 U	97 U	93 U	94 U	NA
2,4-DICHLOROPHENOL	23 U	24 U	23 U	24 U	NA
2,4-DIMETHYLPHENOL	23 U	24 U	23 U	24 U	NA
2,4-DINITROPHENOL	94 U	97 U	93 U	94 U	NA
2,4-DINITROTOLUENE	32 U	33 U	32 U	32 U	NA
2,6-DINITROTOLUENE	25 U	25 U	25 U	25 U	NA
2-CHLORONAPHTHALENE	3.9 U	4 U	3.9 U	3.9 U	NA
2-CHLOROPHENOL	32 U	33 U	32 U	32 U	NA
2-METHYLNAPHTHALENE	3.9 U	4 U	3.9 U	3.9 U	NA
2-METHYLPHENOL	94 U	97 U	93 U	94 U	NA
2-NITROANILINE	11 U	11 U	11 U	11 U	NA
2-NITROPHENOL	32 U	33 U	32 U	32 U	NA
3&4-METHYLPHENOL	23 U	24 U	23 U	24 U	NA
3,3'-DICHLOROBENZIDINE	21 U	22 U	21 U	21 U	NA
3-NITROANILINE	19 U	19 U	19 U	19 U	NA
4,6-DINITRO-2-METHYLPHENOL	94 U	97 U	93 U	94 U	NA
4-BROMOPHENYL PHENYL ETHER	15 U	16 U	15 U	15 U	NA
4-CHLORO-3-METHYLPHENOL	25 U	25 U	25 U	25 U	NA
4-CHLOROANILINE	20 U	21 U	20 U	20 U	NA
4-CHLOROPHENYL PHENYL ETHER	15 U	16 U	15 U	15 U	NA
4-NITROANILINE	30 U	32 U	30 U	31 U	NA
4-NITROPHENOL	94 U	97 U	93 U	94 U	NA
ACENAPHTHENE	3.9 U	4 U	3.9 U	3.9 U	NA
ACENAPHTHYLENE	3.9 U	4 U	3.9 U	3.9 U	NA
ACETOPHENONE	11 U	11 U	11 U	11 U	NA
ANTHRACENE	3.9 U	4 U	3.9 U	3.9 U	NA
ATRAZINE	11 U	11 U	11 U	11 U	NA
BAP EQUIVALENT-HALFND	3.9 U	21.683	8.2315	12.1729	NA
BAP EQUIVALENT-POS	3.9 U	19.683	6.067	10.0084	NA

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SS20		MT-SS21		MT-TCLP
SAMPLE ID	MT-SS20-0-2	MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE	20120709	20120709	20120709	20120709	20120710
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SB
TOP DEPTH	0	8	0	8	8
BOTTOM DEPTH	2	10	2	10	10
BENZALDEHYDE	14 U	15 U	14 U	14 U	NA
BENZO(A)ANTHRACENE	3.9 U	11	6 J	9.3	NA
BENZO(A)PYRENE	3.9 U	16	4.9 J	8.2	NA
BENZO(B)FLUORANTHENE	3.9 U	15	5.6 J	8.7	NA
BENZO(G,H,I)PERYLENE	3.9 U	15	3.9 U	5.4 J	NA
BENZO(K)FLUORANTHENE	3.9 U	7.2 J	3.9 U	3.9 U	NA
BIS(2-CHLOROETHOXY)METHANE	26 U	27 U	26 U	26 U	NA
BIS(2-CHLOROETHYL)ETHER	2.3 U	2.4 U	2.3 U	2.4 U	NA
BIS(2-ETHYLHEXYL)PHTHALATE	34 B	28 B	24 B	22 U	NA
BUTYL BENZYL PHTHALATE	12 U	12 U	12 U	12 U	NA
CAPROLACTAM	43 U	45 U	43 U	44 U	NA
CARBAZOLE	32 U	33 U	32 U	32 U	NA
CHRYSENE	1.3 U	11	7 J	8.4	NA
DIBENZO(A,H)ANTHRACENE	3.9 U	4 U	3.9 U	3.9 U	NA
DIBENZOFURAN	3.9 U	4 U	3.9 U	3.9 U	NA
DIETHYL PHTHALATE	19 U	19 U	19 U	19 U	NA
DIMETHYL PHTHALATE	20 U	21 U	20 U	20 U	NA
DI-N-BUTYL PHTHALATE	24 J	18 U	18 U	18 U	NA
DI-N-OCTYL PHTHALATE	32 U	33 U	32 U	32 U	NA
FLUORANTHENE	5.7 J	13	14	11	NA
FLUORENE	3.9 U	4 U	3.9 U	3.9 U	NA
HEXACHLOROBENZENE	2.5 U	2.5 U	2.5 U	2.5 U	NA
HEXACHLOROBUTADIENE	32 U	33 U	32 U	32 U	NA
HEXACHLOROCYCLOPENTADIENE	32 U	33 U	32 U	32 U	NA
HEXACHLOROETHANE	11 U	11 U	11 U	11 U	NA
INDENO(1,2,3-CD)PYRENE	3.9 U	10	3.9 U	3.9 U	NA
ISOPHORONE	15 U	16 U	15 U	15 U	NA
NAPHTHALENE	3.9 U	4 U	3.9 U	3.9 U	NA
NITROBENZENE	2.6 U	2.7 U	2.6 U	2.6 U	NA
N-NITROSODIMETHYLAMINE	19 U	19 U	19 U	19 U	NA
N-NITROSO-DI-N-PROPYLAMINE	32 U	33 U	32 U	32 U	NA
N-NITROSODIPHENYLAMINE	25 U	25 U	25 U	25 U	NA
PENTACHLOROPHENOL	94 U	97 U	93 U	94 U	NA

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SS20		MT-SS21		MT-TCLP
SAMPLE ID	MT-SS20-0-2	MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE	20120709	20120709	20120709	20120709	20120710
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SB
TOP DEPTH	0	8	0	8	8
BOTTOM DEPTH	2	10	2	10	10
PHENANTHRENE	3.9 U	9.4	11	6.9 J	NA
PHENOL	32 U	33 U	32 U	32 U	NA
PYRENE	4.8 J	19	14	18	NA
TCLP HERBICIDES (MG/L)					
2,4,5-TP (SILVEX)	NA	NA	NA	NA	0.0001 U
2,4-D	NA	NA	NA	NA	0.00021 U
TCLP METALS (MG/L)					
ARSENIC	NA	NA	NA	NA	0.0032 U
BARIUM	NA	NA	NA	NA	0.17 J
CADMIUM	NA	NA	NA	NA	0.0013 J
CHROMIUM	NA	NA	NA	NA	0.0047 J
LEAD	NA	NA	NA	NA	0.05 J
MERCURY	NA	NA	NA	NA	0.00012 U
SELENIUM	NA	NA	NA	NA	0.0041 UL
SILVER	NA	NA	NA	NA	0.0022 U
TCLP PESTICIDE/PCBS (MG/L)					
CHLORDANE	NA	NA	NA	NA	0.00007 U
ENDRIN	NA	NA	NA	NA	0.00002 UJ
GAMMA-BHC (LINDANE)	NA	NA	NA	NA	0.00001 U
HEPTACHLOR	NA	NA	NA	NA	0.00001 UJ
HEPTACHLOR EPOXIDE	NA	NA	NA	NA	0.00001 U
METHOXYCHLOR	NA	NA	NA	NA	0.00007 U
TOXAPHENE	NA	NA	NA	NA	0.00077 U
TCLP SEMIVOLATILES (MG/L)					
1,4-DICHLOROBENZENE	NA	NA	NA	NA	0.00034 U
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA	0.0003 U
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA	0.0008 U
2,4-DINITROTOLUENE	NA	NA	NA	NA	0.00027 U
2-METHYLPHENOL	NA	NA	NA	NA	0.0008 U
3&4-METHYLPHENOL	NA	NA	NA	NA	0.00075 U
HEXACHLOROBENZENE	NA	NA	NA	NA	0.0001 U
HEXACHLOROBUTADIENE	NA	NA	NA	NA	0.00027 U
HEXACHLOROETHANE	NA	NA	NA	NA	0.0008 U

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SS20		MT-SS21		MT-TCLP
SAMPLE ID	MT-SS20-0-2	MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE	20120709	20120709	20120709	20120709	20120710
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SB
TOP DEPTH	0	8	0	8	8
BOTTOM DEPTH	2	10	2	10	10
NITROBENZENE	NA	NA	NA	NA	0.00004 U
PENTACHLOROPHENOL	NA	NA	NA	NA	0.0024 U
PYRIDINE	NA	NA	NA	NA	0.00035 U
TCLP VOLATILES (MG/L)					
1,1-DICHLOROETHENE	NA	NA	NA	NA	0.0095 U
1,2-DICHLOROETHANE	NA	NA	NA	NA	0.011 U
2-BUTANONE	NA	NA	NA	NA	0.029 UR
BENZENE	NA	NA	NA	NA	0.0065 U
CARBON TETRACHLORIDE	NA	NA	NA	NA	0.0065 U
CHLOROBENZENE	NA	NA	NA	NA	0.0075 U
CHLOROFORM	NA	NA	NA	NA	0.008 U
TETRACHLOROETHENE	NA	NA	NA	NA	0.015 U
TRICHLOROETHENE	NA	NA	NA	NA	0.0085 U
VINYL CHLORIDE	NA	NA	NA	NA	0.011 U
VOLATILES (UG/KG)					
1,1,1,2-TETRACHLOROETHANE	0.54 U	0.56 U	0.51 U	0.61 U	NA
1,1,1-TRICHLOROETHANE	0.49 U	0.51 U	0.46 U	0.55 U	NA
1,1,2,2-TETRACHLOROETHANE	0.3 U	0.31 U	0.28 U	0.34 U	NA
1,1,2-TRICHLOROTRIFLUOROETHANE	1.1 U	1.2 U	1.1 U	1.3 U	NA
1,1,3-TRIMETHYLCYCLOHEXANE	NA	NA	NA	NA	NA
1,1-DICHLOROETHANE	0.32 U	0.33 U	0.29 U	0.36 U	NA
1,1-DICHLOROETHENE	0.46 U	0.47 U	0.43 U	0.51 U	NA
1,1-DICHLOROPROPENE	0.26 U	0.27 U	0.25 U	0.3 U	NA
1,2,3-TRICHLOROBENZENE	0.33 U	0.35 U	0.31 U	0.38 U	NA
1,2,3-TRICHLOROPROPANE	0.79 U	0.82 U	0.74 U	0.89 U	NA
1,2,3-TRIMETHYLBENZENE	0.15 U	0.15 U	0.14 U	0.17 U	NA
1,2,4-TRICHLOROBENZENE	0.24 U	0.25 U	0.22 U	0.27 U	NA
1,2,4-TRIMETHYLBENZENE	0.57 U	0.59 U	0.53 U	0.64 U	NA
1,2-DIBROMO-3-CHLOROPROPANE	1.1 U	1.2 U	1.1 U	1.3 U	NA
1,2-DIBROMOETHANE	0.44 U	0.45 U	0.41 U	0.49 U	NA
1,2-DICHLOROBENZENE	0.32 U	0.33 U	0.29 U	0.36 U	NA
1,2-DICHLOROETHANE	0.3 U	0.31 U	0.28 U	0.34 U	NA
1,2-DICHLOROPROPANE	0.6 U	0.63 U	0.56 U	0.68 U	NA

