Technical Memorandum: August 2012 Surface Water Sampling Results for Frog Mortar Creek Martin State Airport 701 Wilson Point Road Middle River, Maryland

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ACRONYMS

AWQC	Ambient Water Quality Criteria
BTAG	Biological Technical Advisory Group
BTEX	benzene, toluene, ethylbenzene, and xylenes
cis-1,2-DCE	*cis*-1,2-dichloroethene
COC	chain of custody
cVOC	chlorinated volatile organic compound
DRA	Dump Road Area
GIS	geographic information system
IDW	investigation-derived waste
Lockheed Martin	Lockheed Martin Corporation
MAA	Maryland Aviation Administration
MDANG	Maryland Air National Guard
MDE	Maryland Department of the Environment
mg/L	milligram(s) per liter
mL	milliliter(s)
MSA	Martin State Airport
µg/L	microgram(s) per liter
NRWQC	National Recommended Water Quality Criteria
PA	preliminary assessment
PAHs	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PDF	portable document format
PPE	personal protective equipment
RI	remedial investigation
SVOC	semivolatile organic compound
TCE	trichloroethene
TB	trip blank
Tetra Tech	Tetra Tech, Inc.
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound

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Section 1
Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. (Tetra Tech) has prepared this technical memorandum to detail work conducted as part of the *2012 Surface Water Sampling Work Plan* (Tetra Tech, 2012a) for the Dump Road Area (DRA) at Martin State Airport (MSA) in Middle River, Maryland (see Figure 1-1). This technical memorandum presents the results of surface water samples collected from Frog Mortar Creek on August 13, 2012. The sampling objectives were to:

- provide additional surface water quality data to determine the concentrations and spatial distributions of volatile organic compounds (VOCs) and other chemicals of potential concern in Frog Mortar Creek, which presumably are emanating from a groundwater plume at the Dump Road Area of Martin State Airport
- evaluate the interaction between Dump Road Area shallow groundwater and Frog Mortar Creek
- provide information that can be used to assess human health risks for recreational users of Frog Mortar Creek, and can be used to update the modeling of shallow groundwater flow patterns and discharge to Frog Mortar Creek

This technical memorandum is organized as follows:

Section 2—Site Background and Previous Investigations: Briefly describes the site and summarizes previous Frog Mortar Creek investigations.

Section 3—Investigation Approach and Methodology: Presents the technical approach of the surface water sampling and describes the field methodology.

Section 4—Results: Presents the investigation findings.

Section 5—Summary: Summarizes the investigation approach and findings.

Section 6—References: Cites references used to compile this memorandum.

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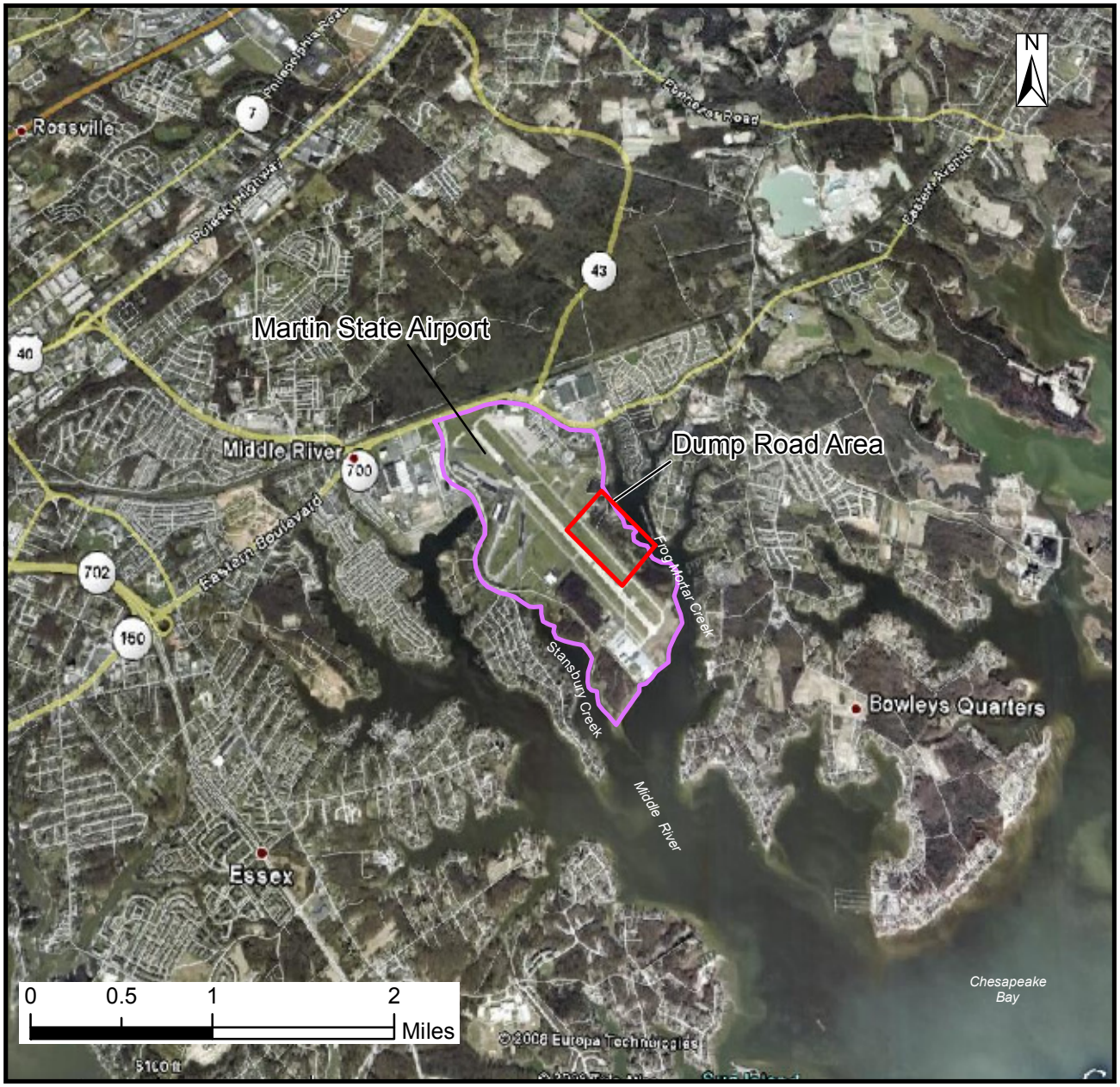

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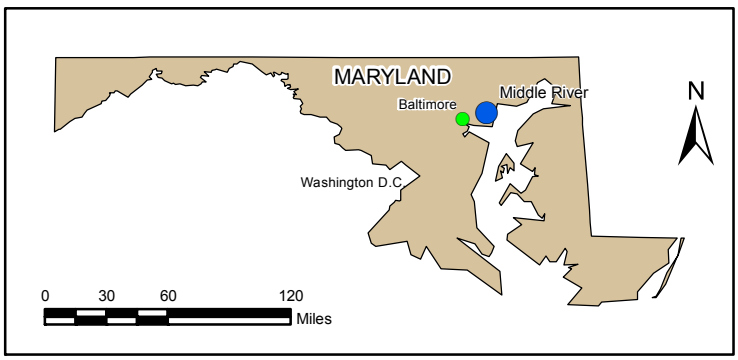

FIGURE 1-1

MARTIN STATE AIRPORT, DUMP ROAD AREA, AND FROG MORTAR CREEK LOCATION MAP

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

DATE MODIFIED:	CREATED BY:
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TETRA TECH

Section 2
Site Background and Previous Investigations

2.1 SITE BACKGROUND

Martin State Airport (MSA) is at 701 Wilson Point Road in Middle River, Maryland and is bounded by Frog Mortar Creek to the east and Stansbury Creek and Dark Head Cove to the west (Figure 2-1). Both creeks are tidal tributaries of Chesapeake Bay. The area under investigation is Frog Mortar Creek, east of and adjacent to the Dump Road Area (DRA) site at MSA. Three pits in the Dump Road Area were reportedly used during the 1930s through 1960s to dump spent battery acid, acid-type strippers, and other acidic solutions, along with dredge spoils and construction debris.

Environmental investigations of the DRA began in 1989 when the Maryland Department of the Environment (MDE) conducted a preliminary assessment (PA) of MSA. Although historical use of three pits was reported, MDE only found two of the three pits during site visits. MDE referred to the two pits as ponds in the PA, as follows: Acid Pit #1 (or Pond 1) and Acid Pit #2 (or Pond 2); these names were used in subsequent studies. The United States Environmental Protection Agency (USEPA) reviewed the preliminary assessment, concluded that no signs of waste disposal were apparent, and classified the site as "No Further Remedial Action Planned."

In July 1991, four drums containing dried zinc chromate paint were uncovered during installation of underground electric cables adjacent to Taxiway Tango (Figure 2–2). The discovery prompted MDE to order additional studies (MDE, 1992 and 1997); aerial photographs taken from 1952 and 1957 and reviewed during these studies also show an open "burial area" or "dump" adjacent to what is now Taxiway Tango. The Maryland Aviation Administration (MAA), the airport owner at that time, removed the four drums and conducted environmental studies from 1991–1998. These studies included geophysical surveys to locate and identify buried materials and sampling and chemical analyses of soil, groundwater, surface water, and sediment. These initial investigations

identified four areas of concern at MSA: the Taxiway Tango Median Anomaly Area, the Drum Area, two ponds (Pond 1 and Pond 2), and the Petroleum Hydrocarbon Area (Figure 2-2).

From 1999–2009, the Lockheed Martin Corporation (Lockheed Martin), the successor corporate entity of the Glenn L. Martin Aircraft Company, conducted a remedial investigation (RI) of the DRA (Tetra Tech, Inc. [Tetra Tech], 2010a). Lockheed Martin also conducted supplemental RI studies of the DRA in 2010 and 2011 (Tetra Tech 2010b–c, 2011a–d, 2012a–g) to further delineate the extent of chemical impacts in soil, groundwater, and sediment that earlier studies had indicated. Through geophysical surveys, test pits, soil borings, and soil-sample chemical analyses, the RI and supplemental studies identified surface and subsurface soil contamination from buried fill material.

The fill material consists of soil, stained soil, and debris, the latter of which is comprised of concrete rubble and disposed industrial items (e.g., batteries, decomposed drums, tires, paint cans, burned items, sludge, buckets, glass, wood, etc.). Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) (primarily polycyclic aromatic hydrocarbons [PAHs]), and several metals have been detected in soils at concentrations exceeding human health risk screening levels. Chlorinated VOCs (cVOCs) (e.g., trichloroethene [TCE] and its degradation products *cis*-1,2-dichloroethene [*cis*-1,2-DCE] and vinyl chloride [VC]), petroleum VOCs (e.g., benzene, toluene, ethylbenzene, and xylenes [BTEX]), and metals have also been found in surficial aquifer groundwater at concentrations exceeding Maryland groundwater and drinking water standards. Complete details of the site background, including previous investigations, descriptions of site geology and hydrogeology, and current conditions, are in the RI report (Tetra Tech, 2010a).

2.2 PREVIOUS INVESTIGATIONS OF FROG MORTAR CREEK

2.2.1 1997 Investigation

An MAA investigation in late 1997 evaluated possible contamination of surface water and bottom sediments in Frog Mortar Creek, east and hydraulically downgradient of the DRA (Apex Environmental, 1998). Six sediment and nine surface water samples were collected along three transects in Frog Mortar Creek, as shown in Figure 2-3. Surface water and sediment

samples were analyzed for VOCs, SVOCs, metals, cyanide, and pH (a measure of the acidity or alkalinity of a substance).

SVOCs and cyanide were not detected in these surface water samples at concentrations above the laboratory method detection limits. The only VOC detected (methylene chloride) is considered a common laboratory contaminant. Several SVOCs (primarily PAHs) and metals were detected above laboratory method detection limits in the sediment samples; copper was detected at particularly high concentrations in sediment samples. Several metals also exceeded comparison criteria in surface water samples.

MAA's consultant at the time of the investigation, the Maryland Environmental Service (MES), determined that SVOC concentrations in sediment were comparable to background levels found in other sediment samples collected in Chesapeake Bay. MES concluded that these concentrations pose no public health or environmental concerns with respect to surface water or bottom sediment quality. An MDE memorandum of August 20, 1998 (MDE, 1998) reviewed the surface water and sediment data and concluded that the potential risks associated with these exposure concentrations are within the range USEPA considers acceptable.

2.2.2 2004 Investigation

Tetra Tech collected sediment and surface water samples from Frog Mortar Creek in July 2004 to provide quality data for risk assessment (Tetra Tech, 2006). Two sediment and two surface water samples were collected within 50 feet of the DRA shoreline. These sampling locations were selected based on extensive groundwater sampling and modeling that indicated that the on-site VOC plume is moving toward Frog Mortar Creek. The July 2004 sampling locations are shown in Figure 2-4.

Sediment and surface water samples were analyzed for inorganic constituents, VOCs, SVOCs, polychlorinated biphenyls (PCBs), and pesticides. Very low concentrations of VOCs and concentrations of various metals were detected in surface water and sediment samples. These data were used to assess risk to recreational users of Frog Mortar Creek. The results of the human health risk assessment conducted in 2006 indicated that contact with sediments and surface water in Frog Mortar Creek during recreational uses of the creek does not pose a

significant cancer risk or health hazard to adults, youth, and child recreational users (Tetra Tech, 2006).

2.2.3 2007–2008 Investigation

Tetra Tech completed a three-phase investigation of surface water and sediment in Frog Mortar Creek (Tetra Tech, 2009) in 2007–2008. That investigation identified and sampled areas where groundwater discharges into Frog Mortar Creek to assess possible contamination in sediment and surface water and whether contaminants may have historically migrated from the site into Frog Mortar Creek via surface erosion. Sampling locations for the three phases of this investigation are shown in Figures 2-5 through 2-7. The three-phase investigation included the following tasks:

- *Phase I*—a Trident™ probe identified locations where groundwater discharges to surface water
- *Phase II*—surface water and shallow sediment was sampled at the locations identified in Phase I as possible groundwater discharge points
- *Phase III*—deeper sediments were sampled at locations identified in Phase II as possibly affected

The Phase I Trident™ study identified the likely presence of groundwater discharge at the southern end of the DRA groundwater plume. The Phase II investigation indicated that groundwater discharge appears to be affecting surface water and sediment in Frog Mortar Creek east of the DRA. The Phase III investigation confirmed the Phase II results, but also indicated that metals and PAHs are widespread in the Frog Mortar Creek system, including areas away from the DRA.

The 2007–2008 investigation concluded that cVOC groundwater contamination, upon discharge to Frog Mortar Creek, was affecting surface water and sediment at locations adjacent to and east of the DRA. These locations are within the lateral boundaries of the groundwater plume and known fill area at the DRA. The sample analyses show that:

- the highest concentrations of cVOCs known to be associated with the DRA groundwater plume were detected in sediments adjacent to the site
- the highest detected concentrations of metals were typically found at areas not influenced by the DRA plume

- the highest concentrations of PAHs in Frog Mortar Creek were found north of the site

Several concentrations of metals in surface water exceeded USEPA National Recommended Water Quality Criteria (NRWQC). However, concentrations of these metals are consistent throughout Frog Mortar Creek and do not appear to be associated with known MSA contaminant sources. In addition, these metals concentrations do not appear to be associated with high levels of potential risk. Most metals appear to be in dissolved form, and not adsorbed to suspended material in the water column.

The 2007–2008 study concluded that surface water concentrations of PAHs and metals appear to be associated with typical sources in active recreational water bodies such as Frog Mortar Creek; these include metals from marine paint, PAHs from boat exhaust and oil discharge, and runoff from land sources. Only Gar Gut, an embayment of Frog Mortar Creek to the north, demonstrated impacts that may not be associated with these typical types of contaminant sources, and thus may represent a separate source. Gar Gut had localized elevated concentrations of VOCs, PAHs, and metals in surface water and elevated concentrations of PAHs in sediment. The types and concentrations of contaminants at this location have a different signature than contamination found at other locations.

2.2.4 2010 Investigation

As part of the July 2010 groundwater and surface water sampling program, three surface water samples were collected along the western shoreline of Frog Mortar Creek near the DRA (Tetra Tech, 2010c). Sampling locations are shown in Figure 2-8. Sample MSA-SW38 was collected northeast of wells DMW2A/B, near the center of the DRA groundwater VOC plumes. Samples MSA-SW37 and MSA-SW39 were collected north and south of the DRA, respectively.

Sample MSA-SW38 reflects near-shore surface water quality in a locale hydraulically downgradient of the DRA groundwater plume. The primary site groundwater contaminants detected in that sample were TCE, *cis*-1,2-DCE, VC, and 1,4-dioxane, as well as low concentrations of three other DRA groundwater VOCs: 1,2,4-trichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene. These results indicate that cVOCs in the DRA groundwater plume discharge to Frog Mortar Creek. The vinyl chloride concentration (32 micrograms per liter [µg/L]) detected in the sample exceeded the NRWQC human health consumption-of-organism criterion.

Other site VOCs (such as BTEX, chlorobenzene, and other chlorobenzene isomers) were not detected in the Frog Mortar Creek surface water samples collected in 2010. Hexavalent chromium was detected at low concentrations in the three surface water samples collected in 2010. One sample's hexavalent chromium concentration (MSA-SW39) exceeded the human health screening level used for the study.

2.2.5 2011 Investigation

The results of the 2011 Frog Mortar Creek surface water investigation and its findings are summarized below:

- Four quarterly rounds of surface water samples were collected in March, June, September, and December 2011. Samples were chemically analyzed to assess concentrations of chemical constituents previously detected in Frog Mortar Creek and to assess the impact to creek surface water quality from a groundwater plume at the DRA. An additional 60 surface water samples were collected from Frog Mortar Creek in August 2011 during two surface water sampling events. These were chemically analyzed to assess variations in surface water chemical concentrations at different depths and at high and low tides.

- Five samples were collected in March near the western shoreline of Frog Mortar Creek. In June, September, and December, three samples were collected along each of nine transects spaced approximately 350 feet apart along the western shoreline of Frog Mortar Creek, for a total of 27 surface water samples. Along each transect, one sample was collected near the shoreline ("A" sample), one was collected approximately 50 feet from the shoreline ("B" sample), and one was collected approximately 100 feet from the shoreline ("C" sample). Each sample was collected at approximately one foot below the water surface. Samples were collected in August along five transects and at multiple depths.

- Quarterly Frog Mortar Creek samples were analyzed for VOCs, 1,4-dioxane, perchlorate, filtered and unfiltered metals, and total hexavalent chromium. The March samples were also analyzed for PAHs, and the June samples were analyzed for SVOCs. August samples were analyzed for VOCs only.

- The data were validated in accordance with the USEPA *Region III Modifications to the National Functional Guidelines for Data Review* and the specifics of the analytical methods used.

- Sampling results were screened against the USEPA Region 3 Biological Technical Advisory Group (BTAG) ecological freshwater screening benchmarks and the NRWQC and Maryland Ambient Water Quality Criteria (AWQC) for acute and chronic aquatic organism exposures and human health criteria for aquatic organism consumption.

- VOCs (primarily TCE, *cis*-1,2-DCE, and VC), 1,4-dioxane, and metals were detected in the 2011 surface water samples.

- Concentrations of VOCs and 1,4-dioxane were greatest for sampling locations MSA-SW38A and MSA-SW41A, northeast and hydraulically downgradient of the DRA monitoring wells that contain some of the highest concentrations of site-related constituents in groundwater (e.g., wells DMW2S/A/B and DMW5S).

- In general, the concentrations of VOCs and 1,4-dioxane detected in March and December samples were higher than those detected in samples collected during the summer months (June, August, and September). Perchlorate was detected only in the December samples.

- Concentrations of TCE, *cis*-1,2-DCE, and VC generally decreased progressively north and south of the MSA-SW38 and MSA-SW41 transects. 1,4-Dioxane was not detected beyond samples from transects MSA-SW38, MSA-SW40, and MSA-SW41.

- At sampling transects with the highest concentrations of VOCs, TCE, and *cis*-1,2-DCE concentrations were highest near the shoreline, and decreased progressively in samples collected farther from the shoreline. 1,4-Dioxane was predominantly detected in the shoreline, or "A" samples.

- All but six detected VOC concentrations were less than screening criteria. In March 2011, the following results were reported greater than screening criteria: TCE was detected in two shoreline samples (MSA-SW38 and MSA-SW41), vinyl chloride was detected in one shoreline sample (MSA-SW38), and total xylenes and *meta*- and *para*-xylenes were detected in sample MSA-SW38. The remaining exceedance was a concentration of TCE detected in a shoreline sample (MSA-SW41A) in December.

- *cis*-1,2-DCE and VC were not detected as far south as TCE during high tide.

- In general, the August 2011 concentrations of TCE, *cis*-1,2-DCE, or VC in samples collected at different depths at any given location show no discernible differences.

- The tidal phase appears to have some influence on detected VOC concentrations, particularly in the samples collected 50 feet from shore. In general, VOC concentrations in samples collected in the "B-series" (50 feet from the shore) were greater at low tide than at high tide, irrespective of sampling depth. Low tide VOC concentrations were also greater than high tide concentrations at MSA-SW43, the southernmost transect sampled in August 2011. Conversely, at the near-shore surface sampling location MSA-SW38A-1-HT, VOC concentrations were higher at high tide than at low tide. This effect is likely the result of more complex mixing in the very shallow near-shore environment due to tide changes.

- 1,4-Dioxane was detected in seven samples. Although 1,4-dioxane does not have a surface water screening criterion, California has adopted a human health advisory level of 3 µg/L for drinking water and groundwater. All seven detected 1,4-dioxane concentrations in the Frog Mortar Creek samples were less than this health advisory level.

- Perchlorate was detected in only 11 of the December 2011 samples. Although perchlorate does not have a surface water screening criterion, Maryland has a perchlorate groundwater standard of 2.6 µg/L. All perchlorate concentrations in the Frog Mortar

Creek samples were less than this standard. The distribution of perchlorate in the December Frog Mortar Creek samples does not appear related to the DRA groundwater plume distribution.

- Concentrations of four dissolved metals (barium, manganese, arsenic, and cadmium) and three total metals (iron, mercury, and selenium) exceeded a screening level in one or more of the 88 surface water samples (five samples for iron and manganese) collected during 2011. However, three of these metals (dissolved cadmium, total mercury, and total selenium) only exceeded their respective screening levels in less than 6% of samples (i.e., one to five samples of 88) collected during the four quarterly sampling rounds.

- Dissolved barium concentrations detected in the June, September, and December sampling rounds are within narrow concentration ranges, typically 2–3 µg/L. The highest dissolved barium concentrations detected (22.2–30 µg/L) were in March, followed by the lowest concentrations in June (6.7–7.9 µg/L), with higher concentrations again detected in September (20–21 µg/L) and December (11–13 µg/L). The barium data show no consistent spatial trends, suggesting that these concentrations may be naturally occurring levels for Frog Mortar Creek.

- Dissolved arsenic concentrations for 2011 range from 0.77–3.0 µg/L, and are similar to the dissolved arsenic concentrations (2.2–3.9 µg/L) reported for reference samples (i.e., background locations) collected during the 2007–2008 Frog Mortar Creek investigation (Tetra Tech, 2009).

- Hexavalent chromium was detected in all June and December 2011 samples, but not in the March or September samples. Concentrations detected in December were greater than those for June, which may be, in part, due to higher turbidity in December samples. All hexavalent chromium concentrations detected are less than screening levels. The maximum detected concentration (5.21 µg/L) was in sample MSA-SW41B, collected in December; this concentration is half of the lowest screening level for hexavalent chromium (11 µg/L). The second highest concentration (0.379 µg/L, at MSA-SW39B) is nearly 30 times less than the lowest screening level. Although strong spatial trends in the June and December data are not apparent, the maximum hexavalent chromium concentration of 5.21 µg/L and several other high hexavalent chromium concentrations were collected in the area where the highest VOC concentrations have been detected (i.e., sampling transects MSA-SW38 and MSA-SW41 area).

The following sections provide a more detailed description of the 2011 Frog Mortar Creek surface water sampling program.

2.2.5.1 March 2011 Investigation

As a part of the 2011 surface water sampling program, five surface water samples were collected along the western shoreline of Frog Mortar Creek near the DRA on March 3, 2011 (Tetra Tech, 2012d). Sampling locations and chemical analytes exceeding ecological and human health screening criteria are shown in Figure 2-9. All five of the March 2011 surface water

samples were collected near the Frog Mortar Creek shoreline from approximately one foot below the water surface. Samples MSA-SW37 and MSA-SW39 were collected north and south of the DRA, respectively.

TCE, *cis*-1,2-DCE, VC, 1,4-dioxane, and metals were detected in the March 2011 surface water samples. PAHs, perchlorate, and hexavalent chromium were not detected in the March 2011 surface water samples. Concentrations of TCE exceeded an ecological screening criterion at locations MSA-SW38 and MSA-SW41 (in the central portion of the DRA), and xylenes exceeded ecological screening criteria at sampling location MSA-SW38. VC was also detected at location MSA-SW38 at a concentration (140 µg/L) exceeding the human health consumption-of-organism criterion of 24 µg/L. Metals exceedances in these samples include dissolved arsenic, dissolved barium, dissolved cadmium, total iron, and dissolved manganese. However, concentrations of dissolved arsenic, as well as total arsenic, were similar in all samples, and are similar to the arsenic concentrations reported for reference samples (i.e., background locations) collected as part of Lockheed Martin's 2007–2008 Frog Mortar Creek investigation.

2.2.5.2 June 2011 Investigation

In June 2011, 27 surface water samples were collected along nine surface water sampling transects (MSA-SW37 to MSA-SW45) (Tetra Tech, 2012e). Sampling locations are shown in Figure 2-10. Transects were spaced approximately 350 feet apart, with five of the nine transects co-located with previous (March 2011) sampling locations MSA-SW37, MSA-SW38, MSA-SW39, MSA-SW40, and MSA-SW41. Along each transect, one sample was collected near the shoreline ("A" sample), one was collected approximately 50 feet from the shoreline ("B" sample), and one was collected approximately 100 feet from the shoreline ("C" sample). Each sample was collected from approximately one foot below the water surface.

The June 2011 samples were analyzed for VOCs, SVOCs including 1,4-dioxane, filtered and unfiltered metals, hexavalent chromium, and perchlorate. VOCs (primarily TCE, *cis*-1,2-DCE and VC), a few SVOCs, and metals were detected in the June 2011 surface water samples. The detected VOC concentrations were less than their respective screening criteria. Metals exceeding the screening criteria include dissolved arsenic and barium. The dissolved and total arsenic concentrations were lower than the dissolved arsenic concentrations in reference (background) samples collected in 2007–2008 during the Frog Mortar Creek investigation. Perchlorate and

1,4-dioxane were not detected in the June 2011 surface water samples. SVOCs detected were either attributed to laboratory artifacts (e.g., phthalates), or were detected very infrequently and at concentrations below screening criteria.

Concentrations of VOCs were greatest at sampling location MSA-SW38A, which is northeast and hydraulically downgradient of the DRA monitoring wells that contain some of the highest groundwater concentrations of site-related constituents (i.e., wells DMW2S/A/B and DMW3S/I/D). At most sampling transects, TCE and *cis*-1,2-DCE concentrations were highest near the shoreline; concentrations decreased progressively with increased distance from the shoreline. Concentrations of TCE and *cis*-1,2-DCE decreased progressively north and south of MSA-SW38A-C. However, *cis*-1,2-DCE was not detected as far south as was TCE (i.e., it was not detected at MSA-SW45A-C and MSA-SW39B). The maximum concentration of VC was detected at location MSA-SW38A, with lower concentrations detected in samples collected from transects to the north (MSA-SW40B, MSA-SW42A, and MSA-SW37B). VC was not detected in any surface water samples collected at distances beyond 50 feet from the shoreline.

2.2.5.3 August 2011 Investigation

In August 2011, two additional parameters (depth and tide) were incorporated into the surface water sampling program to assess constituent variations at different depths and at high and low tides. Surface water samples were again collected at three different distances from shoreline ("A," "B," and "C" samples, as in the June 2011 sampling) and at varying depths below the water surface along five previously sampled transects (Tetra Tech, 2011d). Sixty surface water samples were collected for this study. The August 2011 surface water sampling locations are shown in Figure 2-11; these samples were analyzed for VOCs only.

TCE, *cis*-1,2-DCE, VC, toluene, and acetone were detected in the August 2011 surface water samples at concentrations similar to those detected in the June 2011 samples. All detected VOC concentrations were less than their respective screening criteria. Also consistent with previous surface water trends, concentrations of VOCs (primarily TCE and *cis*-1,2-DCE) were highest in samples collected along surface water transects MSA-SW38 and MSA-SW40.

These transects are hydraulically downgradient of DRA monitoring wells that contain some of the highest groundwater concentrations of site-related constituents. Concentrations of VOCs,

though similar, were slightly higher in the August 2011 samples as compared to those detected in the June 2011 samples. Concentrations of TCE and *cis*-1,2-DCE generally decreased north of MSA-SW40A and south of MSA-SW38A-C. VC and *cis*-1,2-DCE were not detected as far south as TCE during high tide (i.e., only one low concentration was detected, in sample MSA-SW43A-C-HT).

At most sampling transects, TCE and *cis*-1,2-DCE concentrations were highest in the sample collected at or near (50 feet from) the shoreline; concentrations decreased in samples collected 100 feet from the shoreline. Similarly, detected concentrations of VC were generally greatest in near-shore samples and decreased progressively with increased distance from the shoreline. The maximum concentrations of VC were detected in near-shore samples collected at locations MSA-SW38A (high tide) and MSA-SW40A (low tide); lower concentrations were detected in samples collected from transects to the north (MSA-SW40B, MSA-SW42A, and MSA-SW37B).

VOC concentrations appear to be influenced by the tidal phase, particularly in samples collected 50 feet from the shore. In general, VOC concentrations in samples collected in the "B-series" from 50 feet offshore are greater at low tide than at high tide, irrespective of sampling depth. An exception, however, occurred in the near-shore surface water sample MSA-SW38A-1-HT; VOC concentrations in this sample were higher at high tide than at low tide.

2.2.5.4 September 2011 Investigation

Twenty-eight surface water samples (27 samples and one duplicate) were collected from Frog Mortar Creek near the DRA site on September 13, 2011 (Tetra Tech, 2012f). Three samples were collected along each of the nine previously sampled transects spaced approximately 350 feet apart along the western shoreline of Frog Mortar Creek. Samples were again collected from approximately one foot below the water surface at three different distances from shoreline ("A," "B," and "C" samples) along each transect, similar to the June 2011 sampling event.

Figure 2-12 shows the September 2011 surface water sampling locations. Samples were analyzed for VOCs by SW846 Method 8260B, for 1,4-dioxane by SW846 Method 8270C, for priority pollutant metals (filtered and unfiltered) by SW846 Methods 6020/7470A, for hexavalent chromium by SW846 Method 218.6, and for perchlorate by USEPA Method 314. Chlorinated VOCs detected in these samples include TCE, *cis*-1,2-DCE, and VC, the primary cVOCs

detected in the DRA groundwater plume west of Frog Mortar Creek. BTEX were also detected in these samples.

TCE was detected in all 28 samples (27 samples and the duplicate) at concentrations ranging from 0.44–9.5 µg/L. The range of detected concentrations for VC and *cis*-1,2-DCE is similar to that of TCE, but VC and *cis*-1,2-DCE were detected less frequently than TCE. *cis*-1,2-DCE was detected in 24 samples at concentrations ranging from 0.32 to 17 µg/L. VC was detected in 16 samples at concentrations ranging from 0.39 to 21 µg/L. All VOCs detected in the September 2011 surface water samples were reported at concentrations less than their respective screening criteria.

Concentrations of TCE were greatest at sampling locations MSA-SW41A and MSA-SW38A (9.5 and 6 µg/L, respectively), northeast and hydraulically downgradient of DRA monitoring wells DMW2S, DMW2A, and DMW5S. These wells contain some of the highest site-related concentrations found in shallow- and intermediate-depth groundwater. As distance from the shore increases in these two transects, TCE concentrations decrease (4.7 and 3.7 µg/L at MSA-SW38B-C; and 3.4 and 1.3 µg/L at MSA-SW41B-C). Similar, but slightly lower, TCE concentrations were detected in samples MSA-SW40A-B-C (3.4, 4.3, and 2.1 µg/L, respectively) and MSA-SW42A-B-C (2.1, 2.4, and 2.4 µg/L, respectively), collected north of transects MSA-SW38 and MSA-SW41.

Similar to the March, June, and August 2011 surface water results, a decreasing TCE trend was evident in Frog Mortar Creek samples north and south of the MSA-SW38/MSA-SW41 sampling area. The September 2011 TCE concentrations at MSA-SW38A-B (6 µg/L and 4.7 µg/L) were higher than the June 2011 TCE concentrations (1.7 and 1.5 µg/L), but were still approximately five to six times less than the highest March 2011 TCE concentration (32 µg/L at MSA-SW38). At sampling transects with the highest TCE concentrations (transects MSA-SW38 and MSA-SW41), TCE concentrations were highest near the shoreline and decrease progressively in samples collected farther from the shoreline. Other transects (e.g., transects MSA-SW37, MSA-SW39, and MSA-SW42 through MSA-SW45) show increasing concentrations of TCE with distance from the shoreline.

Concentrations of *cis*-1,2-DCE and VC follow the same patterns as TCE, except that there were fewer detections of these constituents in samples collected south of MSA-SW41. The maximum 1,2-DCE and VC concentrations (17 µg/L and 21 µg/L, respectively) were both detected at sampling location MSA-SW38A. Similar to TCE, *cis*-1,2-DCE and VC concentrations typically decreased (or were not detected) in samples collected north and south of the highest concentration area (transects MSA-SW38 and MSA-SW41). Concentrations of *cis*-1,2-DCE and VC decrease progressively from the shoreline at transects MSA-SW38, MSA-SW41, and MSA-SW42. Areas where 1,2-DCE and/or VC concentrations increase with distance from the shore occurred in sampling transects MSA-37, MSA-SW43, and MSA-SW45 (for both VC and *cis*-1,2-DCE) and in transect MSA-SW44 (for *cis*-1,2-DCE only).

Toluene, a component of petroleum fuels and a site groundwater contaminant, was detected in seven samples at trace to low concentrations ranging from an estimated (*J*-qualified; see Section 3.3) 0.14 to 1.5 µg/L; all detected concentrations were less than screening levels. 1,2,4-Trimethylbenzene, benzene, ethylbenzene, and xylenes were all detected in sample MSA-SW41A (collected near the shore) but not in the "B" or "C" samples (50 feet and 100 feet from shore, respectively) along this transect. Benzene was detected in only one other sample (MSA-SW39A), at a low estimated concentration of 0.14 µg/L.

Acetone was detected in four samples at trace concentrations below screening levels. All acetone results were "*B*-qualified," indicating acetone was in the trip blank. As such, acetone in these four samples does not reflect the samples' true concentrations. In addition, because acetone was reported at such low concentrations (i.e., at concentrations below the project action level calculated in the validation), and because acetone is a common laboratory contaminant, it is likely not a constituent of the DRA VOC plume. 1,4-Dioxane was detected in only one sample (MSA-SW38A), at a low estimated concentration of 0.85 J µg/L.

Dissolved arsenic and barium were detected in all samples, and, except for one total mercury concentration, are the only metals to exceed surface water screening levels. Detected concentrations of dissolved arsenic and barium range from 1.6 to 2.4 µg/L and 20 to 21 µg/L, respectively. Dissolved barium concentrations in all 28 samples exceed the BTAG ecological screening level of 4 µg/L. Dissolved arsenic exceeded the human health consumption-of-organism screening criterion of 1.4 µg/L at all locations. However, the dissolved

arsenic concentrations (1.6 to 2.4 µg/L) detected in September 2011 are less than or within the range of dissolved arsenic concentrations (2.2 to 3.9 µg/L) reported for reference (background) samples collected as part of Lockheed Martin's 2007–2008 Frog Mortar Creek investigation (Tetra Tech, 2009).