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SS20		MT-SS21		MT-TCLP
SAMPLE ID	MT-SS20-0-2	MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE	20120709	20120709	20120709	20120709	20120710
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SB
TOP DEPTH	0	8	0	8	8
BOTTOM DEPTH	2	10	2	10	10
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA	NA
1,3-DICHLOROBENZENE	0.31 U	0.32 U	0.29 U	0.35 U	NA
1,3-DICHLOROPROPANE	0.3 U	0.31 U	0.28 U	0.34 U	NA
1,4-DICHLOROBENZENE	0.58 U	0.6 U	0.54 U	0.65 U	NA
2,2-DICHLOROPROPANE	0.82 U	0.85 U	0.77 U	0.93 U	NA
2,3,3-TRIMETHYLPENTANE	NA	NA	NA	NA	NA
2,3,4-TRIMETHYLPENTANE	NA	NA	NA	NA	NA
2,3-DIMETHYLPENTANE	NA	NA	NA	NA	NA
2,4-DIMETHYLPENTANE	NA	NA	NA	NA	NA
2-BUTANONE	1.2 U	1.3 U	1.1 U	1.4 U	NA
2-CHLOROETHYL VINYL ETHER	1.2 UR	1.3 UR	1.1 UR	1.4 UR	NA
2-CHLOROTOLUENE	0.35 U	0.36 U	0.33 U	0.4 U	NA
2-HEXANONE	0.55 U	0.57 U	0.52 U	0.62 U	NA
2-METHYLBUTANE	NA	NA	NA	NA	NA
3-METHYLPENTANE	NA	NA	NA	NA	NA
4-CHLOROTOLUENE	0.36 U	0.37 U	0.34 U	0.41 U	NA
4-ISOPROPYLTOLUENE	0.18 U	0.19 U	0.17 U	0.21 U	NA
4-METHYL-2-PENTANONE	0.47 U	0.49 U	0.44 U	0.53 U	NA
ACETONE	5.5 U	5.7 U	5.2 U	6.2 U	NA
BENZENE	0.2 U	0.21 U	0.19 U	0.23 U	NA
BENZENE, 1-ETHYL-2,3-DIMETHYL-	NA	NA	NA	NA	NA
BENZENE, 1-METHYL-2-(1-METHYLETHYL)-	NA	NA	NA	NA	NA
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	NA	NA	NA	NA	NA
BROMOBENZENE	0.29 U	0.3 U	0.27 U	0.33 U	NA
BROMOCHLOROMETHANE	0.62 U	0.64 U	0.58 U	0.7 U	NA
BROMODICHLOROMETHANE	0.25 U	0.25 U	0.23 U	0.28 U	NA
BROMOFORM	0.29 U	0.3 U	0.27 U	0.33 U	NA
BROMOMETHANE	0.47 U	0.49 U	0.44 U	0.53 U	NA
BUTANE, 2,2,3,3-TETRAMETHYL-	NA	NA	NA	NA	NA
CARBON DISULFIDE	0.39 U	0.4 U	0.36 U	0.43 U	NA
CARBON TETRACHLORIDE	0.32 U	0.34 U	0.3 U	4.4 J	NA
CHLOROBENZENE	0.29 U	0.3 U	0.27 U	0.33 U	NA
CHLORODIBROMOMETHANE	0.48 U	0.5 U	0.45 U	0.54 U	NA

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SS20		MT-SS21		MT-TCLP
SAMPLE ID	MT-SS20-0-2	MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE	20120709	20120709	20120709	20120709	20120710
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SB
TOP DEPTH	0	8	0	8	8
BOTTOM DEPTH	2	10	2	10	10
CHLOROETHANE	0.75 U	0.78 U	0.7 U	0.85 U	NA
CHLOROFORM	0.25 U	0.26 U	0.24 U	0.29 U	NA
CHLOROMETHANE	0.36 U	0.37 U	0.34 U	0.41 U	NA
CIS-1,2-DICHLOROETHENE	0.32 U	0.33 U	0.29 U	0.36 U	NA
CIS-1,3-DICHLOROPROPENE	0.3 U	0.31 U	0.28 U	0.34 U	NA
CYCLOHEXANE	NA	NA	NA	NA	NA
CYCLOTETRASILOXANE, OCTAMETHYL-	16 R	7.6 R	12 R	7.4 R	NA
DIBROMOMETHANE	0.55 U	0.57 U	0.52 U	0.62 U	NA
DICHLORODIFLUOROMETHANE	0.44 U	0.45 U	0.41 U	0.49 U	NA
DIISOPROPYL ETHER	1.3 U	1.4 U	1.2 U	1.5 U	NA
ETHYL TERT-BUTYL ETHER	0.19 U	0.2 U	0.18 U	0.22 U	NA
ETHYLBENZENE	0.23 U	0.24 U	0.21 U	0.26 U	NA
HEXACHLOROBUTADIENE	1.1 U	1.1 U	0.98 U	1.2 U	NA
HEXANE	1.7 J	1.6 J	2.1 J	1.6 J	NA
HEXANE, 2,2,4-TRIMETHYL-	NA	NA	NA	NA	NA
ISOPROPYLBENZENE	0.14 U	0.15 U	0.13 U	0.16 U	NA
M+P-XYLENES	1.1 U	1.1 U	0.98 U	1.2 U	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA	NA
METHYL TERT-BUTYL ETHER	0.38 U	0.39 U	0.35 U	0.42 U	NA
METHYLENE CHLORIDE	1.7 B	0.78 B	1 B	0.66 B	NA
NAPHTHALENE	0.24 B	0.17 U	0.16 U	0.19 U	NA
N-BUTYLBENZENE	0.2 U	0.21 U	0.19 U	0.23 U	NA
N-PROPYLBENZENE	0.35 U	0.36 U	0.33 U	0.4 U	NA
O-XYLENE	0.31 U	0.32 U	0.29 U	0.35 U	NA
SEC-BUTYLBENZENE	0.16 U	0.16 U	0.15 U	0.18 U	NA
STYRENE	0.13 U	0.14 U	0.12 U	0.15 U	NA
TERT-AMYL METHYL ETHER	0.32 U	0.34 U	0.3 U	0.37 U	NA
TERT-BUTYLBENZENE	0.25 U	0.26 U	0.24 U	0.29 U	NA
TERTIARY-BUTYL ALCOHOL	6.7 UR	6.9 UR	6.2 UR	7.5 UR	NA
TETRACHLOROETHENE	0.46 U	0.47 U	0.43 U	0.51 U	NA
TETRAHYDROFURAN	NA	NA	NA	NA	NA
TOLUENE	0.24 U	0.25 U	0.22 U	0.27 U	NA
TOTAL XYLENES	0.59 U	0.61 U	0.55 U	0.66 U	NA

Table H-1

Soil Sample Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

LOCATION	MT-SS20		MT-SS21		MT-TCLP
SAMPLE ID	MT-SS20-0-2	MT-SS20-8-10	MT-SS21-0-2	MT-SS21-8-10	MT-TCLP-8-10
SAMPLE DATE	20120709	20120709	20120709	20120709	20120710
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SO	SO	SO	SO	SO
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SUBMATRIX	SS	SB	SS	SB	SB
TOP DEPTH	0	8	0	8	8
BOTTOM DEPTH	2	10	2	10	10
TRANS-1,2-DICHLOROETHENE	0.36 U	0.37 U	0.34 U	0.41 U	NA
TRANS-1,3-DICHLOROPROPENE	0.47 U	0.49 U	0.44 U	0.53 U	NA
TRICHLOROETHENE	0.37 U	0.38 U	0.34 U	110	NA
TRICHLOROFLUOROMETHANE	0.3 U	0.31 U	0.28 U	0.34 U	NA
UNKNOWN	NA	NA	NA	NA	NA
VINYL ACETATE	0.22 UR	0.23 UR	0.2 UR	0.25 UR	NA
VINYL CHLORIDE	0.34 U	0.35 U	0.32 U	0.39 U	NA

B - qualified due to blank contamination. R - rejected positive result. UR - nondetected rejected.
J - estimated positive value. U - nondetected value.
L - positive value biased low. UJ - estimated nondetected value.
NJ - estimated postive TIC result. UL - nondetected value biased low.