Total arsenic concentrations, ranging from 2.4 to 5 µg/L were also similar to the 2007–2008 reference sample range. The 28 dissolved barium concentrations are similar throughout the sampled area, with detected concentrations occurring within a narrow range of 20 to 21 µg/L. Total barium was detected at similar concentrations, but with a slightly more varied results range: 21 to 35 µg/L; all but one location had barium concentrations of 21 to 25 µg/L. Barium was not analyzed as part of the 2007–2008 Frog Mortar Creek sampling program; therefore, these results cannot be compared to prior reference (background) concentrations. Only one concentration of total mercury (0.26 µg/L), detected in sample MSA-SW45A, exceeded the BTAG screening benchmark (0.026 µg/L). Neither hexavalent chromium nor perchlorate was detected in the September 2011 surface water samples.

2.2.5.5 December 2011 Investigation

Twenty-eight surface water samples (27 samples and one duplicate) were collected from Frog Mortar Creek near the DRA site on December 8, 2011 (Tetra Tech, 2012g). Three samples were again collected from approximately one foot below the water surface along each of the same nine transects at three different distances from the shoreline ("A," "B," and "C" samples). These surface water samples were collected as part of an ongoing investigation to assess the effects of DRA groundwater contaminants on Frog Mortar Creek water quality. Figure 2-12 shows the December 2011 surface water sampling locations.

Samples were analyzed for VOCs, 1,4-dioxane, total (i.e., unfiltered) metals, dissolved (i.e., filtered) metals, hexavalent chromium, and perchlorate. Several VOCs, 1,4-dioxane, perchlorate, and several metals were detected in these surface water samples. cVOCs detected in these samples include TCE, *cis*-1,2-DCE, 1,1-dichloroethene (1,1-DCE), and VC, which are also the primary cVOCs detected in the DRA groundwater plume. Other VOCs detected with limited occurrence (i.e., in only one or two samples) include the petroleum-related compounds toluene, ethylbenzene, xylenes, and chlorobenzene.

TCE was detected in all 28 samples (27 samples and one duplicate) at concentrations ranging from an estimated 0.69*J* to 27 µg/L. *cis*-1,2-DCE was detected in all but six samples, at concentrations ranging from an estimated 0.41*J* to 21 µg/L. Vinyl chloride was detected less frequently (in only 13 samples), at concentrations ranging from 0.30*J* to 14 µg/L. However, only one detected TCE concentration (27 µg/L in sample MSA-SW41A) exceeded the VOC screening criteria.

Toluene, ethylbenzene, and xylenes (components of petroleum fuels and site groundwater contaminants) were detected at trace to low concentrations in four samples (MSA-SW38A, MSA-SW41A, MSA-SW42A [ethylbenzene was not detected at MSA-SW42A], and MSA-SW44A). All detected concentrations are below their corresponding screening levels. These three VOCs were detected in samples collected near the shore ("A" samples), but not in the "B" or "C" samples, which were collected 50 feet and 100 feet from shore, respectively. Benzene, another common VOC component of petroleum fuels and a site groundwater contaminant, was not detected in these samples. Acetone was detected in one sample at a trace concentration less than screening levels. Acetone is a common laboratory contaminant, and its presence, at a low concentration in only one sample, may indicate a laboratory artifact.

TCE concentrations were greatest in samples from MSA-SW41A, MSA-SW38A, and MSA-SW38B (27 µg/L, 17 µg/L, and 14 µg/L, respectively), northeast to east and hydraulically downgradient of the DRA monitoring wells that contain some of the highest site-related shallow- and intermediate-depth groundwater concentrations (i.e., wells DMW2S, DMW2A, DMW4S/4I, DMW5S/5I). Generally, TCE concentrations decrease progressively in samples collected north and south of transects MSA-SW38 and MSA-SW41. This trend of decreasing TCE concentrations to the north and south of the MSA-SW38 and MSA-SW41 sampling transects is similar to previous surface water sampling rounds.

Along sampling transects MSA-SW40, MSA-SW38, and MSA-SW41, TCE concentrations are highest near the shoreline and decrease progressively in samples collected farther from the shoreline. TCE concentrations were relatively consistent in the other sampling transects. The December 2011 TCE concentrations along sampling transects MSA-SW38 and MSA-SW41 were typically two to three times greater than the TCE concentrations detected at the same locations during September 2011.

The December 2011 surface water concentrations of *cis*-1,2-DCE for near-shore samples at transects MSA-SW40, MSA-SW38, MSA-SW41, and MSA-SW43, and the "B" sample at MSA-SW38B were generally greater than those detected in the September 2011 sampling event. The concentrations and spatial distribution of *cis*-1,2-DCE at the remaining December sampling locations were similar to those seen during the September 2011 surface water sampling event. The two highest *cis*-1,2-DCE concentrations, 21 µg/L and 18 µg/L, were detected at MSA-SW38A and MSA-SW41A, respectively. Concentrations of *cis*-1,2-DCE decrease to the north and south of transects MSA-SW38 and MSA-SW41 and typically decrease with increasing distance from the shoreline.

Vinyl chloride showed spatial distributions and trends similar to TCE and *cis*-1,2-DCE. Consistent with the pattern of cVOC detection seen in past rounds, the maximum VC concentration of 14 µg/L was detected at sampling location MSA-SW38A. During the December 2011 sampling event, VC was more frequently detected in the sampling transects north of the highest concentration area (i.e., MSA-SW40, MSA-SW42, and MSA-SW37) than it was in samples collected farther south (i.e., MSA-SW43, MSA-SW44, MSA-SW45, and MSA-SW39). VC concentrations generally decrease with increasing distance from the shoreline, particularly in the highest concentration area (transects MSA-SW38, MSA-SW41, and MSA-SW40). Overall, the pattern of VC concentrations is consistent across the June, August, and September sampling rounds, with the maximum VC concentrations detected at location MSA-SW38A. The December maximum VC concentration (14 µg/L) is approximately 30% less than the September 2011 maximum concentration (21 µg/L).

1,4-Dioxane was detected in four samples in the same area as the highest VOC concentrations (transects MSA-SW38, MSA-SW40, and MSA-SW41), at concentrations ranging from 0.51 µg/L at MSA-SW38B to 1.4 µg/L at MSA-SW38A. Three of four 1,4-dioxane detections were in the "A" samples collected near the shoreline (MSA-SW38A, MSA-SW40A, and MSA-SW-41A). The remaining sampling location (MSA-SW38B) is along MSA-SW38, the transect that had the highest concentration of cVOCs. Perchlorate was detected in 11 samples at concentrations ranging from 0.094 µg/L (MSA-SW44C) to 0.79 µg/L (MSA-SW38C). MSA-SW38 is the location with the highest cVOC concentrations. Except for the maximum concentration from MSA-SW38C, the highest concentrations of perchlorate were detected

primarily in near-shore ("A") samples from transects MSA-SW41, MSA-SW43, MSA-SW44, and MSA-SW45; these transects are south of the area of highest cVOC concentrations.

Total arsenic was detected in all samples at concentrations exceeding the screening level for human health, but these concentrations are less than ecological and AWQC criteria. Total arsenic concentrations range from an estimated 1.9*J* to 4.2 µg/L. All dissolved barium concentrations not flagged with a "*B*" validation qualifier exceed the BTAG ecological screening level of 4 µg/L. All total barium results were flagged with a "*B*" data-validation qualifier, indicating that barium was detected in the laboratory blanks.

Many total cadmium and total lead concentrations exceeded both the AWQC and ecological screening criteria; however, concentrations of both metals are within the same order of magnitude as the criteria and are moderately consistent over the sampling area. None of the dissolved lead, and only four of the dissolved cadmium results, exceed screening criteria. Hexavalent chromium was detected in all samples, at concentrations ranging from 0.056 to 5.21 µg/L. The maximum concentration of hexavalent chromium was detected at MSA-SW41B. If this concentration is excluded, the range of remaining hexavalent concentrations is much narrower, with concentrations from 0.056 to 0.379 µg/L.

2.2.6 2012 Monitoring Events

Six surface water sampling rounds are to be completed in Frog Mortar Creek in 2012, including quarterly rounds in March, June, September, and December 2012 and additional events in July and August 2012. The July and August 2012 events were intended to provide surface water data for the Frog Mortar Creek during peak recreational months. Starting in March 2012, additional surface water samples were collected along a transect extending out from the eastern shoreline of Frog Mortar Creek at 3301 Edwards Lane.

2.2.6.1 March 2012 Investigation

Forty surface water samples were collected from Frog Mortar Creek near the DRA site on March 20, 2012 (Tetra Tech, 2012h). Figure 2-13 shows the March 2012 surface water sampling locations.

Volatile organic compounds (primarily TCE, *cis*-1,2-DCE and VC) and metals were detected in the March 2012 surface water samples. Concentrations of VOCs were greatest for sampling locations SW40A and SW41A, northeast and hydraulically downgradient of the DRA monitoring wells that contain some of the highest concentrations of site-related constituents in groundwater (e.g., wells DMW-2S/A/B and DMW-5S).

The March 2012 VOC concentrations were greater than the December 2011 concentrations in transect SW40 and less than December 2011 concentrations in transects SW38 and SW41. The highest TCE concentration of 21 µg/L was detected in March 2012 in the SW40B sample collected 50 feet from the shoreline, whereas in December 2011 the highest TCE concentrations were detected in the shoreline samples from transects SW38 and SW41 (at concentrations of 17 and 27 µg/L, respectively). Concentrations of *cis*-1,2-DCE and VC increased significantly in SW37A and SW40A and decreased significantly in SW38A from December 2011 to March 2012. Generally, concentrations of TCE, *cis*-1,2-DCE, and VC decrease progressively north and south of the MSA-SW40 and MSA-SW41 transects, except for slightly elevated concentrations in SW37, the northernmost transect. This is similar to what was seen in previous rounds of Frog Mortar Creek surface water samples collected in 2011.

At sampling transects with the highest concentrations of VOCs (transects SW40 and SW41), TCE, *cis*-1,2-DCE, and VC concentrations were highest near the shoreline and decrease progressively in samples collected farther from the shoreline, except for TCE in transect SW40, where the concentration increased approximately 100% from 11 µg/L in SW40A to 21 µg/L in SW40B. Along sampling transects SW42 and SW40, TCE concentrations were highest in the "B" samples collected approximately 50 feet from the shoreline, and decreased progressively in samples collected farther from the shoreline. Along sampling transect SW38, the highest concentration was detected in the "A" sample collected close to the shoreline. For the other sampling transects, TCE concentrations are relatively consistent along each transect.

cis-1,2-DCE concentrations typically decreased with increasing distance from the shoreline, except for four transects (SW42, SW43, SW44, and SW45) where the highest *cis*-1,2-DCE concentration was detected in the "B" sample. *cis*-1,2-DCE concentrations in transect EL-SW01, along the eastern shoreline, are consistent throughout all four samples, ranging from 0.9*J* to 1.4 µg/L.

The VC concentrations follow a similar trend to that of *cis*-1,2-DCE, where the highest *cis*-1,2-DCE concentration was detected in the "B" sample in seven of the 10 transects (SW39, SW41, SW42, SW43, SW44, SW45, and EL-SW01) while decreasing with increasing distance from the shoreline in the other three transects (SW37, SW38, and SW40). *cis*-1,2-DCE was detected in the "C" (0.33*J* µg/L) and "D" (0.40*J* µg/L) samples in transect EL-SW01 located along the eastern shoreline.

Dissolved hexavalent chromium was detected in the March 2012 surface water samples at trace concentrations well below screening criteria, ranging from 0.054*L* to 0.092*L* µg/L. During the previous sampling event in December 2011, hexavalent chromium was detected in all samples at concentrations ranging from 0.056 to 5.21 µg/L. The maximum concentration of hexavalent chromium (5.21 µg/L) was detected at MSA SW41B. Excluding the maximum concentration at MSA SW41B, the range of remaining hexavalent concentrations is much narrower, with concentrations from 0.056 to 0.379 µg/L. Metals exceeding screening criteria in the March 2012 Frog Mortar Creek samples include dissolved barium in all samples and dissolved arsenic in two samples. Dissolved metals exceeding screening criteria in the previous sampling event (December 2011) include arsenic in one sample, cadmium in four samples, and barium in all samples.

2.2.6.2 June 2012 Investigation

Forty surface water samples were collected from Frog Mortar Creek near the DRA site on June 14, 2012 (Tetra Tech, 2012i). Figure 2-13 shows the June 2012 surface water sampling locations.

In general, the June 2012 VOC concentrations were lower than the March 2012 concentrations. In June 2012, the highest TCE concentration (2.7 µg/L) was detected in MSA-SW38A (collected near the shoreline). In March 2012, the highest TCE concentration (21 µg/L) was detected in the MSA-SW40B sample collected 50 feet from the shoreline.

Concentrations of TCE, *cis*-1,2-DCE, and VC show similar spatial distributions as compared to previous events. For example, concentrations are highest near the shoreline and decrease progressively in samples collected farther from the shoreline. In addition, concentrations generally decrease progressively north and south of the SW38, SW40, and SW41 transects.

Concentrations of volatiles in the June 2012 samples did not exceed Maryland and USEPA Region 3 surface water screening criteria. TCE and *cis*-1,2-DCE did not exceed site-specific swimming criteria.

Samples from transect SW38 had the highest concentrations of TCE during the June 2012 event, ranging from 0.57*J* to 2.7 µg/L, with the highest concentration detected at the location nearest the shore. Similar concentration ranges for TCE were detected in June 2012 in samples from transects SW40 and SW41. TCE concentrations in transect SW42, located north of transects SW38 and SW40, show a more narrow range (1.3 to 1.6 µg/L) of detections among its four samples. Consistently across the sampling transects east and south of the DRA area, June 2012 TCE concentrations were highest in the "A" samples near the shoreline and generally decrease with distance from the shoreline. Low TCE concentrations, ranging from 0.63*J* to 0.67*J* µg/L, were also detected in the Edwards Lane surface water samples (e.g., EL-SW01A through EL-SW01D).

The June 2012 *cis*-1,2-DCE concentrations show a significant decrease over the March 2012 results. Transects SW38 and SW41 had the highest detected concentrations, ranging from 0.42 to 7.5 µg/L, and from non-detect to 1.7 µg/L, respectively. Concentrations of *cis*-1,2-DCE were lower throughout transects SW37 and SW42, with concentrations ranging from 0.64 to 0.81 µg/L. Trace *cis*-1,2-DCE concentrations were also detected in samples collected from locations EL-SW01C (0.38 µg/L), MSA-SW40C (0.35 µg/L), and MSA-SW44C (0.29 µg/L).

VC concentrations follow a trend similar to TCE and *cis*-1,2-DCE, with the highest levels near the shoreline and decreasing concentrations with increasing distance from the shoreline. Similar to the June 2012 results for TCE and *cis*-1,2-DCE, the maximum VC concentration (3.7 µg/L) was detected in sample MSA-SW38A. VC was detected in nearly all samples from transects north of SW38 (SW37, SW42, and SW40), with exception of the two samples collected farthest from shore in transect SW40 and the sample collected farthest from shore in transect SW37 (locations SW40C, SW40D, and SW37D, respectively). VC concentrations detected in these samples range from 0.25 µg/L (SW42D) to 0.8 µg/L (SW37A). SW41A has the only detected concentration of VC (0.23 µg/L) in samples collected south of transect SW38. Detected concentrations of VC from near-shore samples from MSA SW38A (3.7 µg/L) and MSA SW37A (0.8 µg/L) exceed site-specific swimming criteria.

Dissolved hexavalent chromium was detected in the June 2012 surface water samples at trace concentrations ranging from 0.056*J* to 0.099*L* µg/L, well below its screening criterion. Except for the maximum hexavalent chromium concentration (5.21 µg/L) detected in December 2011, the range of remaining detected hexavalent chromium concentrations has been fairly consistent with the June 2012 results. Metals exceeding screening criteria in the June 2012 Frog Mortar Creek samples include dissolved arsenic and dissolved barium (in all samples). Overall, the range of metals concentrations in June 2012 samples is consistent with metals concentrations in previous rounds of surface water sampling.

2.2.6.3 July 2012 Investigation

Forty surface water samples were collected from Frog Mortar Creek near the DRA site on July 12, 2012 (Tetra Tech, 2012j). Figure 2-13 shows the July 2012 surface water sampling locations. All of the samples collected along the western shore transects were analyzed for VOCs and metals. The eastern shoreline samples were analyzed for VOCs.

Several VOCs were detected in these surface water samples. TCE was the most frequently detected VOC, and it is one of the primary VOCs detected in the DRA groundwater plume. Other VOCs that were detected, but at low frequencies (i.e., in only one to four samples), include toluene, *cis*-1,2-DCE, and VC.

TCE was detected in 25 of 40 samples at concentrations ranging from 0.17 to 0.64 µg/L. *cis*-1,2-DCE was detected in three of 40 samples, at concentrations ranging from 0.28 to 3.2 µg/L. VC was detected less frequently (in one of 40 samples), at a concentration of 8.7 µg/L. All surface water VOCs were detected at concentrations less than their respective AWQC and their BTAG freshwater screening levels. However, VC was detected at a concentration above the site-specific swimming screening level of 0.7 µg/L in a sample from location SW38A (8.7 µg/L).

Ethylbenzene, xylenes, and benzene were not detected in any samples collected during this sampling event. Toluene was detected in four samples from three transects: locations SW01B (0.26 µg/L), SW39D (0.18 µg/L), SW45B (0.15 µg/L), and SW45C (0.14 µg/L).

Concentrations of TCE were less than 1 µg/L in all of the samples collected. The highest TCE concentrations in July 2012 were in samples from transects SW41 and SW38. The highest TCE concentration for this round was 0.64 µg/L at SW41A, followed by 0.39 µg/L and 0.37 µg/L at

SW41B and SW38A, respectively. Transects SW41 and SW38 are east of the DRA monitoring wells containing some of the highest concentrations of site-related constituents in shallow- and intermediate-depth groundwater (e.g., wells DMW-5S/I, DMW-4S/I, and DMW-2S/A). In contrast, samples from transects SW37, SW42, and SW38 had the highest concentrations of TCE during the June 2012 event, ranging from 0.3 (SW37A) to 2.7 µg/L (SW38A), with the highest concentration detected at the location 50 feet from shore.

In general, TCE concentrations from transects SW41 and SW38 were highest in samples collected near the shoreline, with decreasing concentrations detected toward the center of Frog Mortar Creek. Samples from three transects south of SW41 (SW43, SW44, and SW45) show a similar pattern. TCE was not detected in the farthest southern transect location SW39. In the other sampling transects, TCE was not detected in the A and B samples but was detected at low concentrations in the C and D samples collected farther from shore. Although the July 2012 TCE results are lower than those of the June 2012 sampling event, they still provide evidence of relatively elevated concentrations of TCE close to the shoreline in areas east of the DRA monitoring wells with high concentrations of VOCs, which is consistent with prior Frog Mortar Creek monitoring events.