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW01S-042512	MT-MW02S-043012	MT-MW03S-042512	MT-MW04S-042412
SAMPLE DATE:	20120425	20120430	20120425	20120424
LOCATION:	MT-MW01S	MT-MW02S	MT-MW03S	MT-MW04S
VOLATILES (UG/L)				
1,1,1,2-TETRACHLOROETHANE	0.23 U	1.2 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	1.1 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.9 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	1.4 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.75 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.95 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.65 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.85 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	2.2 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	2.4 J	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.75 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	9.2	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	3.4 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	1.2 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.65 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	3.8 J	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.9 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.7 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.8 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.65 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.65 U	0.13 U	0.13 U
2-BUTANONE	0.57 U	2.9 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	5 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.55 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	2.1 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.9 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	1.6 J	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	2.5 J	0.32 U	0.32 U
ACETONE	1.1 U	90	1.1 U	1.1 U
BENZENE	0.13 J	87	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.65 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	1.5 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.75 U	0.15 U	0.15 U
BROMOFORM	0.64 U	3.2 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	2.1 U	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.65 U	0.51 J	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.65 U	0.13 U	0.13 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW01S-042512	MT-MW02S-043012	MT-MW03S-042512	MT-MW04S-042412
SAMPLE DATE:	20120425	20120430	20120425	20120424
LOCATION:	MT-MW01S	MT-MW02S	MT-MW03S	MT-MW04S
CHLOROBENZENE	0.15 U	0.75 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.9 U	0.18 U	0.18 U
CHLOROETHANE	0.29 U	1.5 U	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.8 U	0.16 U	0.62 J
CHLOROMETHANE	0.3 U	1.5 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.17 U	4.8 J	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.7 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	1.4 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	1.6 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	7.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.55 U	0.11 U	0.11 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA
ETHYLBENZENE	0.17 U	180	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	1.5 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	31	0.13 U	0.13 U
M+P-XYLENES	0.24 U	50	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.85 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	1.7 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	1.2 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.6 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	9.7	0.14 U	0.14 U
O-XYLENE	0.14 U	22	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.75 J	0.13 U	0.13 U
STYRENE	0.11 U	0.55 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.34 U	0.067 U	0.067 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA
TERT-BUTYLBENZENE	0.13 U	0.65 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	20 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	1.5 U	0.29 U	0.29 U
TOLUENE	0.29 J	0.65 U	0.13 U	0.13 U
TOTAL XYLENES	0.28 U	72	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.95 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.95 U	0.19 U	0.19 U
TRICHLOROETHENE	0.17 U	0.85 U	0.17 U	0.17 U
TRICHLOROFLUOROMETHANE	0.21 U	1.1 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.95 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	1.1 U	0.22 U	0.22 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW01S-042512	MT-MW02S-043012	MT-MW03S-042512	MT-MW04S-042412
SAMPLE DATE:	20120425	20120430	20120425	20120424
LOCATION:	MT-MW01S	MT-MW02S	MT-MW03S	MT-MW04S
TIC VOLATILES (UG/L)				
1,3,5-TRIMETHYLBENZENE	NA	47	NA	NA
1-ETHYL-2-METHYL BENZENE	NA	7.3 NJ	NA	NA
2,4-PENTANEDIONE, 3-METHYL-	NA	7.8 NJ	NA	NA
3-PENTANOL, 2,2-DIMETHYL-	NA	6.5 NJ	NA	NA
3-PENTANONE, 2,4-DIMETHYL-	NA	12 NJ	NA	NA
BENZENE, 1-ETHYL-3-METHYL-	NA	10 NJ	NA	NA
BUTANE	1.4 NJ	NA	NA	NA
BUTANE, 2-METHYL-	NA	NA	NA	NA
CYCLOBUTANE, METHYL-	NA	9.8 NJ	NA	NA
CYCLOHEXANE	NA	45	NA	NA
INDANE	NA	8.1 NJ	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	0.13 B
METHYLCYCLOPENTANE	NA	19 NJ	NA	NA
SILANE, FLUOROTRIMETHYL-	NA	NA	2.8 R	NA
SEMIVOLATILES (UG/L)				
1,1-BIPHENYL	NA	NA	NA	NA
1,4-DIOXANE	0.49 U	0.49 U	0.51 U	0.49 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	NA	NA	NA	NA
2,4-DICHLOROPHENOL	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	NA	NA	NA	NA
2,4-DINITROPHENOL	NA	NA	NA	NA
2,4-DINITROTOLUENE	NA	NA	NA	NA
2,6-DINITROTOLUENE	NA	NA	NA	NA
2-CHLORONAPHTHALENE	NA	NA	NA	NA
2-CHLOROPHENOL	NA	NA	NA	NA
2-METHYLNAPHTHALENE	NA	NA	NA	NA
2-METHYLPHENOL	NA	NA	NA	NA
2-NITROANILINE	NA	NA	NA	NA
2-NITROPHENOL	NA	NA	NA	NA
3&4-METHYLPHENOL	NA	NA	NA	NA
3,3'-DICHLOROBENZIDINE	NA	NA	NA	NA
3-NITROANILINE	NA	NA	NA	NA
4,6-DINITRO-2-METHYLPHENOL	NA	NA	NA	NA
4-BROMOPHENYL PHENYL ETHER	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	NA	NA	NA	NA

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW01S-042512	MT-MW02S-043012	MT-MW03S-042512	MT-MW04S-042412
SAMPLE DATE:	20120425	20120430	20120425	20120424
LOCATION:	MT-MW01S	MT-MW02S	MT-MW03S	MT-MW04S
4-CHLOROANILINE	NA	NA	NA	NA
4-CHLOROPHENYL PHENYL ETHER	NA	NA	NA	NA
4-NITROANILINE	NA	NA	NA	NA
4-NITROPHENOL	NA	NA	NA	NA
ACENAPHTHENE	NA	NA	NA	NA
ACENAPHTHYLENE	NA	NA	NA	NA
ACETOPHENONE	NA	NA	NA	NA
ANTHRACENE	NA	NA	NA	NA
ATRAZINE	NA	NA	NA	NA
BAP EQUIVALENT-HALFND	NA	NA	NA	NA
BAP EQUIVALENT-POS	NA	NA	NA	NA
BENZALDEHYDE	NA	NA	NA	NA
BENZO(A)ANTHRACENE	NA	NA	NA	NA
BENZO(A)PYRENE	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	NA	NA	NA	NA
BIS(2-CHLOROETHOXY)METHANE	NA	NA	NA	NA
BIS(2-CHLOROETHYL)ETHER	NA	NA	NA	NA
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	NA
BUTYL BENZYL PHTHALATE	NA	NA	NA	NA
CAPROLACTAM	NA	NA	NA	NA
CARBAZOLE	NA	NA	NA	NA
CHRYSENE	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	NA	NA	NA	NA
DIBENZOFURAN	NA	NA	NA	NA
DIETHYL PHTHALATE	NA	NA	NA	NA
DIMETHYL PHTHALATE	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	NA	NA	NA	NA
FLUORANTHENE	NA	NA	NA	NA
FLUORENE	NA	NA	NA	NA
HEXACHLOROBENZENE	NA	NA	NA	NA
HEXACHLOROBUTADIENE	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	NA	NA	NA	NA
HEXACHLOROETHANE	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	NA	NA	NA	NA
ISOPHORONE	NA	NA	NA	NA

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW01S-042512	MT-MW02S-043012	MT-MW03S-042512	MT-MW04S-042412
SAMPLE DATE:	20120425	20120430	20120425	20120424
LOCATION:	MT-MW01S	MT-MW02S	MT-MW03S	MT-MW04S
NAPHTHALENE	NA	NA	NA	NA
NITROBENZENE	NA	NA	NA	NA
N-NITROSODIMETHYLAMINE	NA	NA	NA	NA
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	NA	NA	NA	NA
PENTACHLOROPHENOL	NA	NA	NA	NA
PHENANTHRENE	NA	NA	NA	NA
PHENOL	NA	NA	NA	NA
PYRENE	NA	NA	NA	NA
METALS (UG/L)				
ANTIMONY	0.13 U	0.13 U	0.21 J	0.13 U
ARSENIC	4.7 J	2.3 J	1.9 J	0.71 J
BARIUM	110	120	26	76
BERYLLIUM	0.59 J	0.74 J	0.41 J	3.3
CADMIUM	0.13 U	0.13 U	0.13 U	0.14 J
CHROMIUM	0.71 U	0.71 U	5.3	0.71 U
COBALT	140	30	2.3	210
COPPER	0.6 B	1.4 B	7.3	43
LEAD	0.26 B	1.3 K	2.6	0.71 B
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.57 B	0.093 U	1.7 B	0.093 U
NICKEL	67	48	5.9	330
SELENIUM	0.57 U	0.57 U	0.57 U	0.57 U
SILVER	0.08 U	0.08 U	0.13 B	0.08 U
THALLIUM	0.14 U	0.15 B	0.14 U	0.16 B
TUNGSTEN	0.37 U	0.37 U	0.37 U	0.37 U
VANADIUM	0.94 J	0.44 U	6 J	0.44 U
ZINC	12 B	100	640	340

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW01S-042512	MT-MW02S-043012	MT-MW03S-042512	MT-MW04S-042412
SAMPLE DATE:	20120425	20120430	20120425	20120424
LOCATION:	MT-MW01S	MT-MW02S	MT-MW03S	MT-MW04S
FILTERED METALS (UG/L)				
ANTIMONY	0.13 U	0.13 U	0.13 U	0.21 B
ARSENIC	5 K	1.7 J	0.86 J	0.69 J
BARIUM	120	110	20	76
BERYLLIUM	0.36 J	0.68 J	0.2 U	3.1
CADMIUM	0.13 U	0.13 U	0.13 U	0.23 J
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	120	23	1.1	200
COPPER	0.4 B	0.62 B	0.29 U	44
LEAD	0.18 U	1 K	0.18 U	0.64 B
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.71 B	0.093 U	0.99 B	0.55 B
NICKEL	55	39	1.7 J	320
SELENIUM	0.57 U	0.57 U	0.57 U	0.57 U
SILVER	0.08 U	0.08 U	0.08 U	0.08 U
THALLIUM	0.14 U	0.14 U	0.14 U	1.3 B
TUNGSTEN	0.37 U	0.37 U	0.37 U	0.78 J
VANADIUM	0.65 J	0.44 U	0.44 U	0.44 U
ZINC	8.3 B	57	860	330
MISCELLANEOUS PARAMETERS (UG/L)				
HEXAVALENT CHROMIUM	0.02 U	0.02 U	0.02 U	0.02 UJ
PERCHLORATE	0.082 U	0.082 U	0.082 U	0.082 U
PETROLEUM HYDROCARBONS (UG/L)				
TPH (C06-C10)	64 B	1400	49 B	49 B
TPH (C10-C32)	540 B	3700	290 B	440 B

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Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW05S-042512	MT-MW06S-042412	MT-MW07S-082212	MT-MW08S-082212
SAMPLE DATE:	20120425	20120424	20120822	20120822
LOCATION:	MT-MW05S	MT-MW06S	MT-MW07S	MT-MW08S
VOLATILES (UG/L)				
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	1.1 U	1.1 U	1.1 U	2.8 J
BENZENE	0.13 U	0.13 U	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.16 J	1.3
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW05S-042512	MT-MW06S-042412	MT-MW07S-082212	MT-MW08S-082212
SAMPLE DATE:	20120425	20120424	20120822	20120822
LOCATION:	MT-MW05S	MT-MW06S	MT-MW07S	MT-MW08S
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.35 J	0.47 J	0.3 U	0.37 J
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	NA	NA
ETHYL TERT-BUTYL ETHER	NA	NA	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	NA	NA
TERT-AMYL METHYL ETHER	NA	NA	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	0.13 U	0.16 J
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.35 J	0.17 U	0.17 U	0.17 U
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U