Detected concentrations of *cis*-1,2-DCE are limited to samples collected from transects SW38, SW41, and SW43. All of these detections occurred in the shoreline samples (SW38A, SW41A, and SW43A), ranging from 0.28 to 3.2 µg/L, with the highest concentration detected in location SW38A. Concentrations of *cis*-1,2-DCE have decreased since June 2012. During the June 2012 sampling event, the highest concentrations of *cis*-1,2-DCE were collected near the shoreline at SW38A (7.5 µg/L) and SW41A (1.7 µg/L). In contrast, in the July 2012 sampling episode, only one sample from transect (3.2 µg/L at SW38A) and one from transect SW41 (0.65 µg/L at SW41A) had a detected concentration of *cis*-1,2-DCE. Only one other trace concentration of *cis*-1,2-DCE was detected in the July sampling event, at SW43A (0.28 µg/L).

The maximum (and only) VC concentration (8.7 µg/L) was detected at sampling location SW38A. In general, VC was detected in the June sampling event at greater frequency and at more locations. However, the maximum detected concentration of VC in July (8.7 µg/L) is greater than the maximum June concentration (3.7 µg/L at SW38A). As in the previous event, VC at this location exceeds the site-specific swimming screening level of 0.7 µg/L.

Metals exceeding screening criteria include dissolved arsenic and dissolved barium. Overall, the ranges of metals concentrations detected in July 2012 samples are consistent with metals concentrations in previous rounds of surface water sampling.

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



Source: Google Earth Pro, 2010

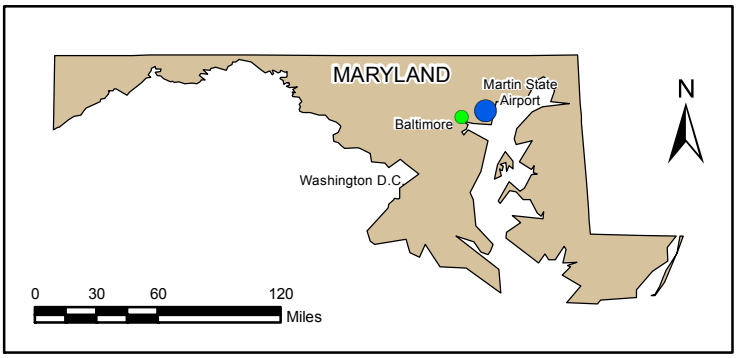


FIGURE 2-1

MARTIN STATE AIRPORT AND SURROUNDING FEATURES

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

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

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Dump Road Features Fig 2-1_revised 1 13 12.mxd)
1/13/2012 -- 3:18:49 PM



FIGURE 2-2

AREAS OF CONCERN
DUMP ROAD AND RUNWAY AREA

LEGEND

POND

MARYLAND AIR NATIONAL GUARD BOUNDARY

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

0 60 120 240 Feet

N

DATE MODIFIED: 1/13/12

CREATED BY: MP

TETRA TECH

FIGURE 2-3

1997 SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS

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

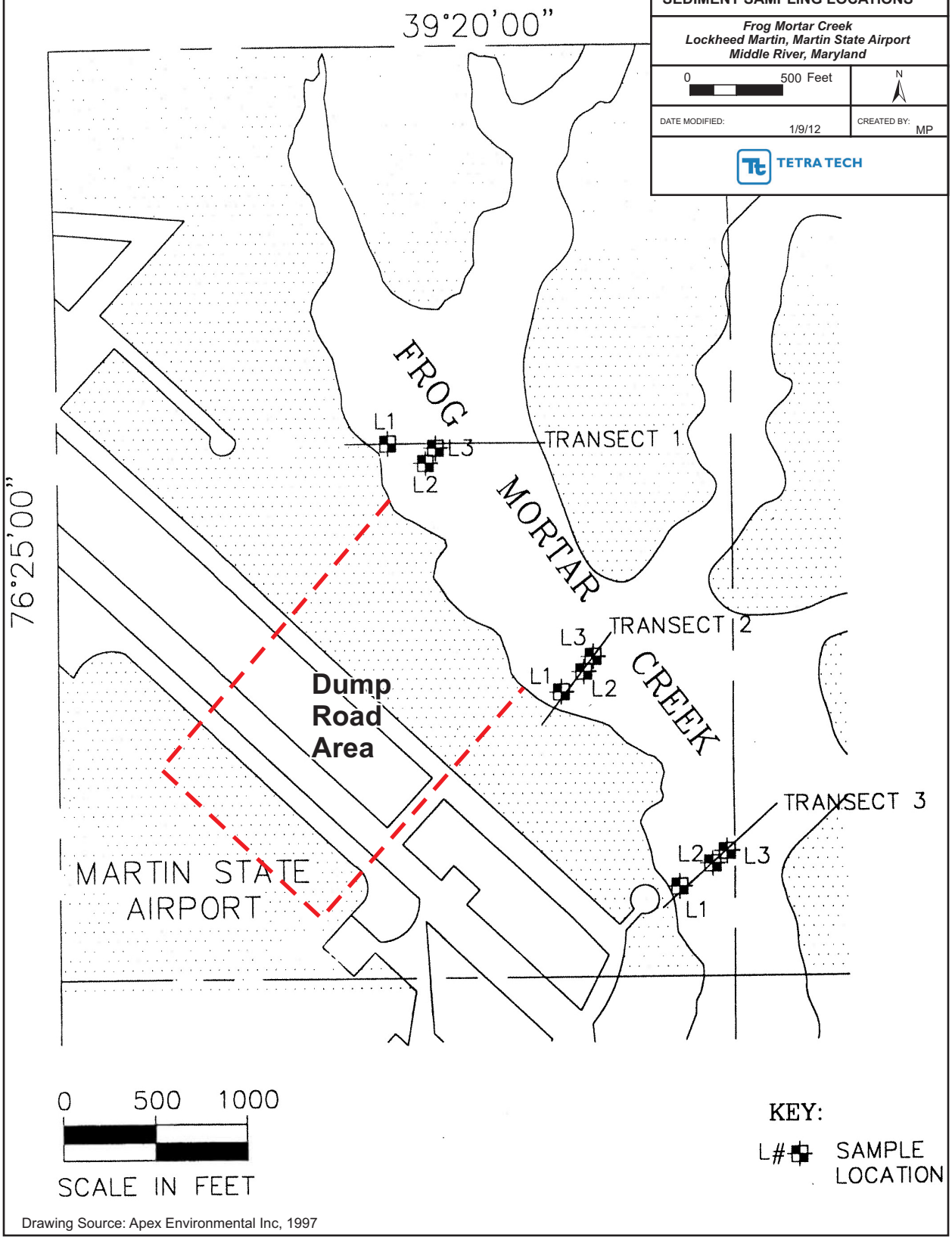
0 500 Feet

N

DATE MODIFIED: 1/9/12

CREATED BY: MP

TETRA TECH



Drawing Source: Apex Environmental Inc, 1997

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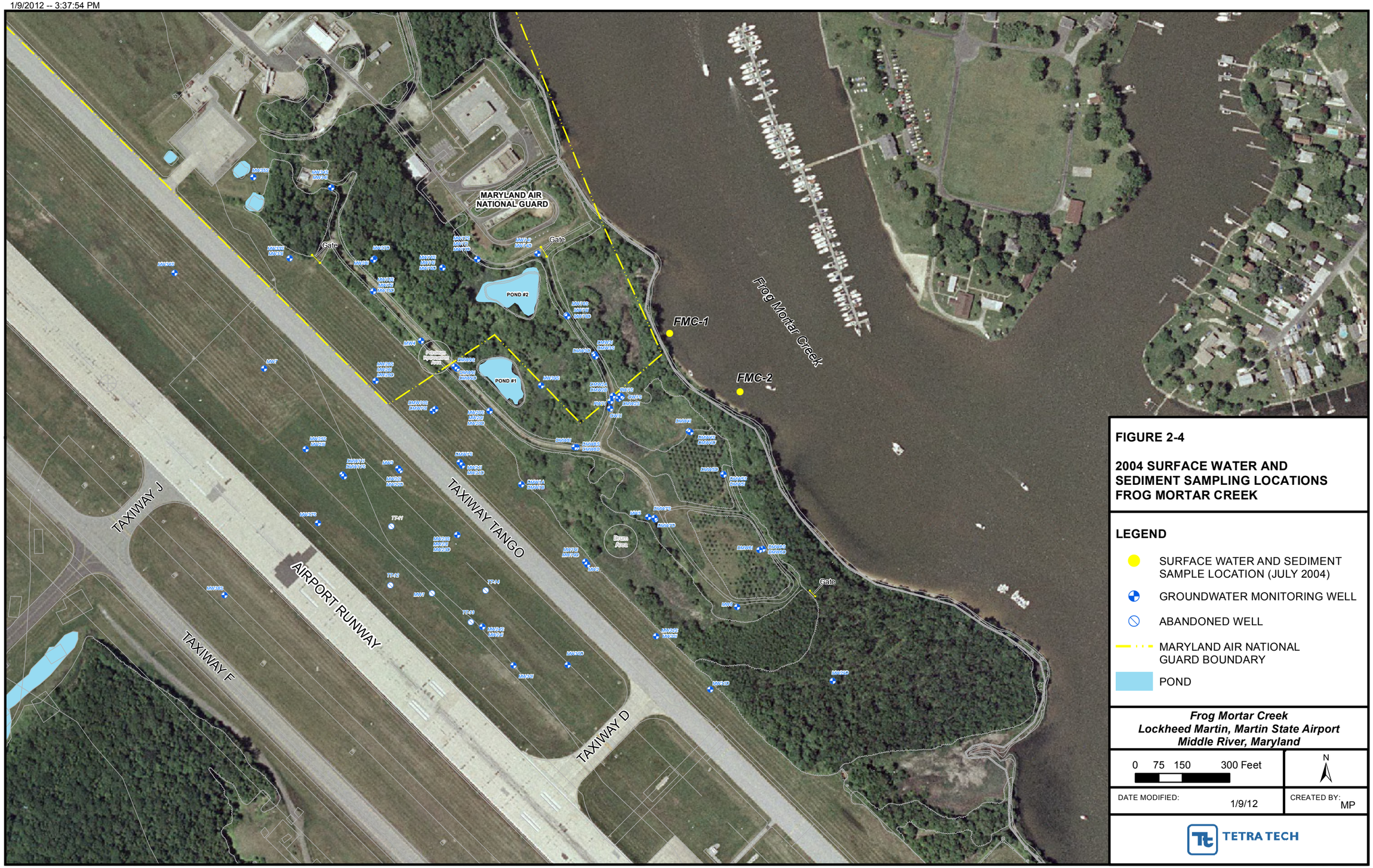

FIGURE 2-4

2004 SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS FROG MORTAR CREEK

LEGEND

- SURFACE WATER AND SEDIMENT SAMPLE LOCATION (JULY 2004)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

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

0 75 150 300 Feet

N

DATE MODIFIED: 1/9/12

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TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA 2007 Trident Sample Locations.mxd)
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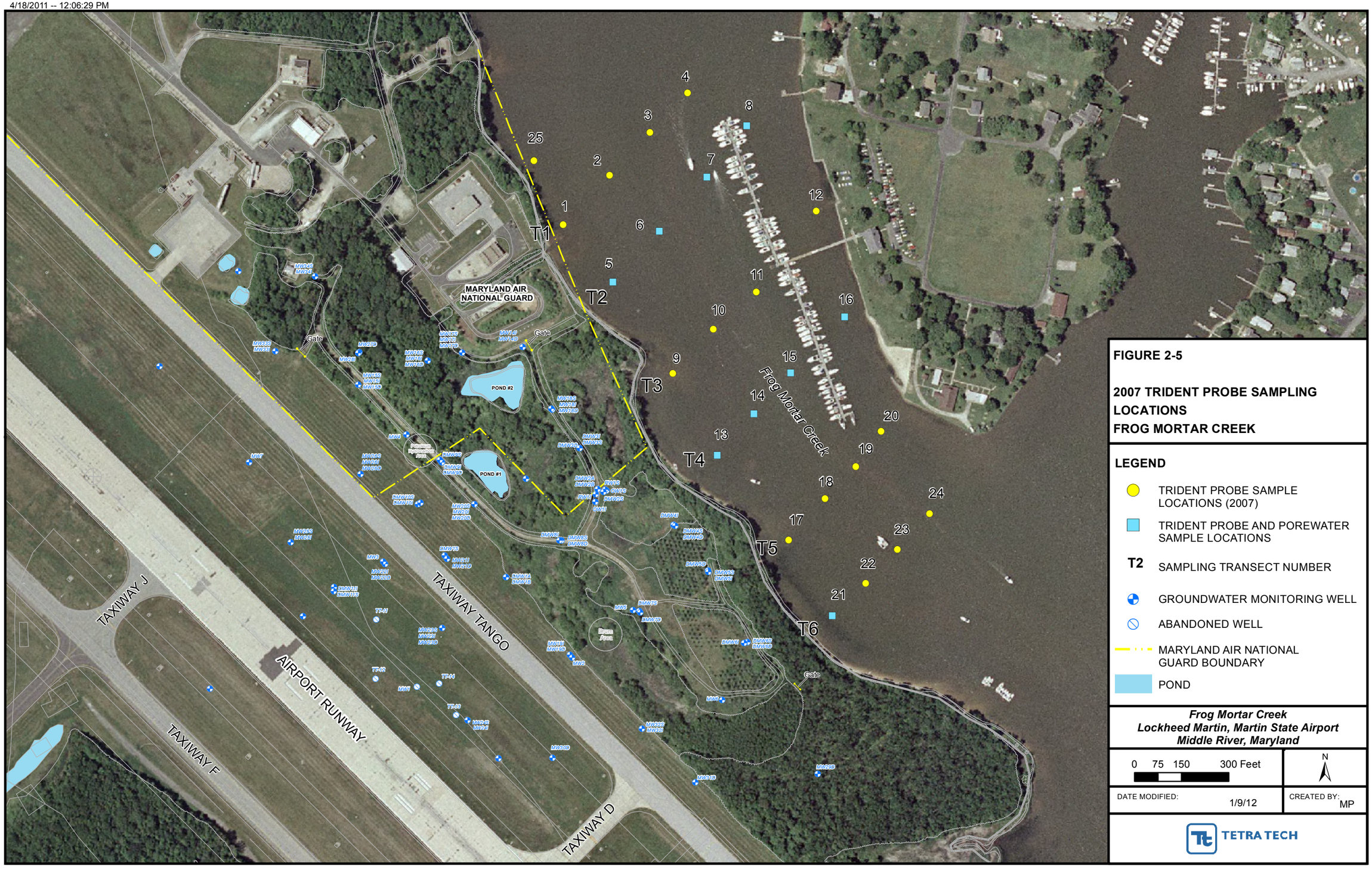

FIGURE 2-5

2007 TRIDENT PROBE SAMPLING LOCATIONS
FROG MORTAR CREEK

LEGEND

- TRIDENT PROBE SAMPLE LOCATIONS (2007)
- TRIDENT PROBE AND POREWATER SAMPLE LOCATIONS
- T2 — SAMPLING TRANSECT NUMBER
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

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

0 75 150 300 Feet

N

DATE MODIFIED: 1/9/12

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TETRA TECH

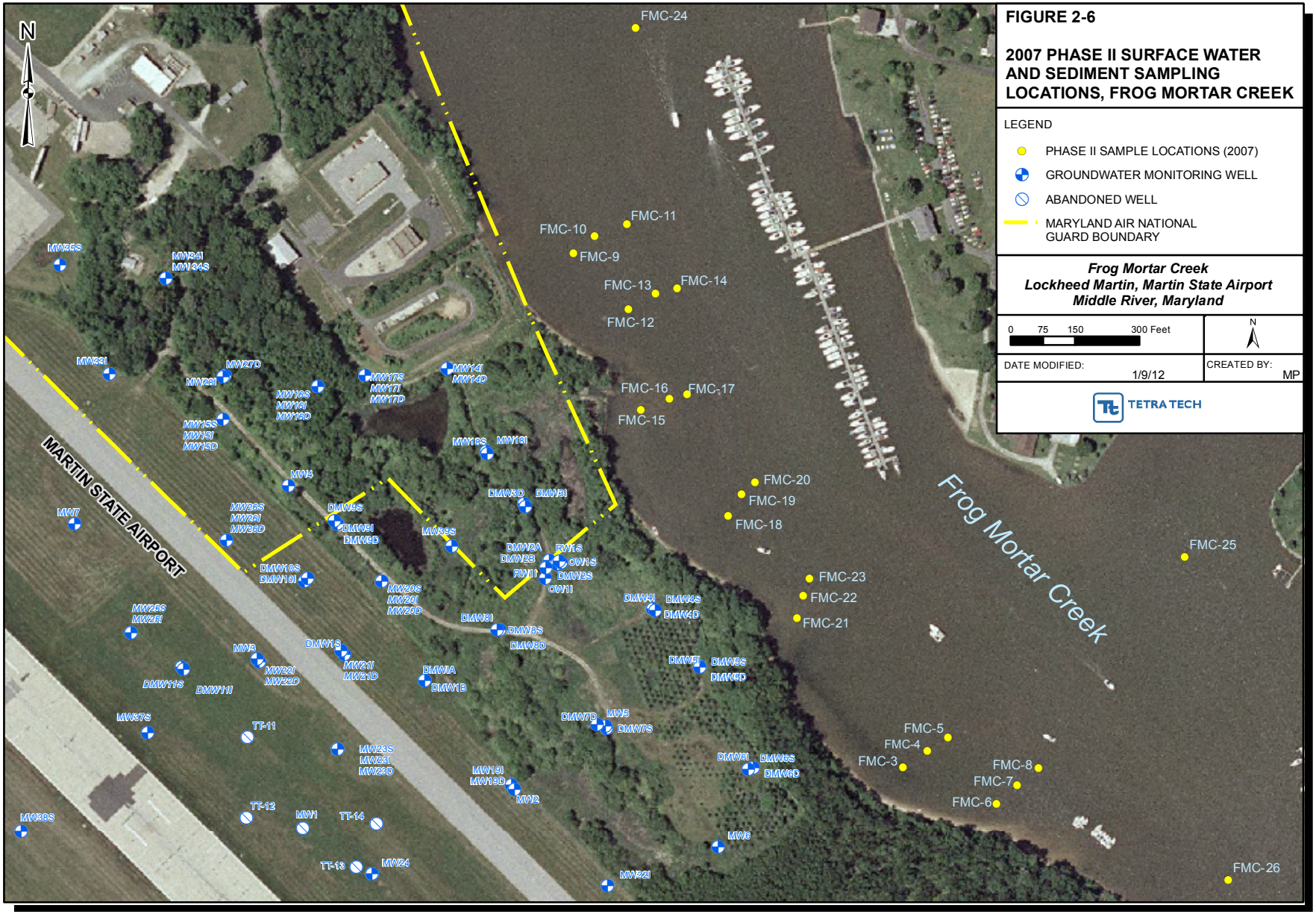

FIGURE 2-6

2007 PHASE II SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS, FROG MORTAR CREEK

LEGEND

- PHASE II SAMPLE LOCATIONS (2007)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY