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Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW05S-042512	MT-MW06S-042412	MT-MW07S-082212	MT-MW08S-082212
SAMPLE DATE:	20120425	20120424	20120822	20120822
LOCATION:	MT-MW05S	MT-MW06S	MT-MW07S	MT-MW08S
TIC VOLATILES (UG/L)				
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA
1-ETHYL-2-METHYL BENZENE	NA	NA	NA	NA
2,4-PENTANEDIONE, 3-METHYL-	NA	NA	NA	NA
3-PENTANOL, 2,2-DIMETHYL-	NA	NA	NA	NA
3-PENTANONE, 2,4-DIMETHYL-	NA	NA	NA	NA
BENZENE, 1-ETHYL-3-METHYL-	NA	NA	NA	NA
BUTANE	NA	NA	NA	NA
BUTANE, 2-METHYL-	2.5 NJ	NA	NA	NA
CYCLOBUTANE, METHYL-	NA	NA	NA	NA
CYCLOHEXANE	NA	NA	NA	NA
INDANE	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA
METHYLCYCLOPENTANE	NA	NA	NA	NA
SILANE, FLUOROTRIMETHYL-	NA	NA	NA	NA
SEMIVOLATILES (UG/L)				
1,1-BIPHENYL	NA	NA	0.78 U	0.76 U
1,4-DIOXANE	0.51 U	0.5 U	0.48 U	0.47 U
2,2'-OXYBIS(1-CHLOROPROPANE)	NA	NA	0.39 U	0.38 U
2,4,5-TRICHLOROPHENOL	NA	NA	0.29 U	0.29 U
2,4,6-TRICHLOROPHENOL	NA	NA	0.78 U	0.76 U
2,4-DICHLOROPHENOL	NA	NA	0.78 U	0.76 U
2,4-DIMETHYLPHENOL	NA	NA	0.78 U	0.76 U
2,4-DINITROPHENOL	NA	NA	2.4 U	2.3 U
2,4-DINITROTOLUENE	NA	NA	0.26 U	0.26 U
2,6-DINITROTOLUENE	NA	NA	0.78 U	0.76 U
2-CHLORONAPHTHALENE	NA	NA	0.098 U	0.095 U
2-CHLOROPHENOL	NA	NA	0.28 U	0.28 U
2-METHYLNAPHTHALENE	NA	NA	0.098 U	0.095 U
2-METHYLPHENOL	NA	NA	0.78 U	0.76 U
2-NITROANILINE	NA	NA	0.78 U	0.76 U
2-NITROPHENOL	NA	NA	0.27 U	0.27 U
3&4-METHYLPHENOL	NA	NA	0.74 U	0.71 U
3,3'-DICHLOROBENZIDINE	NA	NA	0.36 U	0.35 U
3-NITROANILINE	NA	NA	0.27 U	0.27 U
4,6-DINITRO-2-METHYLPHENOL	NA	NA	2.4 U	2.3 U
4-BROMOPHENYL PHENYL ETHER	NA	NA	0.78 U	0.76 U
4-CHLORO-3-METHYLPHENOL	NA	NA	0.78 U	0.76 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW05S-042512	MT-MW06S-042412	MT-MW07S-082212	MT-MW08S-082212
SAMPLE DATE:	20120425	20120424	20120822	20120822
LOCATION:	MT-MW05S	MT-MW06S	MT-MW07S	MT-MW08S
4-CHLOROANILINE	NA	NA	0.78 U	0.76 U
4-CHLOROPHENYL PHENYL ETHER	NA	NA	0.29 U	0.29 U
4-NITROANILINE	NA	NA	0.78 U	0.76 U
4-NITROPHENOL	NA	NA	2.4 U	2.3 U
ACENAPHTHENE	NA	NA	0.098 U	0.095 U
ACENAPHTHYLENE	NA	NA	0.098 U	0.095 U
ACETOPHENONE	NA	NA	0.33 U	0.32 U
ANTHRACENE	NA	NA	0.098 U	0.095 U
ATRAZINE	NA	NA	0.33 U	0.32 U
BAP EQUIVALENT-HALFND	NA	NA	0.098 U	0.095 U
BAP EQUIVALENT-POS	NA	NA	0.098 U	0.095 U
BENZALDEHYDE	NA	NA	0.38 U	0.37 U
BENZO(A)ANTHRACENE	NA	NA	0.098 U	0.095 U
BENZO(A)PYRENE	NA	NA	0.098 U	0.095 U
BENZO(B)FLUORANTHENE	NA	NA	0.098 U	0.095 U
BENZO(G,H,I)PERYLENE	NA	NA	0.098 U	0.095 U
BENZO(K)FLUORANTHENE	NA	NA	0.098 U	0.095 U
BIS(2-CHLOROETHOXY)METHANE	NA	NA	0.31 U	0.3 U
BIS(2-CHLOROETHYL)ETHER	NA	NA	0.098 U	0.095 U
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	0.91 J	0.79 J
BUTYL BENZYL PHTHALATE	NA	NA	0.78 U	0.76 U
CAPROLACTAM	NA	NA	0.78 U	0.78 J
CARBAZOLE	NA	NA	0.27 U	0.27 U
CHRYSENE	NA	NA	0.098 U	0.095 U
DIBENZO(A,H)ANTHRACENE	NA	NA	0.098 U	0.095 U
DIBENZOFURAN	NA	NA	0.098 U	0.095 U
DIETHYL PHTHALATE	NA	NA	0.59 U	0.57 U
DIMETHYL PHTHALATE	NA	NA	0.28 U	0.28 U
DI-N-BUTYL PHTHALATE	NA	NA	0.66 U	0.64 U
DI-N-OCTYL PHTHALATE	NA	NA	0.78 U	0.76 U
FLUORANTHENE	NA	NA	0.098 U	0.095 U
FLUORENE	NA	NA	0.098 U	0.095 U
HEXACHLOROBENZENE	NA	NA	0.098 U	0.095 U
HEXACHLOROBUTADIENE	NA	NA	0.26 U	0.26 U
HEXACHLOROCYCLOPENTADIENE	NA	NA	0.78 U	0.76 U
HEXACHLOROETHANE	NA	NA	0.78 U	0.76 U
INDENO(1,2,3-CD)PYRENE	NA	NA	0.098 U	0.095 U
ISOPHORONE	NA	NA	0.26 U	0.26 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW05S-042512	MT-MW06S-042412	MT-MW07S-082212	MT-MW08S-082212
SAMPLE DATE:	20120425	20120424	20120822	20120822
LOCATION:	MT-MW05S	MT-MW06S	MT-MW07S	MT-MW08S
NAPHTHALENE	NA	NA	0.098 U	0.095 U
NITROBENZENE	NA	NA	0.039 U	0.038 U
N-NITROSODIMETHYLAMINE	NA	NA	0.3 U	0.3 U
N-NITROSO-DI-N-PROPYLAMINE	NA	NA	0.78 U	0.76 U
N-NITROSODIPHENYLAMINE	NA	NA	0.3 U	0.3 U
PENTACHLOROPHENOL	NA	NA	2.4 U	2.3 U
PHENANTHRENE	NA	NA	0.098 U	0.095 U
PHENOL	NA	NA	0.59 U	0.57 U
PYRENE	NA	NA	0.098 U	0.095 U
METALS (UG/L)				
ANTIMONY	0.13 U	0.13 U	0.17 J	0.4 J
ARSENIC	1 J	1.5 J	0.4 U	0.4 U
BARIUM	20	96	20	63
BERYLLIUM	36	81	3	0.2 U
CADMIUM	0.85 J	2	0.13 U	0.13 U
CHROMIUM	0.71 U	0.71 U	5.2	1.8 J
COBALT	430	540	20	5.9
COPPER	32	46	3.4 K	2.1 B
LEAD	1.3 B	2.3	0.55 J	0.29 J
MERCURY	0.12 U	0.12 U	0.39	0.12 U
MOLYBDENUM	0.093 U	0.15 B	0.22 B	0.67 B
NICKEL	870	1200	31	11
SELENIUM	0.74 J	1.2 J	0.57 U	0.57 U
SILVER	0.08 U	0.08 U	0.08 U	0.08 U
THALLIUM	0.34 B	0.77 B	0.16 B	0.14 U
TUNGSTEN	0.37 U	0.37 U	NA	NA
VANADIUM	0.44 U	0.44 U	2.4 J	0.61 J
ZINC	2500	1900	53	12 B

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Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW05S-042512	MT-MW06S-042412	MT-MW07S-082212	MT-MW08S-082212
SAMPLE DATE:	20120425	20120424	20120822	20120822
LOCATION:	MT-MW05S	MT-MW06S	MT-MW07S	MT-MW08S
FILTERED METALS (UG/L)				
ANTIMONY	0.13 U	0.13 U	0.13 J	0.31 J
ARSENIC	1.2 J	1.3 J	0.4 U	0.4 U
BARIUM	20	94	17	62
BERYLLIUM	36	80	2.9	0.2 U
CADMIUM	0.9 J	2.1	0.13 U	0.13 U
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	430	530	21	5.5
COPPER	35	48	1.5 B	1.4 B
LEAD	1.3 B	2.3	0.18 U	0.18 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	0.093 U	0.093 U	0.11 B	0.69 B
NICKEL	870	1200	31	11
SELENIUM	0.57 U	0.63 J	0.57 U	0.57 U
SILVER	0.08 U	0.08 U	0.08 U	0.08 U
THALLIUM	0.32 B	0.57 B	0.14 B	0.14 U
TUNGSTEN	0.37 U	0.37 U	NA	NA
VANADIUM	0.44 U	0.44 U	0.44 U	0.44 U
ZINC	2500	1900	51	12 B
MISCELLANEOUS PARAMETERS (UG/L)				
HEXAVALENT CHROMIUM	0.02 U	0.02 UJ	NA	NA
PERCHLORATE	0.082 U	0.16 J	NA	NA
PETROLEUM HYDROCARBONS (UG/L)				
TPH (C06-C10)	52 B	64 B	36 B	40 B
TPH (C10-C32)	430 B	480 B	400 B	240 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW09S-082112	MT-MW10S-082212	MT-MW11S-082112	MT-MW12S-082112
SAMPLE DATE:	20120821	20120822	20120821	20120821
LOCATION:	MT-MW09S	MT-MW10S	MT-MW11S	MT-MW12S
VOLATILES (UG/L)				
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	0.23 U	0.23 U
1,1,1-TRICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	0.18 U	0.18 U
1,1,2-TRICHLOROTRIFLUOROETHANE	0.28 U	0.28 U	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	0.15 U	0.15 U
1,1-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	0.13 U	0.13 U
1,2,3-TRICHLOROBENZENE	0.17 U	0.17 U	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	0.43 U	0.43 U
1,2,3-TRIMETHYLBENZENE	0.0059 U	0.0059 U	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U
1,2,4-TRIMETHYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	0.67 U	0.67 U
1,2-DIBROMOETHANE	0.24 U	0.24 U	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
1,2-DICHLOROETHANE	0.22 U	0.22 U	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	0.18 U	0.18 U
1,3-DICHLOROBENZENE	0.14 U	0.14 U	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	0.57 U	0.57 U	0.57 U	0.57 U
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	0.99 U	0.99 U
2-CHLOROTOLUENE	0.11 U	0.11 U	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	0.41 U	0.41 U
4-CHLOROTOLUENE	0.18 U	0.18 U	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	0.12 U	0.12 U
4-METHYL-2-PENTANONE	0.32 U	0.32 U	0.32 U	0.32 U
ACETONE	1.9 J	1.1 U	2.8 J	1.1 U
BENZENE	0.13 U	1.9	0.13 U	0.13 U
BROMOBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	0.29 U	0.29 U
BROMODICHLOROMETHANE	0.15 U	0.15 U	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	0.64 U	0.64 U
BROMOMETHANE	0.41 U	0.41 U	0.41 U	0.41 U
CARBON DISULFIDE	2.9	0.67 J	0.46 J	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.34 J

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Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW09S-082112	MT-MW10S-082212	MT-MW11S-082112	MT-MW12S-082112
SAMPLE DATE:	20120821	20120822	20120821	20120821
LOCATION:	MT-MW09S	MT-MW10S	MT-MW11S	MT-MW12S
CHLOROBENZENE	0.15 U	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	0.18 U	0.18 U
CHLOROETHANE	0.29 U	0.29 U	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.36 J	11
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	0.14 U	0.14 U
DIBROMOMETHANE	0.28 U	0.28 U	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	NA	NA	NA	NA
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	0.24 U	0.54 J
N-BUTYLBENZENE	0.12 U	0.12 U	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U
TERT-AMYL METHYL ETHER	NA	NA	NA	NA
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	0.067 U	0.067 U
TERT-BUTYLBENZENE	0.13 U	0.13 U	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	3.9 UR	3.9 UR
TETRACHLOROETHENE	0.29 U	0.29 U	0.29 U	0.29 U
TOLUENE	0.13 U	0.27 J	0.13 U	0.13 U
TOTAL XYLENES	0.28 U	0.28 U	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	0.19 U	0.19 U
TRANS-1,3-DICHLOROPROPENE	0.19 U	0.19 U	0.19 U	0.19 U
TRICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	0.21 U	0.21 U
VINYL ACETATE	0.19 UR	0.19 UR	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW09S-082112	MT-MW10S-082212	MT-MW11S-082112	MT-MW12S-082112
SAMPLE DATE:	20120821	20120822	20120821	20120821
LOCATION:	MT-MW09S	MT-MW10S	MT-MW11S	MT-MW12S
TIC VOLATILES (UG/L)				
1,3,5-TRIMETHYLBENZENE	NA	NA	NA	NA
1-ETHYL-2-METHYL BENZENE	NA	NA	NA	NA
2,4-PENTANEDIONE, 3-METHYL-	NA	NA	NA	NA
3-PENTANOL, 2,2-DIMETHYL-	NA	NA	NA	NA
3-PENTANONE, 2,4-DIMETHYL-	NA	NA	NA	NA
BENZENE, 1-ETHYL-3-METHYL-	NA	NA	NA	NA
BUTANE	NA	NA	NA	NA
BUTANE, 2-METHYL-	NA	NA	NA	NA
CYCLOBUTANE, METHYL-	NA	NA	NA	NA
CYCLOHEXANE	NA	NA	NA	NA
INDANE	NA	NA	NA	NA
METHYL CYCLOHEXANE	NA	NA	NA	NA
METHYLCYCLOPENTANE	NA	NA	NA	NA
SILANE, FLUOROTRIMETHYL-	NA	NA	NA	NA
SEMIVOLATILES (UG/L)				
1,1-BIPHENYL	0.76 U	0.76 U	0.76 U	0.76 U
1,4-DIOXANE	0.47 U	0.47 U	0.47 U	0.47 U
2,2'-OXYBIS(1-CHLOROPROPANE)	0.38 U	0.38 U	0.38 U	0.38 U
2,4,5-TRICHLOROPHENOL	0.29 U	0.29 U	0.29 U	0.29 U
2,4,6-TRICHLOROPHENOL	0.76 U	0.76 U	0.76 U	0.76 U
2,4-DICHLOROPHENOL	0.76 U	0.76 U	0.76 U	0.76 U
2,4-DIMETHYLPHENOL	0.76 U	0.76 U	0.76 U	0.76 U
2,4-DINITROPHENOL	2.3 U	2.3 U	2.3 U	2.3 U
2,4-DINITROTOLUENE	0.26 U	0.26 U	0.26 U	0.26 U
2,6-DINITROTOLUENE	0.76 U	0.76 U	0.76 U	0.76 U
2-CHLORONAPHTHALENE	0.095 U	0.095 U	0.095 U	0.095 U
2-CHLOROPHENOL	0.28 U	0.28 U	0.28 U	0.28 U
2-METHYLNAPHTHALENE	0.095 U	0.095 U	0.095 U	0.095 U
2-METHYLPHENOL	0.76 U	0.76 U	0.76 U	0.76 U
2-NITROANILINE	0.76 U	0.76 U	0.76 U	0.76 U
2-NITROPHENOL	0.27 U	0.27 U	0.27 U	0.27 U
3&4-METHYLPHENOL	0.71 U	0.71 U	0.71 U	0.71 U
3,3'-DICHLOROBENZIDINE	0.35 U	0.35 U	0.35 U	0.35 U
3-NITROANILINE	0.27 U	0.27 U	0.27 U	0.27 U
4,6-DINITRO-2-METHYLPHENOL	2.3 U	2.3 U	2.3 U	2.3 U
4-BROMOPHENYL PHENYL ETHER	0.76 U	0.76 U	0.76 U	0.76 U
4-CHLORO-3-METHYLPHENOL	0.76 U	0.76 U	0.76 U	0.76 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW09S-082112	MT-MW10S-082212	MT-MW11S-082112	MT-MW12S-082112
SAMPLE DATE:	20120821	20120822	20120821	20120821
LOCATION:	MT-MW09S	MT-MW10S	MT-MW11S	MT-MW12S
4-CHLOROANILINE	0.76 U	0.76 U	0.76 U	0.76 U
4-CHLOROPHENYL PHENYL ETHER	0.29 U	0.29 U	0.29 U	0.29 U
4-NITROANILINE	0.76 U	0.76 U	0.76 U	0.76 U
4-NITROPHENOL	2.3 U	2.3 U	2.3 U	2.3 U
ACENAPHTHENE	0.095 U	0.095 U	0.095 U	0.095 U
ACENAPHTHYLENE	0.095 U	0.095 U	0.095 U	0.095 U
ACETOPHENONE	0.32 U	0.32 U	0.32 U	0.32 U
ANTHRACENE	0.095 U	0.095 U	0.095 U	0.095 U
ATRAZINE	0.32 U	0.32 U	0.32 U	0.32 U
BAP EQUIVALENT-HALFND	0.095 U	0.095 U	0.095 U	0.095 U
BAP EQUIVALENT-POS	0.095 U	0.095 U	0.095 U	0.095 U
BENZALDEHYDE	0.37 U	0.37 U	0.37 U	0.37 U
BENZO(A)ANTHRACENE	0.095 U	0.095 U	0.095 U	0.095 U
BENZO(A)PYRENE	0.095 U	0.095 U	0.095 U	0.095 U
BENZO(B)FLUORANTHENE	0.095 U	0.095 U	0.095 U	0.095 U
BENZO(G,H,I)PERYLENE	0.095 U	0.095 U	0.095 U	0.095 U
BENZO(K)FLUORANTHENE	0.095 U	0.095 U	0.095 U	0.095 U
BIS(2-CHLOROETHOXY)METHANE	0.3 U	0.3 U	0.3 U	0.3 U
BIS(2-CHLOROETHYL)ETHER	0.095 U	0.095 U	0.095 U	0.095 U
BIS(2-ETHYLHEXYL)PHTHALATE	1.5 J	0.76 U	1.5 J	1.1 J
BUTYL BENZYL PHTHALATE	0.76 U	0.76 U	0.76 U	0.76 U
CAPROLACTAM	1.7 J	0.76 U	0.76 U	0.76 U
CARBAZOLE	0.27 U	0.27 U	0.27 U	0.27 U
CHRYSENE	0.095 U	0.095 U	0.095 U	0.095 U
DIBENZO(A,H)ANTHRACENE	0.095 U	0.095 U	0.095 U	0.095 U
DIBENZOFURAN	0.095 U	0.095 U	0.095 U	0.095 U
DIETHYL PHTHALATE	0.57 U	0.57 U	0.57 U	0.57 U
DIMETHYL PHTHALATE	0.28 U	0.28 U	0.28 U	0.28 U
DI-N-BUTYL PHTHALATE	0.64 U	0.64 U	0.64 U	0.64 U
DI-N-OCTYL PHTHALATE	0.76 U	0.76 U	0.76 U	0.76 U
FLUORANTHENE	0.095 U	0.095 U	0.095 U	0.095 U
FLUORENE	0.095 U	0.095 U	0.095 U	0.095 U
HEXACHLOROBENZENE	0.095 U	0.095 U	0.095 U	0.095 U
HEXACHLOROBUTADIENE	0.26 U	0.26 U	0.26 U	0.26 U
HEXACHLOROCYCLOPENTADIENE	0.76 U	0.76 U	0.76 U	0.76 U
HEXACHLOROETHANE	0.76 U	0.76 U	0.76 U	0.76 U
INDENO(1,2,3-CD)PYRENE	0.095 U	0.095 U	0.095 U	0.095 U
ISOPHORONE	0.26 U	0.26 U	0.26 U	0.26 U