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

0 75 150 300 Feet

N

DATE MODIFIED: 1/9/12

CREATED BY: MP

TETRA TECH

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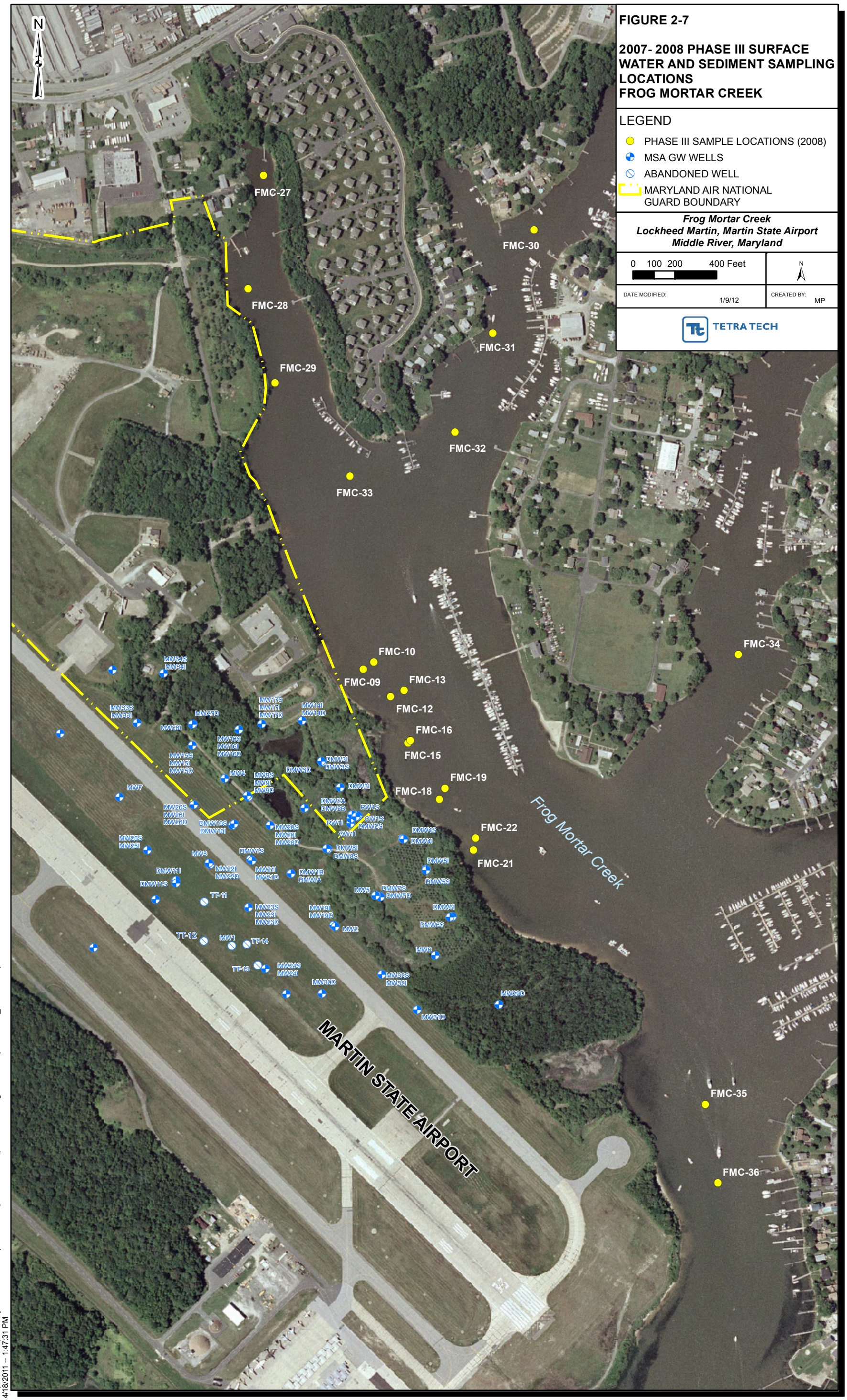

FIGURE 2-7

2007- 2008 PHASE III SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS FROG MORTAR CREEK

LEGEND

- PHASE III SAMPLE LOCATIONS (2008)
- MSA GW WELLS
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY

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

0 100 200 400 Feet

N

DATE MODIFIED: 1/9/12

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\Phase III Frog Mortar samples Tabloid_041811.mxd)
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FIGURE 2-8

JULY 2010 SURFACE WATER SAMPLING LOCATIONS

LEGEND

- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- SURFACE WATER SAMPLE LOCATION (2010)
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

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

0 75 150 300 Feet

N

DATE MODIFIED: 1/9/12

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples Exceedances 4 19 11_revised 012712.mxd)
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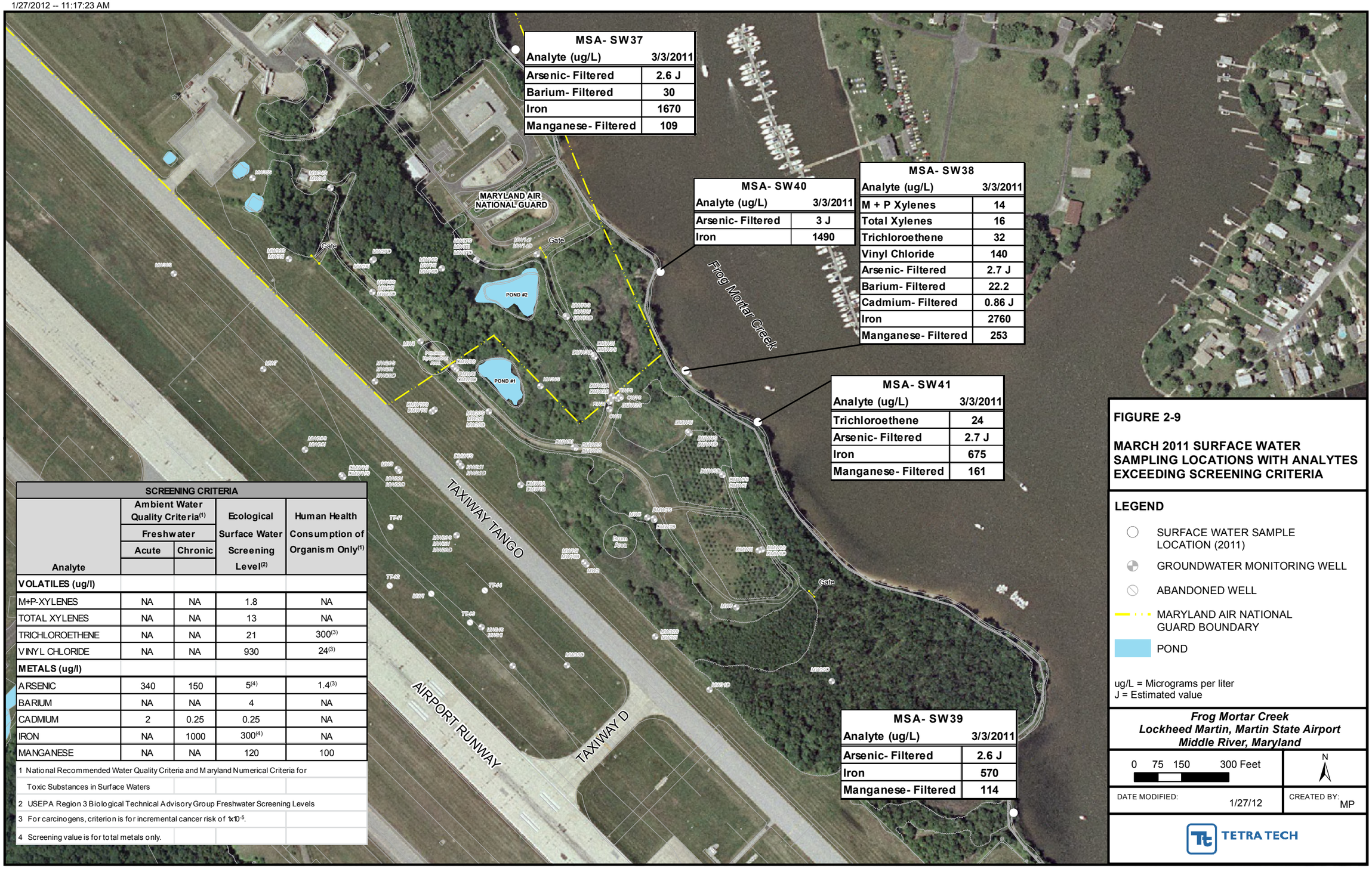

MSA- SW37	
Analyte (ug/L)	3/3/2011
Arsenic- Filtered	2.6 J
Barium- Filtered	30
Iron	1670
Manganese- Filtered	109

MSA- SW40	
Analyte (ug/L)	3/3/2011
Arsenic- Filtered	3 J
Iron	1490

MSA- SW38	
Analyte (ug/L)	3/3/2011
M + P Xylenes	14
Total Xylenes	16
Trichloroethene	32
Vinyl Chloride	140
Arsenic- Filtered	2.7 J
Barium- Filtered	22.2
Cadmium- Filtered	0.86 J
Iron	2760
Manganese- Filtered	253

MSA- SW41	
Analyte (ug/L)	3/3/2011
Trichloroethene	24
Arsenic- Filtered	2.7 J
Iron	675
Manganese- Filtered	161

MSA- SW39	
Analyte (ug/L)	3/3/2011
Arsenic- Filtered	2.6 J
Iron	570
Manganese- Filtered	114

SCREENING CRITERIA				
	Ambient Water Quality Criteria[1]		Ecological	Human Health
	Freshwater		Surface Water	Consumption of
	Acute	Chronic	Screening	Organism Only[1]
Analyte			Level[2]	
VOLATILES (ug/l)				
M+P-XYLENES	NA	NA	1.8	NA
TOTAL XYLENES	NA	NA	13	NA
TRICHLOROETHENE	NA	NA	21	300[3]
VINYL CHLORIDE	NA	NA	930	24[3]
METALS (ug/l)				
ARSENIC	340	150	5[4]	1.4[3]
BARIUM	NA	NA	4	NA
CADMIUM	2	0.25	0.25	NA
IRON	NA	1000	300[4]	NA
MANGANESE	NA	NA	120	100

1 National Recommended Water Quality Criteria and Maryland Numerical Criteria for Toxic Substances in Surface Waters

2 USEPA Region 3 Biological Technical Advisory Group Freshwater Screening Levels

3 For carcinogens, criterion is for incremental cancer risk of 1×10^{-5}.

4 Screening value is for total metals only.

FIGURE 2-9

MARCH 2011 SURFACE WATER SAMPLING LOCATIONS WITH ANALYTES EXCEEDING SCREENING CRITERIA

LEGEND

- SURFACE WATER SAMPLE LOCATION (2011)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

ug/L = Micrograms per liter
J = Estimated value

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

0 75 150 300 Feet

N

DATE MODIFIED: 1/27/12

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FIGURE 2-10

JUNE 2011 SURFACE WATER SAMPLING LOCATIONS

LEGEND

- SURFACE WATER SAMPLE LOCATION (1 FOOT DEPTH BELOW WATER SURFACE)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

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

0 75 150 300 Feet

N

DATE MODIFIED: 1/4/12

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples August2011.mxd)
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FIGURE 2-11

AUGUST 2011 SURFACE WATER SAMPLING LOCATIONS

LEGEND

- AUGUST 2011 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

"A" 1 foot below surface
"B" 1 foot below surface and 1 foot above bottom
"C" 1 foot below surface, midpoint of water column, and 1 foot above bottom

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

0 75 150 300 Feet

N

DATE MODIFIED: 1/4/12

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples September and December2011.mxd)
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SW-37-C
SW-37-B
SW-37-A
SW-42-C
SW-42-B
SW-42-A
SW-40-C
SW-40-B
SW-40-A
SW-38-C
SW-38-B
SW-38-A
SW-41-C
SW-41-B
SW-41-A
SW-43-C
SW-43-B
SW-43-A
SW-44-C
SW-44-B
SW-44-A
SW-45-C
SW-45-B
SW-45-A
SW-39-C
SW-39-B
SW-39-A

MARYLAND AIR NATIONAL GUARD
Parkside Marina
Conrad's Ruth Villa
Frog Mortar Creek
POND #1
POND #2
Gate
Drum Area
TAXIWAY J
TAXIWAY TANGO
AIRPORT RUNWAY
TAXIWAY F
TAXIWAY D

FIGURE 2-12

SEPTEMBER AND DECEMBER 2011 SURFACE WATER SAMPLE LOCATIONS

LEGEND

- DECEMBER 2011 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY

Lockheed Martin, Martin State Airport
Middle River, Maryland

0 75 150 300 Feet

N

DATE MODIFIED: 4/27/12

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples June2012.mxd)



FIGURE 2-13

2012 SURFACE WATER SAMPLING LOCATIONS
FROG MORTAR CREEK

LEGEND

- MARCH, JUNE, JULY, AND AUGUST 2012 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

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

0 75 150 300 Feet

N

DATE MODIFIED: 9/5/12

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Section 3
Investigation Approach and Methodology

A review of previous surface water sampling data for Frog Mortar Creek supported additional investigations to assess the extent to which surface water is affected by groundwater discharge from the Dump Road Area (DRA). This review evaluated chemical concentrations with respect to United States Environmental Protection Agency (USEPA) or Maryland Department of the Environment (MDE) screening levels and USEPA Ambient Water Quality Criteria (AWQC). Previously, the DRA groundwater volatile organic compounds (VOCs) trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) were detected in Frog Mortar Creek surface water samples at concentrations exceeding ecological and/or human health screening criteria.

The August 2012 sampling event is the fourth of six surface-water sampling rounds in 2012. The August sampling round assessed water quality during summer months, when increased recreational activity in Frog Mortar Creek is expected. Quarterly sampling rounds were or will be conducted in September and December 2012. To assess water quality with respect to recreational activities, additional site-specific screening levels were developed for TCE, *cis*-1,2-DCE, and VC to be protective of swimming in warm weather months, specifically in the June, July, August, and September sampling events. Therefore, results from August are compared to these swimming criteria, in addition to comparison to the USEPA and MDE criteria.

3.1 SURFACE WATER SAMPLING

3.1.1 Surface Water Sampling and Chemical Analyses

Forty surface water samples were collected from Frog Mortar Creek near the DRA site on August 13, 2012. Sampling locations are shown in Figure 3-1. Four samples were collected along each of nine transects spaced approximately 350 feet apart along the western shoreline of Frog Mortar Creek; these transects are designated as MSA-SW37, MSA-SW38, MSA-SW39,

MSA-SW40, MSA-SW41, MSA-SW42, MSA-SW43, MSA-SW44, and MSA-SW45. Four samples were also collected along a transect extending out from the eastern shoreline of the creek at 3301 Edwards Lane; this transect is designated EL-SW01 (see Figure 3-1). Along each transect, one sample was collected near the shoreline ("A" sample), one was collected approximately 50 feet from the shoreline ("B" sample), one was collected approximately 100 feet from the shoreline ("C" sample), and one was collected approximately 200 feet from the shoreline ("D" sample). Each sample was collected approximately one foot below the water surface.

Frog Mortar Creek samples designated with the "MSA-SW" prefix were analyzed for VOCs by SW846 Method 8260C, for metals (filtered in the field) by SW846 Methods 6010C/7470A, and for hexavalent chromium (filtered in the field) by USEPA Method 218.6. The Edwards Lane samples, designated with the "EL-SW" prefix, were analyzed for VOCs only. Analytical parameters for the Frog Mortar creek samples are in Table 3-1.

Water quality parameters, including temperature, pH, specific conductance, salinity, turbidity, dissolved oxygen, and oxidation-reduction potential were measured and recorded along with the water depth at all surface water sampling locations at the time of sampling. Tidal-gauge water measurements were also collected before and at the completion of the sampling event at the staff gauge located at 3301 Edwards Lane. All information was documented on the sample log sheets in Appendix A.

Surface water samples were collected as grab samples using direct-fill sampling techniques. All samples were collected at a depth of approximately one foot below the water surface. VOC samples were collected using a stainless steel discrete-interval sampler (a "Bacon Bomb" sampler). The sampler was lowered to approximately one foot below the water surface, the check valve was engaged to fill the sampler, which was then brought to the surface and the water was removed through a valve to fill three laboratory-cleaned hydrochloric-acid-preserved 40-milliliter (mL) sample vials. The discrete-interval sampler was cleaned after each use by rinsing with potable water. Equipment was cleaned after each sample had been collected. No decontamination fluids were collected during this sampling event.

For hexavalent chromium samples, a pre-cleaned bottle containing no sample preservatives (e.g., no nitric acid for preserving metal samples, etc.) was submerged approximately one foot

below the water surface and allowed to fill. Samples for metals were collected by a different method, using a peristaltic pump and Teflon® tubing, in accordance with USEPA guidance. The tubing inlet was set at the desired sampling depth (approximately one foot below the water surface) and the tubing was connected to a peristaltic pump. The sample was drawn directly from the desired sampling depth through a disposable 0.45-micron filter and collected in an unpreserved bottle. Metals and hexavalent chromium samples were preserved with nitric acid to the appropriate pH level in the laboratory. Surface water sampling locations were surveyed according to the Maryland State Plane North American Datum 1983 (feet) using a handheld global positioning system receiver.

The holding time for hexavalent chromium sample analysis is short: samples must be analyzed within 24 hours of collection. These samples were expedited to the laboratory so they could be analyzed within the prescribed holding time. No duplicates were collected during the August 2012 investigation. A trip blank (one per cooler containing VOC samples) was submitted for VOC analysis for quality assurance/quality control purposes.

3.1.2 Documentation

A master site logbook was maintained as an overall record of field activities for the site. Sample documentation includes completed chain of custody (COC) forms and surface water-specific sample log sheets. COC forms are standardized to summarize and document pertinent sample information such as sample identification and type, matrix, date and time of collection, preservation, and the analysis requested. Sample custody procedures document sample acquisition and integrity. Surface water sample log sheets are presented in Appendix A. COC forms are provided along with the data validation reports in Appendix B.

3.1.3 Sample Nomenclature and Handling

Surface water samples collected from transects SW37 through SW45 were identified with a unique sample identification tag. Surface water samples were labeled with an “MSA-SW” prefix, followed by the sample number, the profile location (“A,” “B,” “C,” or “D”), and the six-digit sampling date. For example, the surface water sample collected on August 13, 2012 from MSA-SW37A was labeled as MSA-SW37A-081312. Samples collected from the Edwards Lane

transect were labeled similarly, except for an "EL-SW" prefix. The trip blank was labeled with a "TB" prefix followed by the sample's six-digit submittal date (e.g., TB-081312).

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. COC protocols were used throughout sample handling to assure the evidentiary integrity of sample containers. These protocols demonstrate that the samples were handled and transferred in a manner that would prevent or detect possible tampering.

Sample containers were released under signature from the laboratory and accepted under signature by the sampler(s) or other individual responsible for maintaining custody until the sample containers were transferred to the sampler(s). Transport containers returning to the laboratory were sealed with strapping tape and a tamper-resistant custody seal. The custody seal contains the signature of the individual releasing the transport container, along with the date and time.

3.1.4 Equipment Decontamination

This project required minimal equipment decontamination. Both dedicated and disposable equipment were used for surface water sampling to reduce decontamination activities and eliminate potential cross-contamination of samples. The discrete-interval sampler was cleaned after each use by rinsing with potable water. Equipment was cleaned over the water after each sample had been collected. No decontamination fluids were collected during this sampling event.

3.1.5 Waste Management

Investigation-derived waste (IDW) consisted of personal protective equipment (PPE) and disposable equipment (filters, tubing, etc.) generated during field sampling. PPE IDW was brushed off, placed in trash bags along with the disposable equipment, and disposed of in a facility trash receptacle designated by facility personnel.

3.2 DATA MANAGEMENT

Laboratory data handling procedures met the requirements of the laboratory subcontract. All analytical and field data are maintained in project files, including copies of COC forms, sample log forms, sampling location maps, and documentation of quality assurance and data corrections.

3.2.1 Data Tracking and Control

A cradle-to-grave sample tracking system was used from the beginning to the end of the sampling event. The field operations leader began and coordinated sample tracking before mobilizing to the field. Sample container labels were handwritten in the field and reviewed to ensure that they were accurate and adhered to work plan requirements. The project manager coordinated with the analytical laboratory to ensure that the laboratory was aware of the number and type of samples and analyses that would be submitted each day.

During field sampling, the field operations leader forwarded the COC to a designated project assistant and to the laboratory. The project assistant confirmed that the COC provided the information required by the work plan. This allowed for early detection of errors made in the field so that adjustments could be made before sample analyses. After successful completion of all requested analyses, the laboratory submitted an electronic deliverable for each sample delivery group. When all electronic deliverables had been received from the laboratory, the project assistant checked the laboratory submittal to determine whether the laboratory had performed all analyses requested. All requested analyses were performed for this project.

3.2.2 Sample Information

Data from field measurements were recorded using appropriate sample log sheets and summarized in tabular form, as were the raw instrument data from the laboratory. The field operations leader verified field data daily; laboratory data were verified by the group supervisor and then by the laboratory's quality control/documentation department. The sample log sheets are in Appendix A.

3.2.3 Project Data Compilation

The analytical laboratory generated an Adobe *Acrobat*® portable document format (PDF) file of the analytical data package, as well as an electronic database deliverable. 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. All data, such as units of measure and chemical nomenclature, were corrected as necessary to be consistent with the project database.

3.2.4 Geographic Information System

Data management systems for this investigation consist of a relational database and geographic information system (GIS) to manage environmental information pertaining to Martin State Airport (MSA). The relational database stores chemical, geological, hydrogeological, and other environmental data collected during environmental investigations. The GIS is created from the relational database and contains subsets of the larger data pool. The GIS allows environmental data to be posted onto base maps to graphically represent project information. Compiled sampling, chemical, and positional data were incorporated into the GIS.

3.3 DATA REVIEW

Data from the laboratory were entered into a sample database and evaluated against risk-based criteria. Data validation (to evaluate data completeness, holding times, calibrations, precision, accuracy, laboratory and field blank contamination, and detection limits) was completed concurrent with the data evaluation. These reviews are based on *USEPA Region III Modifications to the National Functional Guidelines for Data Review* (USEPA, 1993 and 1994) and the specifics of the analytical methods used. Data from this sampling event consist of surface water sample chemical results. Data validation reports and COC are in Appendix B (on compact disc) as PDF files. Appendix C presents a table of all August 2012 Frog Mortar Creek surface water sample analytical data, including non-detects.

Collectively, these data are acceptable for their intended uses (site characterization and risk assessment), except for data qualified as unreliable ("*R*" flag). For this validation, the data qualifiers (i.e., flags) listed below were applied to the chemical results presented in this report. These flags appear on the chemical-results tables in Section 4 and in Appendices B and C.

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

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

K Positive result is considered estimated, biased high.

L Positive result is considered estimated, biased low.

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

UR The result is considered qualitatively or quantitatively unreliable.

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

Occasionally, common laboratory or field contaminants may be detected in samples. Analysis of quality control blanks and other internal laboratory blanks (e.g., method blanks, etc.) determines the significance of the analytical results versus possible laboratory or field contaminants. Common laboratory contaminants associated with VOCs analyses include acetone, methylene chloride, and 2-butanone.

The *National Functional Guidelines* for contract laboratories require that any compound, other than common laboratory contaminants, detected in both the sample and an associated blank must be qualified (i.e., "*B*" flag) when the sample concentration is less than five times the blank concentration. For the common laboratory contaminants listed above, results were qualified with a "*B*" flag when the sample concentration was less than 10 times the blank concentration. In addition to the common laboratory contaminants listed above, several common metals were also reported in the blank. Qualified data results are included in the chemical tables and figures in Section 4 and in Appendices B and C.

Table 3-1

List of Samples and Chemical Analyses for Surface Water Sampling-August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland

Sample ID	Analyses Performed (Method)		
	Volatile Organic Compounds (USEPA 8260B)	Dissolved Metals (USEPA 6020/7470A)	Hexavalent Chromium (USEPA 218.6)
MSA-SW37A	X	X	X
MSA-SW37B	X	X	X
MSA-SW37C	X	X	X
MSA-SW38A	X	X	X
MSA-SW38B	X	X	X
MSA-SW38C	X	X	X
MSA-SW39A	X	X	X
MSA-SW39B	X	X	X
MSA-SW39C	X	X	X
MSA-SW40A	X	X	X
MSA-SW40B	X	X	X
MSA-SW40C	X	X	X
MSA-SW41A	X	X	X
MSA-SW41B	X	X	X
MSA-SW41C	X	X	X
MSA-SW42A	X	X	X
MSA-SW42B	X	X	X
MSA-SW42C	X	X	X
MSA-SW43A	X	X	X
MSA-SW43B	X	X	X
MSA-SW43C	X	X	X
MSA-SW44A	X	X	X
MSA-SW44B	X	X	X
MSA-SW44C	X	X	X
MSA-SW45A	X	X	X
MSA-SW45B	X	X	X
MSA-SW45C	X	X	X
EL-SW01A	X		
EL-SW01B	X		
EL-SW01C	X		
EL-SW01D	X		

USEPA - U.S. Environmental Protection Agency

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples August 2012.mxd)
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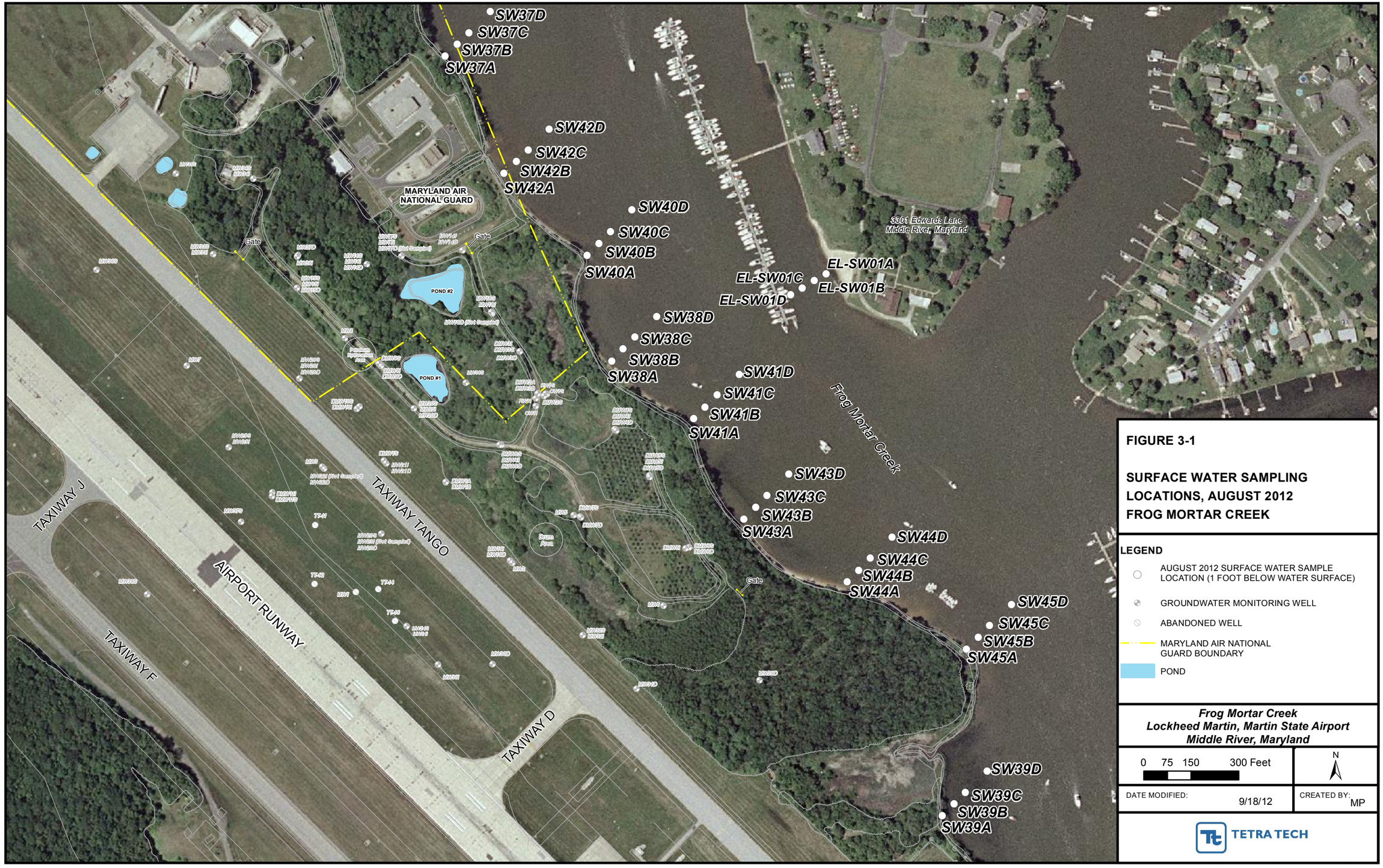

FIGURE 3-1

SURFACE WATER SAMPLING LOCATIONS, AUGUST 2012 FROG MORTAR CREEK

LEGEND

- AUGUST 2012 SURFACE WATER SAMPLE LOCATION (1 FOOT BELOW WATER SURFACE)
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

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

0 75 150 300 Feet

N

DATE MODIFIED: 9/18/12

CREATED BY: MP

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Section 4
Results

4.1 SURFACE WATER DATA AND SCREENING CRITERIA

Validated surface water chemical data from the surface water samples collected in August 2012 were used to generate a statistical summary table (Table 4-1) and a table summarizing positive detections of chemical analytes (Table 4-2). Samples were analyzed for volatile organic compounds (VOCs), dissolved (i.e., filtered) metals, and hexavalent chromium. Table 4-2, compares surface water sampling results to several applicable screening criteria, including:

- United States Environmental Protection Agency (USEPA) Region 3 Biological Technical Advisory Group (BTAG) freshwater screening benchmarks (USEPA, 2006)
- USEPA National Recommended Water Quality Criteria (NRWQC) for acute and chronic aquatic organism exposures, and NRWQC for human health aquatic organism consumption (USEPA, 2009)
- State of Maryland Ambient Water Quality Criteria (AWQC) for acute and chronic aquatic organism exposures and AWQC for human health aquatic-organism consumption (*Code of Maryland Regulations,* 2012)
- Site-specific swimming screening levels developed for trichloroethene (TCE), *cis*-1,2-dichloroethene (*cis*-1,2-DCE), and vinyl chloride (VC) only

The NRWQC, AWQC, and most BTAG screening levels for metals represent concentrations of dissolved metals in the water column; therefore, dissolved metals criteria were used to screen against these results. The BTAG screening levels for arsenic, iron, mercury, selenium, and thallium are based on the total metals concentration in the water column. During the current surface water sampling round, only dissolved metals were analyzed in surface water; therefore, the dissolved results for these five metals are not directly comparable to the BTAG criteria developed for total metals.

The NRWQC screening values for select dissolved metals (chromium, copper, lead, nickel, and zinc) were adjusted for hardness based on a site-specific value of 260 milligrams per liter (mg/L)

(the standard default value is 100 mg/L). The site-specific swimming criteria shown in Table 4-2 are surface water screening levels for TCE, *cis*-1,2-DCE, and VC developed by Lockheed Martin Corporation (Lockheed Martin) to protect swimmers near the Dump Road Area (DRA) shoreline. The surface water chlorinated VOC (cVOC) results are screened against the swimming criteria for monitoring events in peak recreational swimming months (e.g., June–September).

Gray shading in Table 4-2 indicates a result that exceeds its surface water screening criterion. Figures 4-1 through 4-3 show the respective concentrations of TCE, *cis*-1,2-DCE, and VC detected in August 2012 Frog Mortar Creek samples. Appendix C presents the August 2012 analytical data, including non-detect results.

4.2 SURFACE WATER SAMPLING RESULTS

As shown in Tables 4-1 and 4-2, several VOCs and metals were detected in surface water samples. Hexavalent chromium was detected in 12 of the 36 samples analyzed; however, the detected concentrations are all low values, well below screening criteria.

4.2.1 Volatile Organic Compounds

The most frequently detected cVOCs in the August 2012 samples include TCE, *cis*-1,2-DCE, and VC, which are also the primary cVOCs detected in the DRA groundwater plume. Carbon disulfide was detected in 21 of the 36 samples collected from the western transects, but was not detected in any of the four Edwards Lane samples. Other VOCs detected, but at low frequencies (i.e., in only one or two samples), include 1,4-dichlorobenzene, chlorobenzene, and toluene.

Results for TCE, *cis*-1,2-DCE, and VC are shown in Figures 4-1 through 4-3, respectively. As shown in Figure 4-1, TCE was detected in 29 of 40 samples at concentrations ranging from 0.2 to 3.7 micrograms per liter (µg/L). As shown in Figure 4-2, *cis*-1,2-DCE was detected in 19 of 40 samples, at concentrations ranging from 0.32 to 3.6 µg/L. VC was detected less frequently (in 12 of 40 samples), at concentrations ranging from 0.23 to 3.0 µg/L, as shown in Figure 4-3. As indicated in Table 4-2, all surface water cVOC were detected at concentrations less than their respective AWQC and their BTAG freshwater screening levels. However, VC was detected at concentrations above its site-specific swimming screening level (0.7 µg/L) in two sampling locations: SW38A (3.0 µg/L) and SW40A (1.1 µg/L).

Benzene, toluene, ethylbenzene, and xylenes (BTEX), common components of petroleum fuels, are also site groundwater chemicals of concern. Chlorobenzene was detected at only one location (SW38A), at a low estimated concentration (0.22 µg/L). Toluene was detected at two locations 200 feet from the shoreline (SW40D and SW45D) at low estimated concentrations, approximately 10 times less than its screening criteria. Ethylbenzene and xylenes were not detected in any samples collected during this sampling event.

As shown in Figure 4-1, concentrations of TCE were non-detect or less than 1 µg/L in five of nine transects from the western shore (SW37, SW38, SW39, SW42, and SW45). TCE was not detected in the Edwards Lane transect during the August 2012 sampling event.

Samples from the transects east of the Dump Road Area (e.g., SW40, SW41, and SW43) had the highest concentrations of TCE during the August 2012 event, ranging from 0.47 to 3.7 µg/L. The highest concentration (3.7 µg/L) was detected in sample SW43A (nearest the shore). This is generally consistent with the July results, in which TCE concentrations were greatest in the SW38, SW41, and SW43 transects. In contrast, samples from the transects farther north (e.g., SW37, SW42, and SW38) had the highest TCE concentrations in June 2012, ranging from 0.3 to 2.7 µg/L. Transects SW40, SW38, and SW41 are east of the DRA monitoring wells (DMW-2S, DMW-2A, DMW-3I); SW37 and SW42 are farther north, near the Maryland Air National Guard (MDANG) munitions area.

In August 2012, TCE concentrations were highest in samples collected near the shoreline at transects SW41, SW43, SW44, with decreased concentrations detected toward the center of Frog Mortar Creek. In transect SW40, the TCE concentration is greatest in the "C" sample, collected 100 feet from the shore. In the other sampling transects, concentrations of TCE, where detected, were relatively consistent along each transect. Although TCE results over the last three events (June, July, and August) have remained significantly lower than those of the March 2012 sampling event, they still provide evidence of relatively elevated concentrations close to the shoreline in areas to the east of wells DMW-2S, DMW-2A, DMW-3I, which is consistent with prior monitoring events.