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland

SAMPLE ID:	MT-MW09S-082112	MT-MW10S-082212	MT-MW11S-082112	MT-MW12S-082112
SAMPLE DATE:	20120821	20120822	20120821	20120821
LOCATION:	MT-MW09S	MT-MW10S	MT-MW11S	MT-MW12S
NAPHTHALENE	0.095 U	0.095 U	0.095 U	0.095 U
NITROBENZENE	0.038 U	0.038 U	0.038 U	0.038 U
N-NITROSODIMETHYLAMINE	0.3 U	0.3 U	0.3 U	0.3 U
N-NITROSO-DI-N-PROPYLAMINE	0.76 U	0.76 U	0.76 U	0.76 U
N-NITROSODIPHENYLAMINE	0.3 U	0.3 U	0.3 U	0.3 U
PENTACHLOROPHENOL	2.3 U	2.3 U	2.3 U	2.3 U
PHENANTHRENE	0.095 U	0.095 U	0.095 U	0.095 U
PHENOL	0.57 U	0.57 U	0.57 U	0.57 U
PYRENE	0.095 U	0.095 U	0.095 U	0.095 U
METALS (UG/L)				
ANTIMONY	1.9 J	0.15 J	1.3 J	0.49 J
ARSENIC	0.6 J	0.56 J	1.2 J	0.75 J
BARIUM	59	63	120	100
BERYLLIUM	1.8	23	0.44 J	4.9
CADMIUM	0.13 U	0.13 U	0.13 U	0.75 J
CHROMIUM	1.8 J	2.5	21	1.2 J
COBALT	7.6	250	86	390
COPPER	2.2 B	1.5 B	2.8 K	12
LEAD	0.79 J	0.44 J	0.76 J	0.54 J
MERCURY	0.12 U	0.12 U	0.12 U	0.12 J
MOLYBDENUM	1.9 B	0.34 B	3.9 B	1.2 B
NICKEL	12	380	140	690
SELENIUM	0.62 J	0.57 U	0.57 U	0.79 J
SILVER	0.08 U	0.08 U	0.08 U	0.08 U
THALLIUM	0.57 B	0.2 B	0.37 B	0.38 B
TUNGSTEN	NA	NA	NA	NA
VANADIUM	0.84 J	0.53 J	2.6 J	0.87 J
ZINC	43	370	160	670

Table H-2

Groundwater Summary Table
Main Terminal, Martin State Airport, Middle River, Maryland
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SAMPLE ID:	MT-MW09S-082112	MT-MW10S-082212	MT-MW11S-082112	MT-MW12S-082112
SAMPLE DATE:	20120821	20120822	20120821	20120821
LOCATION:	MT-MW09S	MT-MW10S	MT-MW11S	MT-MW12S
FILTERED METALS (UG/L)				
ANTIMONY	3	0.14 J	1.1 J	0.28 J
ARSENIC	0.52 J	0.4 U	0.74 J	0.4 U
BARIUM	47	62	110	110
BERYLLIUM	1.7	22	0.2 U	1.9
CADMIUM	0.13 U	0.13 U	0.13 U	0.42 J
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	7.5	250	54	400
COPPER	0.41 B	0.29 B	0.39 B	0.31 B
LEAD	0.18 U	0.18 U	0.18 U	0.18 U
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	2.5 B	0.23 B	4.2 B	0.97 B
NICKEL	12	370	83	680
SELENIUM	0.57 U	0.57 U	0.57 U	0.57 U
SILVER	0.08 U	0.08 U	0.08 U	0.08 U
THALLIUM	0.44 B	0.19 B	0.3 B	0.33 B
TUNGSTEN	NA	NA	NA	NA
VANADIUM	0.44 U	0.44 U	0.89 J	0.44 U
ZINC	43	360	11 B	580
MISCELLANEOUS PARAMETERS (UG/L)				
HEXAVALENT CHROMIUM	NA	NA	NA	NA
PERCHLORATE	NA	NA	NA	NA
PETROLEUM HYDROCARBONS (UG/L)				
TPH (C06-C10)	56 B	41 B	61 B	64 B
TPH (C10-C32)	470 B	330 B	410 B	240 B

B - qualified due to blank contamination.
J - estimated positive value.
K - positive value biased high.
NJ - estimated postive TIC result.
R - rejected positive result.
U - nondetected value.
UJ - estimated nondetected value.
UR - nondetected value rejected.

Table H-2

Statistical Analysis for Soil
Main Terminal, Martin State Airport, Middle River, Maryland

Chemical	Frequency of Detection		Mininum Non Detected	Maximum Non Detected	Mininum Detected		Maximum Detected		Location of Maximum Detected	Sample of Maximum Detected	Mean of Positive Detects	Mean of All Samples	Standard Deviation
	Number	Percent											
VOLATILES (ug/kg)													
1,1,3-TRIMETHYLCYCLOHEXANE	1/1	100			4.4	NJ	4.4	NJ	MT-SS17	MT-SS17-0-2	4.4	4.4	
1,3,5-TRIMETHYLBENZENE	2/2	100			1.3	NJ	45	NJ	MT-SS18	MT-SS18-0-2	23.2	23.2	30.9
2,3,3-TRIMETHYLPENTANE	1/1	100			13	NJ	13	NJ	MT-SS18	MT-SS18-8-10	13.0	13.0	
2,3,4-TRIMETHYLPENTANE	1/1	100			9.7	NJ	9.7	NJ	MT-SS18	MT-SS18-8-10	9.7	9.7	
2,3-DIMETHYLPENTANE	1/1	100			8.2	NJ	8.2	NJ	MT-SS18	MT-SS18-8-10	8.2	8.2	
2,4-DIMETHYLPENTANE	1/1	100			8.8	NJ	8.8	NJ	MT-SS18	MT-SS18-8-10	8.8	8.8	
2-METHYLBUTANE	1/1	100			30	NJ	30	NJ	MT-SS18	MT-SS18-8-10	30.0	30.0	
3-METHYLPENTANE	1/1	100			11	NJ	11	NJ	MT-SS18	MT-SS18-8-10	11.0	11.0	
BENZENE, 1-ETHYL-2,3-DIMETHYL-	1/1	100			4.6	NJ	4.6	NJ	MT-SS17	MT-SS17-0-2	4.6	4.6	
BENZENE, 1-METHYL-2-(1-METHYLETHYL)-	1/1	100			8.2	NJ	8.2	NJ	MT-SS17	MT-SS17-0-2	8.2	8.2	
BENZENE, 1-METHYL-4-(1-METHYLETHYL)-	1/1	100			5.1	NJ	5.1	NJ	MT-SS17	MT-SS17-0-2	5.1	5.1	
BUTANE, 2,2,3,3-TETRAMETHYL-	1/1	100			26	NJ	26	NJ	MT-SS18	MT-SS18-8-10	26.0	26.0	
CYCLOHEXANE	3/3	100			0.32	J	140	J	MT-SS18	MT-SS18-0-2	52.1	52.1	76.5
HEXANE	7/7	100			1.2	J	2.6	J	MT-SS19	MT-SS19-0-2	1.9	1.9	0.5
HEXANE	7/7	100			1.2	J	2.6	J	MT-SS19	MT-SS19-8-10	1.9	1.9	0.5
HEXANE, 2,2,4-TRIMETHYL-	1/1	100			6.6	NJ	6.6	NJ	MT-SS18	MT-SS18-8-10	6.6	6.6	
METHYL CYCLOHEXANE	2/2	100			2.6	J	28	J	MT-SS18	MT-SS18-0-2	15.3	15.3	18.0
TETRAHYDROFURAN	1/1	100			80	NJ	80	NJ	MT-SS18	MT-SS18-0-2	80.0	80.0	
UNKNOWN	1/1	100			6.3	NJ	6.3	NJ	MT-SS17	MT-SS17-0-2	6.3	6.3	
1,2,3-TRIMETHYLBENZENE	3/10	30	0.14	0.17	1.9	J	33	J	MT-SS18	MT-SS18-0-2	12.9	3.9	10.3
CARBON TETRACHLORIDE	3/10	30	0.3	0.36	4.4	J	490		MT-SS18	MT-SS18-0-2	190.8	57.4	154.0
ISOPROPYLBENZENE	3/10	30	0.13	0.16	0.24	J	8.3	J	MT-SS18	MT-SS18-0-2	3.2	1.0	2.6
O-XYLENE	3/10	30	0.29	0.35	0.46	J	49	J	MT-SS18	MT-SS18-0-2	17.3	5.3	15.4
TOLUENE	3/10	30	0.22	19	0.28	J	0.49	J	MT-SS17	MT-SS17-0-2	0.4	1.1	2.9
1,2,4-TRIMETHYLBENZENE	2/10	20	0.53	0.65	2.3	J	34	J	MT-SS18	MT-SS18-0-2	18.2	3.9	10.6
2-BUTANONE	2/10	20	1.1	48	3	J	4.1	J	MT-SS17	MT-SS17-0-2	3.6	3.6	7.3
4-ISOPROPYLTOLUENE	2/10	20	0.17	0.21	1.3	J	26	J	MT-SS18	MT-SS18-0-2	13.7	2.8	8.2
ACETONE	2/10	20	5.2	190	42		65		MT-SS17	MT-SS17-8-10	53.5	22.2	33.6
CARBON DISULFIDE	2/10	20	0.36	13	3	J	4.2	J	MT-SS18	MT-SS18-8-10	3.6	1.5	2.3
CHLOROFORM	2/10	20	0.24	0.29	32		55	J	MT-SS18	MT-SS18-0-2	43.5	8.8	19.1
ETHYLBENZENE	2/10	20	0.21	0.26	0.34	J	27	J	MT-SS18	MT-SS18-0-2	13.7	2.8	8.5
SEC-BUTYLBENZENE	2/10	20	0.15	5.3	0.54	J	0.64	J	MT-SS17	MT-SS17-0-2	0.6	0.4	0.8
TOTAL XYLENES	2/10	20	0.55	0.66	2.5	J	120	J	MT-SS18	MT-SS18-0-2	61.3	12.5	37.8
BENZENE	1/10	10	0.19	13	5.4		5.4		MT-SS18	MT-SS18-8-10	5.4	1.3	2.5
CIS-1,2-DICHLOROETHENE	1/10	10	0.29	7.7	5.2		5.2		MT-SS17	MT-SS17-0-2	5.2	1.0	1.9
M+P-XYLENES	1/10	10	0.98	1.2	67	J	67	J	MT-SS18	MT-SS18-0-2	67.0	7.2	21.0
METHYLENE CHLORIDE	1/10	10	0.56	86	0.71	J	0.71	J	MT-SS18	MT-SS18-8-10	0.7	4.9	13.4
NAPHTHALENE	1/10	10	0.16	1.6	23	J	23	J	MT-SS18	MT-SS18-0-2	23.0	2.5	7.2
TERT-BUTYLBENZENE	1/10	10	0.24	7.3	0.45	J	0.45	J	MT-SS18	MT-SS18-8-10	0.5	0.5	1.1

Table H-2

Statistical Analysis for Soil
Main Terminal, Martin State Airport, Middle River, Maryland