As shown in Figure 4-2, detected concentrations of *cis*-1,2-DCE in August 2012 were generally limited to samples collected from transects SW38, SW40, SW41, and SW43. *cis*-1,2-DCE was

detected at low estimated concentrations in transects SW42 and SW44, but was not detected in transects SW37, SW39, and SW45. The highest *cis*-1,2-DCE concentrations were detected at locations SW43A (3.6 µg/L), SW38A (1.5 µg/L), SW41A (1.4 µg/L), and SW40C (1.3 µg/L). The remaining *cis*-1,2-DCE concentrations range from 0.32 to 0.95 µg/L. *cis*-1,2-DCE concentrations in transects SW38, SW41, and SW43 are highest near the shoreline, and decrease with increasing distance from the shoreline.

Similar to TCE, concentrations of *cis*-1,2-DCE have significantly decreased since March 2012. During the March 2012 sampling event, the highest concentrations of *cis*-1,2-DCE were collected near the shoreline at transects SW40 (39 µg/L at SW40A) and SW41 (18 µg/L at SW41A). However, the areas with relatively elevated *cis*-1,2-DCE concentrations in August 2012 are consistent with previous investigations: their general location is in the area east of groundwater monitoring wells DMW-2S, DMW-2A, and DMW-3I.

VC detections in August 2012 were generally limited to samples collected from transects SW38, SW40, SW42, SW43, and SW44. As shown in Figure 4-3, the highest VC concentrations were detected in SW38A (3.0 µg/L) and SW40A (1.1 µg/L). During the June and July 2012 sampling events, the highest VC concentration was also detected at sampling location MSA-SW38A. Other VC detections in August 2012 were limited to low or estimated concentrations in transects SW42, SW43, and SW44. VC concentrations detected in these samples range from 0.23 µg/L (SW43D) to 0.61 µg/L (SW43A). In general, VC concentrations detected during the August 2012 sampling event are similar to those of the past two events (June and July 2012). However, in March 2012, the highest VC concentration (40 µg/L at SW40A) was more than one order of magnitude higher than the maximum detected in August round (3.0 µg/L at SW38A).

4.2.2 Metals

All August 2012 dissolved arsenic concentrations were above the human health consumption-of-organism screening criterion, but less than the ecological and AWQC criteria, at concentrations ranging from 2.1 to 2.7 µg/L. Dissolved barium concentrations (ranging from 70 to 80 µg/L) exceed the BTAG ecological screening level of 4 µg/L in all samples.

4.2.3 Hexavalent Chromium

During the August 2012 sampling event, dissolved hexavalent chromium was detected in 12 of 36 samples, but at trace concentrations ranging from 0.02 to 0.034*J* µg/L, well below its AWQC and the BTAG freshwater screening levels. In contrast, hexavalent chromium (dissolved) was detected in all samples during the June 2012 sampling event, and in 23 of 40 samples during the July 2012 event.

Table 4-1

Statistical Summary of Analytes Detected in Surface Water Samples - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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Chemical	Frequency of Detection[1]		Mininum Non Detected	Maximum Non Detected	Mininum Detected	Maximum Detected	Sample of Maximum Detected	Mean of All Samples	Mean of Positive Detects	Standard Deviation
	Number	Percent								
VOLATILES (UG/L)										
TRICHLOROETHENE	29/40	72%	0.17	0.17	0.2 J	3.7	MSA-SW43A-081312	0.70	0.93	0.74
CARBON DISULFIDE	21/40	52%	0.13	0.13	0.13 J	0.88 J	MSA-SW40A-081312	0.20	0.32	0.18
CIS-1,2-DICHLOROETHENE	19/40	47%	0.17	0.17	0.32 J	3.6	MSA-SW43A-081312	0.44	0.83	0.64
VINYL CHLORIDE	12/40	30%	0.22	0.22	0.23 J	3	MSA-SW38A-081312	0.26	0.62	0.48
1,4-DICHLOROBENZENE	1/40	3%	0.13	0.13	0.38 J	0.38 J	MSA-SW38A-081312	0.07	0.38	0.05
CHLOROBENZENE	1/40	3%	0.15	0.15	0.22 J	0.22 J	MSA-SW38A-081312	0.08	0.22	0.02
TOLUENE	2/40	5%	0.13	0.13	0.19 J	0.33 J	MSA-SW40D-081312	0.07	0.26	0.05
FILTERED METALS (UG/L)										
ANTIMONY	36/36	100%			0.18 J	0.39 J	MSA-SW37A-081312	0.28	0.28	0.05
ANTIMONY	36/36	100%			0.18 J	0.39 J	MSA-SW42B-081312	0.28	0.28	0.05
ANTIMONY	36/36	100%			0.18 J	0.39 J	MSA-SW37B-081312	0.28	0.28	0.05
ARSENIC	36/36	100%			2.1 J	2.7 J	MSA-SW42A-081312	2.43	2.43	0.14
BARIUM	36/36	100%			70	80	MSA-SW44B-081312	75.1	75.1	1.97
COPPER	36/36	100%			2.6 K	5.4	MSA-SW42B-081312	3.3	3.3	0.6
MOLYBDENUM	36/36	100%			2 J	2.7 J	MSA-SW37B-081312	2.3	2.3	0.2
MOLYBDENUM	36/36	100%			2 J	2.7 J	MSA-SW42B-081312	2.3	2.3	0.2
MOLYBDENUM	36/36	100%			2 J	2.7 J	MSA-SW37A-081312	2.3	2.3	0.2
NICKEL	36/36	100%			1.1 J	2.6	MSA-SW41A-081312	1.3	1.3	0.3
VANADIUM	36/36	100%			0.9 J	1.6 J	MSA-SW44D-081312	1.2	1.2	0.2
COBALT	18/36	50%	0.058	0.058	0.062 J	0.22 J	MSA-SW38D-081312	0.076	0.124	0.058
ZINC	17/36	47%	2.3	2.3	2.3 J	5.3 J	MSA-SW39D-081312	2.1	3.2	1.2
LEAD	5/36	14%	0.18	0.18	0.28 J	0.63 J	MSA-SW38D-081312	0.14	0.42	0.12
THALLIUM	3/36	8%	0.14	0.14	0.17 J	0.41 J	MSA-SW37A-081312	0.09	0.32	0.08
MISCELLANEOUS PARAMETERS (UG/L)										
HEXAVALENT CHROMIUM	12/36	33%	0.04	0.04	0.02 J	0.034 J	MSA-SW40A-081312	0.021	0.024	0.003

Table 4-1

Statistical Summary of Analytes Detected in Surface Water Samples - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland

1 Analytes are ranked from highest to lowest by percent frequency of detection.
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.
UG/L - micrograms per liter
J - Estimated concentration
K - Result is biased high. Value is expected to be lower.
Associated Samples

EL-SW01A-081312	MSA-SW41A-081312
EL-SW01B-081312	MSA-SW41B-081312
EL-SW01C-081312	MSA-SW41C-081312
EL-SW01D-081312	MSA-SW41D-081312
MSA-SW37A-081312	MSA-SW42A-081312
MSA-SW37B-081312	MSA-SW42B-081312
MSA-SW37C-081312	MSA-SW42C-081312
MSA-SW37D-081312	MSA-SW42D-081312
MSA-SW38A-081312	MSA-SW43A-081312
MSA-SW38B-081312	MSA-SW43B-081312
MSA-SW38C-081312	MSA-SW43C-081312
MSA-SW38D-081312	MSA-SW43D-081312
MSA-SW39A-081312	MSA-SW44A-081312
MSA-SW39B-081312	MSA-SW44B-081312
MSA-SW39C-081312	MSA-SW44C-081312
MSA-SW39D-081312	MSA-SW44D-081312
MSA-SW40A-081312	MSA-SW45A-081312
MSA-SW40B-081312	MSA-SW45B-081312
MSA-SW40C-081312	MSA-SW45C-081312
MSA-SW40D-081312	MSA-SW45D-081312

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	EL-SW01A EL-SW01A-081312 20120813 SW NORMAL 1	EL-SW01B EL-SW01B-081312 20120813 SW NORMAL 1	EL-SW01C EL-SW01C-081312 20120813 SW NORMAL 1	EL-SW01D EL-SW01D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	--	--	--	--
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[4]	10	--	--	--	--
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	--	--	--	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	NA	NA	NA	NA
ARSENIC	340	150	NA[3]	1.4[4]	NA	NA	NA	NA	NA
BARIUM	NA	NA	4	NA	NA	NA	NA	NA	NA
COBALT	NA	NA	23	NA	NA	NA	NA	NA	NA
COPPER	33.06[5]	20[5]	9	NA	NA	NA	NA	NA	NA
LEAD	179.6[5]	7[5]	2.5	NA	NA	NA	NA	NA	NA
MOLYBDENUM	NA	NA	73	NA	NA	NA	NA	NA	NA
NICKEL	470	52	52	4600	NA	NA	NA	NA	NA
THALLIUM	NA	NA	NA[3]	0.47	NA	NA	NA	NA	NA
VANADIUM	NA	NA	20	NA	NA	NA	NA	NA	NA
ZINC	263.3[5]	265[5]	120	26000	NA	NA	NA	NA	NA
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	NA	NA	NA	NA

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-37A MSA-SW37A-081312 20120813 SW NORMAL 1	MSA-SW-37B MSA-SW37B-081312 20120813 SW NORMAL 1	MSA-SW-37C MSA-SW37C-081312 20120813 SW NORMAL 1	MSA-SW-37D MSA-SW37D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	0.6 J	--	0.23 J	0.36 J
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	--	--	--	--
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[4]	10	0.28 J	0.43 J	0.32 J	0.25 J
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	--	--	--	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.39 J	0.39 J	0.31 J	0.3 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.6 J	2.6 J	2.4 J	2.5 J
BARIUM	NA	NA	4	NA	NA	74	74	75	74
COBALT	NA	NA	23	NA	NA	0.15 J	--	0.082 J	0.076 J
COPPER	33.06[5]	20[5]	9	NA	NA	3.3 K	3 K	3.2 K	3.5 K
LEAD	179.6[5]	7[5]	2.5	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	73	NA	NA	2.7 J	2.7 J	2.3 J	2.2 J
NICKEL	470	52	52	4600	NA	1.3 J	1.2 J	1.3 J	1.5 J
THALLIUM	NA	NA	NA[3]	0.47	NA	0.41 J	0.38 J	--	--
VANADIUM	NA	NA	20	NA	NA	1.1 J	1.2 J	1.1 J	1.1 J
ZINC	263.3[5]	265[5]	120	26000	NA	3.5 J	--	--	3.5 J
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-38A MSA-SW38A-081312 20120813 SW NORMAL 1	MSA-SW-38B MSA-SW38B-081312 20120813 SW NORMAL 1	MSA-SW-38C MSA-SW38C-081312 20120813 SW NORMAL 1	MSA-SW-38D MSA-SW38D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	0.38 J	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	0.24 J	--	0.2 J	--
CHLOROBENZENE	NA	NA	1.3	1600	NA	0.22 J	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	1.5	0.46 J	0.55 J	0.41 J
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[4]	10	0.73 J	0.99 J	0.96 J	0.69 J
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	3	--	--	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.3 J	0.29 J	0.3 J	0.29 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.5 J	2.3 J	2.3 J	2.6 J
BARIUM	NA	NA	4	NA	NA	76	74	76	77
COBALT	NA	NA	23	NA	NA	0.17 J	--	--	0.22 J
COPPER	33.06[5]	20[5]	9	NA	NA	3.8 K	3.2 K	3 K	5
LEAD	179.6[5]	7[5]	2.5	NA	NA	0.32 J	--	--	0.63 J
MOLYBDENUM	NA	NA	73	NA	NA	2.3 J	2.4 J	2.3 J	2.3 J
NICKEL	470	52	52	4600	NA	1.3 J	1.2 J	1.2 J	1.5 J
THALLIUM	NA	NA	NA[3]	0.47	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	1.4 J	0.92 J	1.1 J	1.5 J
ZINC	263.3[5]	265[5]	120	26000	NA	2.6 J	2.3 J	3.2 J	3.4 J
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	0.02 J	--	0.025 J

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-39A MSA-SW39A-081312 20120813 SW NORMAL 1	MSA-SW-39B MSA-SW39B-081312 20120813 SW NORMAL 1	MSA-SW-39C MSA-SW39C-081312 20120813 SW NORMAL 1	MSA-SW-39D MSA-SW39D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	0.3 J	0.16 J
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	--	--	--	--
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[4]	10	--	0.2 J	--	--
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	--	--	--	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.28 J	0.26 J	0.25 J	0.23 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.3 J	2.4 J	2.5 J	2.5 J
BARIUM	NA	NA	4	NA	NA	75	77	78	77
COBALT	NA	NA	23	NA	NA	0.11 J	--	--	--
COPPER	33.06[5]	20[5]	9	NA	NA	3 K	2.8 K	2.6 K	2.7 K
LEAD	179.6[5]	7[5]	2.5	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	73	NA	NA	2.3 J	2.4 J	2.4 J	2.4 J
NICKEL	470	52	52	4600	NA	1.3 J	1.1 J	1.2 J	1.3 J
THALLIUM	NA	NA	NA[3]	0.47	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	1.3 J	1.2 J	1.4 J	1.3 J
ZINC	263.3[5]	265[5]	120	26000	NA	--	--	--	5.3 J
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	--

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-40A MSA-SW40A-081312 20120813 SW NORMAL 1	MSA-SW-40B MSA-SW40B-081312 20120813 SW NORMAL 1	MSA-SW-40C MSA-SW40C-081312 20120813 SW NORMAL 1	MSA-SW-40D MSA-SW40D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	0.88 J	0.53 J	0.13 J	0.34 J
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	0.6 J	0.95 J	1.3	--
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	0.33 J
TRICHLOROETHENE	NA	NA	21	300[4]	10	0.48 J	1.8	2.5	0.5 J
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	1.1	--	--	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.28 J	0.3 J	0.29 J	0.27 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.5 J	2.4 J	2.4 J	2.1 J
BARIUM	NA	NA	4	NA	NA	76	76	76	71
COBALT	NA	NA	23	NA	NA	0.12 J	--	--	--
COPPER	33.06[5]	20[5]	9	NA	NA	2.9 K	3.4 K	3.5 K	3 K
LEAD	179.6[5]	7[5]	2.5	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	73	NA	NA	2.2 J	2.2 J	2.3 J	2.2 J
NICKEL	470	52	52	4600	NA	1.2 J	1.5 J	1.3 J	1.1 J
THALLIUM	NA	NA	NA[3]	0.47	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	1.4 J	0.94 J	1.1 J	1.2 J
ZINC	263.3[5]	265[5]	120	26000	NA	--	--	2.6 J	--
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.034 J	0.025 J	--	--

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-41A MSA-SW41A-081312 20120813 SW NORMAL 1	MSA-SW-41B MSA-SW41B-081312 20120813 SW NORMAL 1	MSA-SW-41C MSA-SW41C-081312 20120813 SW NORMAL 1	MSA-SW-41D MSA-SW41D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	0.17 J	--	0.26 J	--
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	1.4	0.53 J	0.5 J	--
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[4]	10	1.9	1	0.86 J	0.62 J
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	--	--	--	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.26 J	0.27 J	0.31 J	0.24 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.3 J	2.2 J	2.3 J	2.2 J
BARIUM	NA	NA	4	NA	NA	76	73	74	73
COBALT	NA	NA	23	NA	NA	0.2 J	0.12 J	--	--
COPPER	33.06[5]	20[5]	9	NA	NA	3.8 K	3.6 K	4	3.3 K
LEAD	179.6[5]	7[5]	2.5	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	73	NA	NA	2.3 J	2.2 J	2.2 J	2.1 J
NICKEL	470	52	52	4600	NA	2.6	2.4	1.3 J	1.2 J
THALLIUM	NA	NA	NA[3]	0.47	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	1.2 J	1.1 J	0.99 J	1 J
ZINC	263.3[5]	265[5]	120	26000	NA	4.5 J	4 J	--	--
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	0.026 J	--

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-42A MSA-SW42A-081312 20120813 SW NORMAL 1	MSA-SW-42B MSA-SW42B-081312 20120813 SW NORMAL 1	MSA-SW-42C MSA-SW42C-081312 20120813 SW NORMAL 1	MSA-SW-42D MSA-SW42D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	0.36 J	--	--	0.39 J
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	0.38 J	0.32 J	--	0.32 J
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	0.77 B	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[4]	10	0.59 J	0.53 J	0.72 J	0.52 J
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	0.29 J	0.29 J	0.32 J	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.38 J	0.39 J	0.31 J	0.27 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.7 J	2.6 J	2.4 J	2.5 J
BARIUM	NA	NA	4	NA	NA	74	76	75	73
COBALT	NA	NA	23	NA	NA	0.15 J	0.15 J	0.081 J	0.062 J
COPPER	33.06[5]	20[5]	9	NA	NA	3.4 K	5.4	3.2 K	3.1 K
LEAD	179.6[5]	7[5]	2.5	NA	NA	0.4 J	--	--	--
MOLYBDENUM	NA	NA	73	NA	NA	2.5 J	2.7 J	2.3 J	2.2 J
NICKEL	470	52	52	4600	NA	1.3 J	1.2 J	1.2 J	1.2 J
THALLIUM	NA	NA	NA[3]	0.47	NA	--	0.17 J	--	--
VANADIUM	NA	NA	20	NA	NA	1.5 J	1.2 J	1.1 J	1.1 J
ZINC	263.3[5]	265[5]	120	26000	NA	2.5 J	4.4 J	--	--
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	--	--	0.026 J