Chemical	Frequency of Detection		Mininum Non Detected	Maximum Non Detected	Mininum Detected		Maximum Detected		Location of Maximum Detected	Sample of Maximum Detected	Mean of Positive Detects	Mean of All Samples	Standard Deviation
	Number	Percent											
TRICHLOROETHENE	1/10	10	0.34	11	110		110		MT-SS21	MT-SS21-8-10	110.0	11.7	34.6
VINYL CHLORIDE	1/10	10	0.32	20	2.5	J	2.5	J	MT-SS17	MT-SS17-0-2	2.5	1.4	3.1
SEMIVOLATILES (ug/kg)													
FLUORANTHENE	8/10	80	3.9	4	5.7	J	510		MT-SS17	MT-SS17-8-10	95.9	77.1	162.5
PYRENE	7/10	70	3.9	4	4.8	J	450		MT-SS17	MT-SS17-8-10	104.5	73.8	146.6
BAP EQUIVALENT-HALFND	6/10	60	3.9	4	8.2315		465.65		MT-SS17	MT-SS17-8-10	122.7	74.4	152.8
BAP EQUIVALENT-POS	6/10	60	3.9	4	6.067		465.65		MT-SS17	MT-SS17-8-10	121.3	73.5	153.2
BENZO(A)PYRENE	6/10	60	3.9	4	4.9	J	310		MT-SS17	MT-SS17-8-10	82.6	50.4	102.0
BENZO(B)FLUORANTHENE	6/10	60	3.9	4	5.6	J	440		MT-SS17	MT-SS17-8-10	110.9	67.3	143.3
BENZO(A)ANTHRACENE	5/10	50	3.8	4	6	J	240		MT-SS17	MT-SS17-8-10	75.3	38.6	78.2
CHRYSENE	5/10	50	1.3	1.3	7	J	350		MT-SS17	MT-SS17-8-10	107.3	54.0	115.1
DI-N-BUTYL PHTHALATE	5/10	50	18	18	20	J	35	J	MT-SS17	MT-SS17-0-2	28.4	18.7	11.1
PHENANTHRENE	5/10	50	3.8	4	6.9	J	150		MT-SS17	MT-SS17-8-10	48.5	25.2	47.9
BENZO(G,H,I)PERYLENE	4/10	40	3.8	4	5.4	J	280		MT-SS17	MT-SS17-8-10	107.6	44.2	91.9
BENZO(K)FLUORANTHENE	4/10	40	3.9	4	4.9	J	230		MT-SS17	MT-SS17-8-10	85.3	35.3	74.8
BIS(2-ETHYLHEXYL)PHTHALATE	4/10	40	22	34	25	J	58	J	MT-SS17	MT-SS17-8-10	38.8	23.4	15.6
INDENO(1,2,3-CD)PYRENE	3/10	30	3.8	4	10		230		MT-SS17	MT-SS17-8-10	112.7	35.2	74.7
ACENAPHTHYLENE	2/10	20	3.8	4	15		17		MT-SS17	MT-SS17-8-10	16.0	4.8	5.9
ANTHRACENE	2/10	20	3.8	4	25		39		MT-SS17	MT-SS17-8-10	32.0	8.0	13.1
DIBENZO(A,H)ANTHRACENE	2/10	20	3.8	4	28		62		MT-SS17	MT-SS17-8-10	45.0	10.6	19.8
2,4-DIMETHYLPHENOL	1/10	10	23	24	25	J	25	J	MT-SS17	MT-SS17-0-2	25.0	13.1	4.2
2-METHYLNAPHTHALENE	1/10	10	3.8	4	18		18		MT-SS17	MT-SS17-0-2	18.0	3.6	5.1
ACETOPHENONE	1/10	10	11	11	25	J	25	J	MT-SS17	MT-SS17-0-2	25.0	7.5	6.2
FLUORENE	1/10	10	3.8	4	10		10		MT-SS17	MT-SS17-8-10	10.0	2.8	2.5
NAPHTHALENE	1/10	10	3.8	4	30		30		MT-SS17	MT-SS17-0-2	30.0	4.8	8.9
PHENOL	1/10	10	31	33	37	J	37	J	MT-SS17	MT-SS17-0-2	37.0	18.2	6.6
PETROLEUM HYDROCARBONS													
TPH (C06-C10) (ug/kg)	2/10	20	54	56	130		380		MT-SS18	MT-SS18-0-2	255.0	72.9	112.6
TPH (C10-C32) (mg/kg)	2/10	20	11	11	28		240		MT-SS17	MT-SS17-0-2	134.0	31.2	73.7
METALS (mg/kg)													
ARSENIC	10/10	100			1	J	6.7		MT-SS18	MT-SS18-0-2	4.6	4.6	1.8
BARIUM	10/10	100			9.3	J	20	J	MT-SS17	MT-SS17-0-2	14.3	14.3	3.7
CHROMIUM	10/10	100			19		29		MT-SS18	MT-SS18-0-2	22.9	22.9	3.0
COBALT	10/10	100			1.8	L	14		MT-SS21	MT-SS21-8-10	9.6	9.6	4.3
COBALT	10/10	100			1.8	L	14		MT-SS20	MT-SS20-0-2	9.6	9.6	4.3
COBALT	10/10	100			1.8	L	14		MT-SS19	MT-SS19-8-10	9.6	9.6	4.3
COPPER	10/10	100			4.7		38		MT-SS20	MT-SS20-8-10	22.5	22.5	10.8
LEAD	10/10	100			1	J	7.8		MT-SS17	MT-SS17-0-2	4.6	4.6	2.1
NICKEL	10/10	100			3.3	J	52	J	MT-SS19	MT-SS19-8-10	31.2	31.2	16.4
VANADIUM	10/10	100			14		80		MT-SS18	MT-SS18-0-2	38.1	38.1	17.2

Table H-2

Statistical Analysis for Soil
Main Terminal, Martin State Airport, Middle River, Maryland
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Chemical	Frequency of Detection		Mininum Non Detected	Maximum Non Detected	Mininum Detected		Maximum Detected		Location of Maximum Detected	Sample of Maximum Detected	Mean of Positive Detects	Mean of All Samples	Standard Deviation
	Number	Percent											
ZINC	10/10	100			4.9	J	79		MT-SS17	MT-SS17-0-2	50.0	50.0	28.2
BERYLLIUM	9/10	90	0.44	0.44	1.6		5.8		MT-SS21	MT-SS21-8-10	3.0	2.8	1.5
SELENIUM	1/10	10	0.42	0.5	0.98	J	0.98	J	MT-SS18	MT-SS18-0-2	1.0	0.3	0.2
TCLP METALS (mg/l)													
BARIUM	1/1	100			0.17	J	0.17	J	MT-TCLP	MT-TCLP-8-10	0.2	0.2	
CADMIUM	1/1	100			0.0013	J	0.0013	J	MT-TCLP	MT-TCLP-8-10	0.0	0.0	
CHROMIUM	1/1	100			0.0047	J	0.0047	J	MT-TCLP	MT-TCLP-8-10	0.0	0.0	
LEAD	1/1	100			0.05	J	0.05	J	MT-TCLP	MT-TCLP-8-10	0.1	0.1	

Footnotes:
For non-detects, 1/2 sample quantitation limit was used as a proxy concentration.
1/2 the detection limit was used for B qualified data.
NA - Not applicable, there are an insufficient number of samples to calculate statistics.

Associated Samples

MT-SS17-0-2	MT-SS19-8-10	MT-TCLP-8-10
MT-SS17-8-10	MT-SS20-0-2	
MT-SS18-0-2	MT-SS20-8-10	
MT-SS18-8-10	MT-SS21-0-2	
MT-SS19-0-2	MT-SS21-8-10	

Table H-4

Statistical Analysis for Groundwater
Main Terminal, Martin State Airport, Middle River, Maryland

Chemical	Frequency of Detection		Mininum Non Detected	Maximum Non Detected	Mininum Detected		Maximum Detected		Location of Maximum Detected
	Number	Percent							
VOLATILES (UG/L)									
CARBON DISULFIDE	6/12	50	0.13	0.65	0.16	J	2.9		MT-MW09S
ACETONE	4/12	33	1.1	1.1	1.9	J	90		MT-MW02S
BENZENE	3/12	25	0.13	0.13	0.13	J	87		MT-MW02S
CHLOROFORM	3/12	25	0.16	0.8	0.36	J	11		MT-MW12S
CHLOROMETHANE	3/12	25	0.3	1.5	0.35	J	0.47	J	MT-MW06S
TOLUENE	3/12	25	0.13	0.65	0.16	J	0.29	J	MT-MW01S
1,2,3-TRIMETHYLBENZENE	1/12	8	0.0059	0.0059	2.4	J	2.4	J	MT-MW02S
1,2,4-TRIMETHYLBENZENE	1/12	8	0.12	0.12	9.2		9.2		MT-MW02S
1,2-DICHLOROETHANE	1/12	8	0.22	0.22	3.8	J	3.8	J	MT-MW02S
4-ISOPROPYLTOLUENE	1/12	8	0.12	0.12	1.6	J	1.6	J	MT-MW02S
4-METHYL-2-PENTANONE	1/12	8	0.32	0.32	2.5	J	2.5	J	MT-MW02S
CARBON TETRACHLORIDE	1/12	8	0.13	0.65	0.34	J	0.34	J	MT-MW12S
CIS-1,2-DICHLOROETHENE	1/12	8	0.17	0.17	4.8	J	4.8	J	MT-MW02S
ETHYLBENZENE	1/12	8	0.17	0.17	180		180		MT-MW02S
ISOPROPYLBENZENE	1/12	8	0.13	0.13	31		31		MT-MW02S
M+P-XYLENES	1/12	8	0.24	0.24	50		50		MT-MW02S
N-PROPYLBENZENE	1/12	8	0.14	0.14	9.7		9.7		MT-MW02S
NAPHTHALENE	1/12	8	0.24	1.2	0.54	J	0.54	J	MT-MW12S
O-XYLENE	1/12	8	0.14	0.14	22		22		MT-MW02S
SEC-BUTYLBENZENE	1/12	8	0.13	0.13	0.75	J	0.75	J	MT-MW02S
TOTAL XYLENES	1/12	8	0.28	0.28	72		72		MT-MW02S
TRICHLOROETHENE	1/12	8	0.17	0.85	0.35	J	0.35	J	MT-MW05S
TIC VOLATILES (UG/L)									
1,3,5-TRIMETHYLBENZENE	1/1	100			47		47		MT-MW02S
1-ETHYL-2-METHYL BENZENE	1/1	100			7.3	NJ	7.3	NJ	MT-MW02S
2,4-PENTANEDIONE, 3-METHYL-	1/1	100			7.8	NJ	7.8	NJ	MT-MW02S
3-PENTANOL, 2,2-DIMETHYL-	1/1	100			6.5	NJ	6.5	NJ	MT-MW02S
3-PENTANONE, 2,4-DIMETHYL-	1/1	100			12	NJ	12	NJ	MT-MW02S
BENZENE, 1-ETHYL-3-METHYL-	1/1	100			10	NJ	10	NJ	MT-MW02S
BUTANE	1/1	100			1.4	NJ	1.4	NJ	MT-MW01S
BUTANE, 2-METHYL-	1/1	100			2.5	NJ	2.5	NJ	MT-MW05S
CYCLOBUTANE, METHYL-	1/1	100			9.8	NJ	9.8	NJ	MT-MW02S
CYCLOHEXANE	1/1	100			45		45		MT-MW02S
INDANE	1/1	100			8.1	NJ	8.1	NJ	MT-MW02S
METHYLCYCLOPENTANE	1/1	100			19	NJ	19	NJ	MT-MW02S
SEMIVOLATILES (UG/L)									
BIS(2-ETHYLHEXYL)PHTHALATE	5/6	83	0.76	0.76	0.79	J	1.5	J	MT-MW11S/MT-MW09S
CAPROLACTAM	2/6	33	0.76	0.78	0.78	J	1.7	J	MT-MW09S

Table H-4

Statistical Analysis for Groundwater
Main Terminal, Martin State Airport, Middle River, Maryland

Chemical	Frequency of Detection		Mininum Non Detected	Maximum Non Detected	Mininum Detected		Maximum Detected		Location of Maximum Detected
	Number	Percent							
METALS (UG/L)									
BARIUM	12/12	100			20		120		MT-MW11S/MT-MW02S
COBALT	12/12	100			2.3		540		MT-MW06S
NICKEL	12/12	100			5.9		1200		MT-MW06S
BERYLLIUM	11/12	92	0.2	0.2	0.41	J	81		MT-MW06S
ARSENIC	10/12	83	0.4	0.4	0.56	J	4.7	J	MT-MW01S
ZINC	10/12	83	12	12	43		2500		MT-MW05S
LEAD	9/12	75	0.26	1.3	0.29	J	2.6		MT-MW03S
VANADIUM	8/12	67	0.44	0.44	0.53	J	6	J	MT-MW03S
ANTIMONY	7/12	58	0.13	0.13	0.15	J	1.9	J	MT-MW09S
CHROMIUM	7/12	58	0.71	0.71	1.2	J	21		MT-MW11S
COPPER	7/12	58	0.6	2.2	2.8	K	46		MT-MW06S
CADMIUM	4/12	33	0.13	0.13	0.14	J	2		MT-MW06S
SELENIUM	4/12	33	0.57	0.57	0.62	J	1.2	J	MT-MW06S
MERCURY	2/12	17	0.12	0.12	0.12	J	0.39		MT-MW07S
FILTERED METALS (UG/L)									
BARIUM	12/12	100			17		120		MT-MW01S
COBALT	12/12	100			1.1		530		MT-MW06S
NICKEL	12/12	100			1.7	J	1200		MT-MW06S
BERYLLIUM	9/12	75	0.2	0.2	0.36	J	80		MT-MW06S
ZINC	9/12	75	8.3	12	43		2500		MT-MW05S
ARSENIC	8/12	67	0.4	0.4	0.52	J	5	K	MT-MW01S
ANTIMONY	6/12	50	0.13	0.21	0.13	J	3		MT-MW09S
CADMIUM	4/12	33	0.13	0.13	0.23	J	2.1		MT-MW06S
COPPER	3/12	25	0.29	1.5	35		48		MT-MW06S
LEAD	2/12	17	0.18	1.3	1	K	2.3		MT-MW06S
TUNGSTEN	1/6	17	0.37	0.37	0.78	J	0.78	J	MT-MW04S
VANADIUM	2/12	17	0.44	0.44	0.65	J	0.89	J	MT-MW11S
SELENIUM	1/12	8	0.57	0.57	0.63	J	0.63	J	MT-MW06S
MISCELLANEOUS PARAMETERS (UG/L)									
PERCHLORATE	1/6	17	0.082	0.082	0.16	J	0.16	J	MT-MW06S
PETROLEUM HYDROCARBONS (UG/L)									
TPH (C06-C10)	1/12	8	36	64	1400		1400		MT-MW02S
TPH (C10-C32)	1/12	8	240	540	3700		3700		MT-MW02S

Table H-4

Statistical Analysis for Groundwater
Main Terminal, Martin State Airport, Middle River, Maryland

Chemical	Sample of Maximum Detected	Mean of Positive Detects	Mean of All Samples	Standard Deviation
VOLATILES (UG/L)				
CARBON DISULFIDE	MT-MW09S-082112	1.000	0.554	0.825
ACETONE	MT-MW02S-043012	24.375	8.492	25.684
BENZENE	MT-MW02S-043012	29.677	7.468	25.052
CHLOROFORM	MT-MW12S-082112	3.993	1.085	3.128
CHLOROMETHANE	MT-MW06S-042412	0.397	0.262	0.191
TOLUENE	MT-MW01S-042512	0.240	0.130	0.104
1,2,3-TRIMETHYLBENZENE	MT-MW02S-043012	2.400	0.203	0.692
1,2,4-TRIMETHYLBENZENE	MT-MW02S-043012	9.200	0.822	2.638
1,2-DICHLOROETHANE	MT-MW02S-043012	3.800	0.418	1.065
4-ISOPROPYLTOLUENE	MT-MW02S-043012	1.600	0.188	0.445
4-METHYL-2-PENTANONE	MT-MW02S-043012	2.500	0.355	0.675
CARBON TETRACHLORIDE	MT-MW12S-082112	0.340	0.110	0.104
CIS-1,2-DICHLOROETHENE	MT-MW02S-043012	4.800	0.478	1.361
ETHYLBENZENE	MT-MW02S-043012	180.000	15.078	51.937
ISOPROPYLBENZENE	MT-MW02S-043012	31.000	2.643	8.930
M+P-XYLENES	MT-MW02S-043012	50.000	4.277	14.399
N-PROPYLBENZENE	MT-MW02S-043012	9.700	0.873	2.780
NAPHTHALENE	MT-MW12S-082112	0.540	0.195	0.176
O-XYLENE	MT-MW02S-043012	22.000	1.898	6.331
SEC-BUTYLBENZENE	MT-MW02S-043012	0.750	0.122	0.198
TOTAL XYLENES	MT-MW02S-043012	72.000	6.128	20.744
TRICHLOROETHENE	MT-MW05S-042512	0.350	0.135	0.119
TIC VOLATILES (UG/L)				
1,3,5-TRIMETHYLBENZENE	MT-MW02S-043012	47.000	47.000	
1-ETHYL-2-METHYL BENZENE	MT-MW02S-043012	7.300	7.300	
2,4-PENTANEDIONE, 3-METHYL-	MT-MW02S-043012	7.800	7.800	
3-PENTANOL, 2,2-DIMETHYL-	MT-MW02S-043012	6.500	6.500	
3-PENTANONE, 2,4-DIMETHYL-	MT-MW02S-043012	12.000	12.000	
BENZENE, 1-ETHYL-3-METHYL-	MT-MW02S-043012	10.000	10.000	
BUTANE	MT-MW01S-042512	1.400	1.400	
BUTANE, 2-METHYL-	MT-MW05S-042512	2.500	2.500	
CYCLOBUTANE, METHYL-	MT-MW02S-043012	9.800	9.800	
CYCLOHEXANE	MT-MW02S-043012	45.000	45.000	
INDANE	MT-MW02S-043012	8.100	8.100	
METHYLCYCLOPENTANE	MT-MW02S-043012	19.000	19.000	
SEMIVOLATILES (UG/L)				
BIS(2-ETHYLHEXYL)PHTHALATE	MT-MW11S-082112/MT-MW09S-082112	1.160	1.030	0.434
CAPROLACTAM	MT-MW09S-082112	1.240	0.668	0.530

Table H-4

Statistical Analysis for Groundwater
Main Terminal, Martin State Airport, Middle River, Maryland
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Chemical	Sample of Maximum Detected	Mean of Positive Detects	Mean of All Samples	Standard Deviation
METALS (UG/L)				
BARIUM	MT-MW11S-082112/MT-MW02S-043012	72.750	72.750	37.266
COBALT	MT-MW06S-042412	175.983	175.983	188.764
NICKEL	MT-MW06S-042412	315.408	315.408	400.019
BERYLLIUM	MT-MW06S-042412	14.107	12.940	24.168
ARSENIC	MT-MW01S-042512	1.522	1.302	1.249
ZINC	MT-MW05S-042512	677.600	565.667	807.442
LEAD	MT-MW03S-042512	1.063	0.892	0.788
VANADIUM	MT-MW03S-042512	1.849	1.306	1.686
ANTIMONY	MT-MW09S-082112	0.660	0.412	0.586
CHROMIUM	MT-MW11S-082112	5.543	3.381	5.829
COPPER	MT-MW06S-042412	20.929	12.533	17.384
CADMIUM	MT-MW06S-042412	0.935	0.355	0.590
SELENIUM	MT-MW06S-042412	0.838	0.469	0.302
MERCURY	MT-MW07S-082212	0.255	0.093	0.095
FILTERED METALS (UG/L)				
BARIUM	MT-MW01S-042512	70.667	70.667	38.580
COBALT	MT-MW06S-042412	170.175	170.175	190.492
NICKEL	MT-MW06S-042412	306.058	306.058	403.079
BERYLLIUM	MT-MW06S-042412	16.516	12.412	24.039
ZINC	MT-MW05S-042512	742.333	558.054	822.700
ARSENIC	MT-MW01S-042512	1.501	1.068	1.333
ANTIMONY	MT-MW09S-082112	0.827	0.449	0.855
CADMIUM	MT-MW06S-042412	0.913	0.348	0.606
COPPER	MT-MW06S-042412	42.333	10.817	19.217
LEAD	MT-MW06S-042412	1.650	0.416	0.661
TUNGSTEN	MT-MW04S-042412	0.780	0.284	0.243
VANADIUM	MT-MW11S-082112	0.770	0.312	0.220
SELENIUM	MT-MW06S-042412	0.630	0.314	0.100
MISCELLANEOUS PARAMETERS (UG/L)				
PERCHLORATE	MT-MW06S-042412	0.160	0.061	0.049
PETROLEUM HYDROCARBONS (UG/L)				
TPH (C06-C10)	MT-MW02S-043012	1400.000	140.667	396.618
TPH (C10-C32)	MT-MW02S-043012	3700.000	486.250	1013.193

Footnotes:
For non-detects, 1/2 sample quantitation limit was used as a proxy concentration.
1/2 the detection limit was used for B qualified data.

Associated Samples

MT-MW01S-042512	MT-MW10S-082212	20120822
MT-MW02S-043012	MT-MW11S-082112	20120822
MT-MW03S-042512	MT-MW12S-082112	20120821
MT-MW04S-042412	20120425	20120822
MT-MW05S-042512	20120430	20120821
MT-MW06S-042412	20120425	20120821
MT-MW07S-082212	20120424	
MT-MW08S-082212	20120425	
MT-MW09S-082112	20120424	