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-43A MSA-SW43A-081312 20120813 SW NORMAL 1	MSA-SW-43B MSA-SW43B-081312 20120813 SW NORMAL 1	MSA-SW-43C MSA-SW43C-081312 20120813 SW NORMAL 1	MSA-SW-43D MSA-SW43D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	0.29 J	0.25 J	0.14 J
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	3.6	0.59 J	0.45 J	0.4 J
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[4]	10	3.7	0.95 J	0.83 J	0.71 J
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	0.61	0.29 J	0.24 J	0.23 J
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.24 J	0.27 J	0.25 J	0.25 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.1 J	2.3 J	2.4 J	2.5 J
BARIUM	NA	NA	4	NA	NA	70	75	75	77
COBALT	NA	NA	23	NA	NA	0.11 J	0.073 J	--	--
COPPER	33.06[5]	20[5]	9	NA	NA	2.8 K	3.2 K	3.3 K	3.2 K
LEAD	179.6[5]	7[5]	2.5	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	73	NA	NA	2 J	2.2 J	2.2 J	2.3 J
NICKEL	470	52	52	4600	NA	1.3 J	1.3 J	1.2 J	1.3 J
THALLIUM	NA	NA	NA[3]	0.47	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	0.9 J	1.1 J	1.2 J	1 J
ZINC	263.3[5]	265[5]	120	26000	NA	--	--	--	2.6 J
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	0.024 J	0.022 J	0.021 J	--

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland
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LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-44A MSA-SW44A-081312 20120813 SW NORMAL 1	MSA-SW-44B MSA-SW44B-081312 20120813 SW NORMAL 1	MSA-SW-44C MSA-SW44C-081312 20120813 SW NORMAL 1	MSA-SW-44D MSA-SW44D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	--	--	--	--
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	0.73 J	0.82 J	--	--
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	--
TRICHLOROETHENE	NA	NA	21	300[4]	10	1.3	1.4	0.56 J	0.69 J
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	0.38 J	0.42 J	0.24 J	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.27 J	0.25 J	0.25 J	0.26 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.4 J	2.6 J	2.5 J	2.6 J
BARIUM	NA	NA	4	NA	NA	74	80	76	77
COBALT	NA	NA	23	NA	NA	0.065 J	0.18 J	--	0.11 J
COPPER	33.06[5]	20[5]	9	NA	NA	3.1 K	4.4	2.9 K	3.3 K
LEAD	179.6[5]	7[5]	2.5	NA	NA	--	0.45 J	--	0.28 J
MOLYBDENUM	NA	NA	73	NA	NA	2.1 J	2.3 J	2.3 J	2.3 J
NICKEL	470	52	52	4600	NA	1.2 J	1.4 J	1.4 J	1.3 J
THALLIUM	NA	NA	NA[3]	0.47	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	1.1 J	1.5 J	1.1 J	1.6 J
ZINC	263.3[5]	265[5]	120	26000	NA	--	2.6 J	2.3 J	2.5 J
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	0.021 J	0.021 J	--

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland

LOCATION SAMPLE ID SAMPLE DATE MATRIX SAMPLE TYPE DEPTH (FEET BELOW WATER SURFACE)	National Recommended and Ambient Water Quality Criteria[1] Freshwater		Ecological Surface Water Screening Level[2]	Human Health Consumption of Organism Only[1,4]	Swimming Screening Levels[6]	MSA-SW-45A MSA-SW45A-081312 20120813 SW NORMAL 1	MSA-SW-45B MSA-SW45B-081312 20120813 SW NORMAL 1	MSA-SW-45C MSA-SW45C-081312 20120813 SW NORMAL 1	MSA-SW-45D MSA-SW45D-081312 20120813 SW NORMAL 1
	Acute	Chronic							
VOLATILES (UG/L)									
1,4-DICHLOROBENZENE	NA	NA	26	190	NA	--	--	--	--
CARBON DISULFIDE	NA	NA	0.92	NA	NA	0.48 J	0.19 J	--	0.15 J
CHLOROBENZENE	NA	NA	1.3	1600	NA	--	--	--	--
CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	300	--	--	--	--
HEXACHLOROBUTADIENE	NA	NA	1.3	18	NA	--	--	--	--
TOLUENE	NA	NA	2	15000	NA	--	--	--	0.19 J
TRICHLOROETHENE	NA	NA	21	300[4]	10	--	--	--	--
VINYL CHLORIDE	NA	NA	930	24[4]	0.7	--	--	--	--
FILTERED METALS (UG/L)									
ANTIMONY	NA	NA	30	640	NA	0.23 J	0.22 J	0.18 J	0.21 J
ARSENIC	340	150	NA[3]	1.4[4]	NA	2.4 J	2.5 J	2.4 J	2.5 J
BARIUM	NA	NA	4	NA	NA	76	77	72	76
COBALT	NA	NA	23	NA	NA	--	--	--	--
COPPER	33.06[5]	20[5]	9	NA	NA	2.9 K	2.9 K	2.7 K	3 K
LEAD	179.6[5]	7[5]	2.5	NA	NA	--	--	--	--
MOLYBDENUM	NA	NA	73	NA	NA	2.3 J	2.2 J	2.2 J	2.2 J
NICKEL	470	52	52	4600	NA	1.2 J	1.3 J	1.2 J	1.2 J
THALLIUM	NA	NA	NA[3]	0.47	NA	--	--	--	--
VANADIUM	NA	NA	20	NA	NA	1.2 J	1.2 J	1.2 J	1.1 J
ZINC	263.3[5]	265[5]	120	26000	NA	2.9 J	--	--	--
MISCELLANEOUS PARAMETERS (UG/L)									
HEXAVALENT CHROMIUM	16	11	11	NA	NA	--	0.022 J	--	--

Table 4-2

Analytes Detected in Surface Water Samples and Screening Criteria - August 2012
Frog Mortar Creek
Martin State Airport, Middle River, Maryland

1 National Recommended Water Quality Criteria, http://water.epa.gov/scitech/swguidance/standards/current/index.cfm;
and Maryland Numerical Criteria for Toxic Substances in Surface Waters, Code of Maryland Regulations (COMAR) 26.08.02.03,
http://www.dsd.state.md.us./comar/comarhtml/26/26.08.02.03-2.htm

2 United States Environmental Protection Agency (USEPA) Region 3 Biological Technical Advisory Group (BTAG) Freshwater Screening Benchmarks.

3 The BTAG screening benchmark is based on total metal concentration for this analyte. Therefore, dissolved metals results for this metal are not screened against the BTAG screening benchmark.

4 For carcinogens, criterion is for incremental cancer risk of 1x10-5.

5 Screening criteria adjusted based on using a site specific hardness value of 260 mg/L as opposed to the standard 100 mg/L.

6 Site-specific swimming screening levels developed for trichloroethene, cis-1,2-dichloroethene, and vinyl chloride only.

J - Positive result is considered estimated.

K - Positive result is considered estimated biased high. Value is expected to be lower.

NA - Not analyzed or not available.

SW - surface water

UG/L - micrograms per liter.

- - Not detected

Gray shading indicates the value exceeds one of the criteria.

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples TCE concentration August2012.mxd)
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FIGURE 4-1

CONCENTRATIONS OF TRICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2012 FROG MORTAR CREEK

LEGEND

- AUGUST 2012 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

(0.6) =Trichloroethene Concentration
J = Estimated Value
- - = Not Detected

Concentration in micrograms per liter (ug/L)

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

0 75 150 300 Feet

N

DATE MODIFIED: 9/5/12

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples CIS 1-2 Dichloroethene August2012.mxd)
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FIGURE 4-2

CONCENTRATIONS OF CIS-1,2-DICHLOROETHENE IN SURFACE WATER SAMPLES, AUGUST 2012 FROG MORTAR CREEK

LEGEND

- AUGUST 2012 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

(1.7) = CIS-1,2-DICHLOROETHENE
J = ESTIMATED VALUE
- - = NOT DETECTED

Concentration in micrograms per liter (ug/L)

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

0 75 150 300 Feet

N

DATE MODIFIED: 9/24/12

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\MartinStateAirport-LMC\MapDocs\MXD\Maps\MSA Surface Water Samples Vinyl Chloride concentration August2012.mxd)
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FIGURE 4-3

CONCENTRATIONS OF VINYL CHLORIDE IN SURFACE WATER SAMPLES, AUGUST 2012 FROG MORTAR CREEK

LEGEND

- AUGUST 2012 SURFACE WATER SAMPLE LOCATION
- GROUNDWATER MONITORING WELL
- ABANDONED WELL
- MARYLAND AIR NATIONAL GUARD BOUNDARY
- POND

(1.7) = Vinyl Chloride Concentration
J = Estimated Value
- - - = Not Detected

Concentration in micrograms per liter (ug/L)

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

0 75 150 300 Feet

N

DATE MODIFIED: 9/5/12

CREATED BY: MP

TETRA TECH

Section 5
Summary

The following summarizes the August 2012 Frog Mortar Creek surface water investigation and findings:

- Forty surface water samples were collected from Frog Mortar Creek on August 13, 2012 and chemically analyzed to assess concentrations of chemical constituents previously detected in Frog Mortar Creek, and to assess creek surface-water quality near the Dump Road Area (DRA).

- Four samples were collected along each of nine transects spaced approximately 350 feet apart along the western shoreline of Frog Mortar Creek. In addition, four samples were collected along a transect extending out from a property (3301 Edwards Lane) across Frog Mortar Creek, along the eastern shoreline. The transects are designated MSA-SW37, MSA-SW38, MSA-SW39, MSA-SW40, MSA-SW41, MSA-SW42, MSA-SW43, MSA-SW44, and MSA-SW45, all along the western shoreline of Frog Mortar Creek near the Dump Road Area, and EL-SW01, along the eastern shoreline of Frog Mortar Creek near 3301 Edwards Lane. Along each transect, one sample was collected near the shoreline ("A" sample), one was collected approximately 50 feet from the shoreline ("B" sample), one was collected approximately 100 feet from the shoreline ("C" sample), and one was collected approximately 200 feet from the shoreline ("D" sample). Each sample was collected approximately one foot below the water surface.

- All of the Frog Mortar Creek samples, except for the Edwards Lane samples, were analyzed for volatile organic compounds (VOCs), filtered metals, and filtered hexavalent chromium. The four surface water samples from the Edwards Lane transect were analyzed for volatile organic compounds only.

- The data were validated in accordance with the *U.S. Environmental Protection Agency (USEPA) Region III Modifications to the National Functional Guidelines for Data Review* (USEPA, 1993 and 1994) and the specific requirements of the analytical methods used.

- Sampling results were screened against U.S. Environmental Protection Agency Region III Biological Technical Advisory Group (BTAG) ecological freshwater screening benchmarks; United States Environmental Protection Agency National Recommended Water Quality Criteria (NRWQC) for acute and chronic aquatic organism exposures and for human health aquatic organism consumption; State of Maryland Ambient Water Quality Criteria (AWQC) for acute and chronic aquatic organism exposures and for human health aquatic organism consumption; and site-specific screening levels developed

to evaluate risks to recreational swimmers from exposure to volatile organic compounds in surface water.

- Volatile organic compounds (primarily trichloroethene [TCE], *cis*-1,2-dichloroethene [*cis*-1,2-DCE], and vinyl chloride [VC]), and metals were detected in the August 2012 surface water samples.

- Concentrations of volatile organic compounds are greatest for sampling locations SW43A and SW41A, which are south (SW43A) and east (SW41A) of the Dump Road Area monitoring wells that contain some of the highest concentrations of site-related constituents in groundwater.

- The August 2012 volatile organic compound concentrations are generally higher than the July 2012 concentrations. In August 2012, the highest trichloroethene concentration (3.7 micrograms per liter [µg/L]) was detected in the SW43A sample. In July 2012, the highest trichloroethene concentration (0.64 micrograms per liter) was detected at SW41A, located one transect north of SW43. Generally, concentrations of trichloroethene and *cis*-1,2-dichloroethene in August decrease progressively north and south of the SW43 transect; this pattern differs from the previous rounds of Frog Mortar Creek surface water samples collected in 2011, in that the highest concentrations are generally detected along transect SW38 in 2011.

- At sampling transects with the highest concentrations of volatile organic compounds in the August 2012 round (transect SW43 for trichloroethene and *cis*-1,2-dichloroethene and SW38 for vinyl chloride), trichloroethene, *cis*-1,2-dichloroethene, and vinyl chloride concentrations are highest near the shoreline and decrease progressively (or are not detected) in samples collected farther from the shoreline. Concentrations of volatile organic compounds in the August 2012 samples did not exceed state and USEPA Region 3 surface water screening criteria.

- Generally, trichloroethene concentrations are highest in the "A" samples near the shoreline and decrease progressively in samples collected farther from the shoreline. Along sampling transects SW43, SW41, and SW44, the highest trichloroethene concentrations were detected in the "A" samples collected close to the shoreline. Volatile organic compounds were not detected in samples EL-SW01A, 01B, 01C, and 01D.

- The detected vinyl chloride concentrations of 3.0 micrograms per liter at SW38A and 1.1 micrograms per liter at SW40A in August 2012 exceed the site-specific swimming criterion of 0.7 micrograms per liter. The frequency of detection for vinyl chloride has decreased over the summer months in 2012 (e.g., 34 detections in March 2012, 11 in June, one in July, and 12 in August).

- Metals exceeding screening criteria include dissolved arsenic and dissolved barium (in all samples). Overall, the ranges of metals concentrations in the August samples are consistent with those in previous rounds.

- Dissolved hexavalent chromium was detected in 12 of 36 samples at trace concentrations ranging from 0.02 micrograms per liter to 0.034 micrograms per liter, well below its lowest screening criterion of 11 micrograms per liter.

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Section 6
References

1. Apex (Apex Environmental Inc.), 1998. "Frog Mortar Creek Sediment Sampling." Letter report to Mr. William Chicca of the Maryland Environmental Service, Annapolis, Maryland, from Apex Environmental Inc., Rockville, Maryland. January 12.

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3. MDE (Maryland Department of the Environment), 1992. Letter from Ms. Arlene G. Weiner, MDE, Baltimore, Maryland to Maryland Aviation Administration: "Subsurface Investigations, Martin State Airport, Middle River, Maryland." January 6.

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APPENDIX A—SURFACE WATER SAMPLE LOG SHEETS

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW01A-08/13/12
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1096								
Depth: 1 foot	GR/BL	7.73	8.71	29.18	11.8	6.99	4.85	173.9
Method: Grab								

SAMPLE COLLECTION INFORMATION:

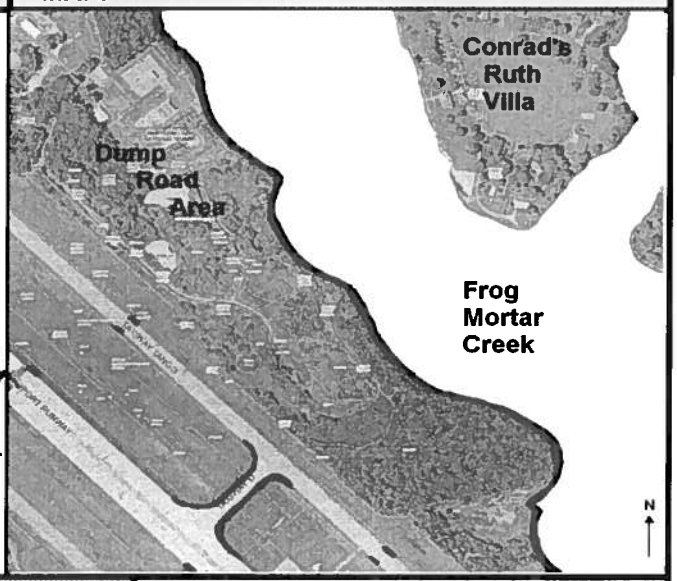
Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

Gauge at 1037: 31.5" from bottom
Gauge at 1500: 37" from bottom
30" from top

MAP:



Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW01B-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 1052								
Depth: 1 foot	GR/BR	7.75	8.70	29.11	9.01	8.25	4.83	160.1
Method: Grab								

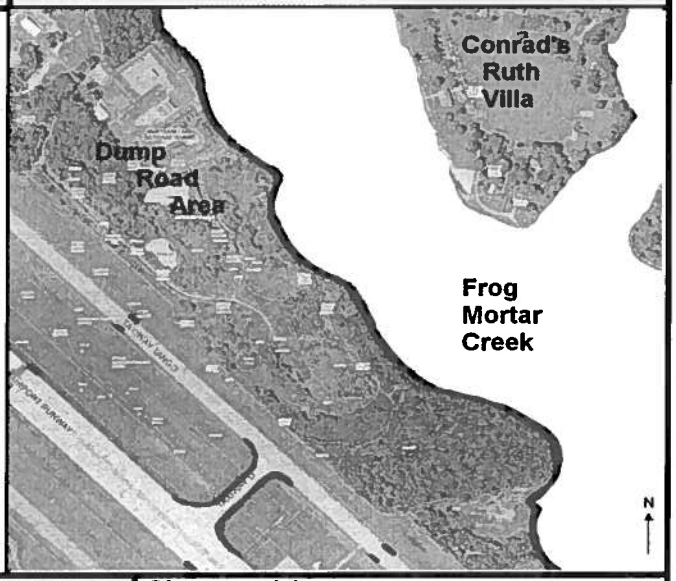
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW01C-08/3/12
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1100								
Depth: 1 foot	GR/BR	7.71	8.75	29.23	9.29	7.75	4.83	164.3
Method: Grab								

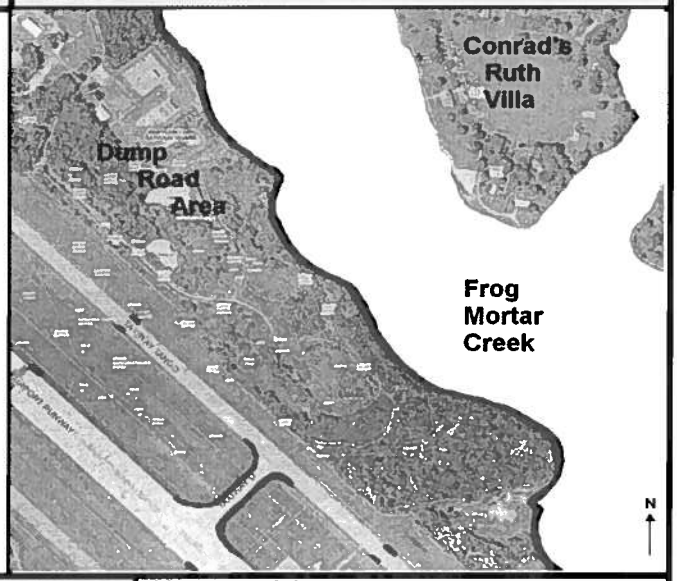
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW01D-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1105								
Depth: 1 foot	GR/BR	7.53	8.76	29.08	8.90	7.12	4.79	170.9
Method: Grab								

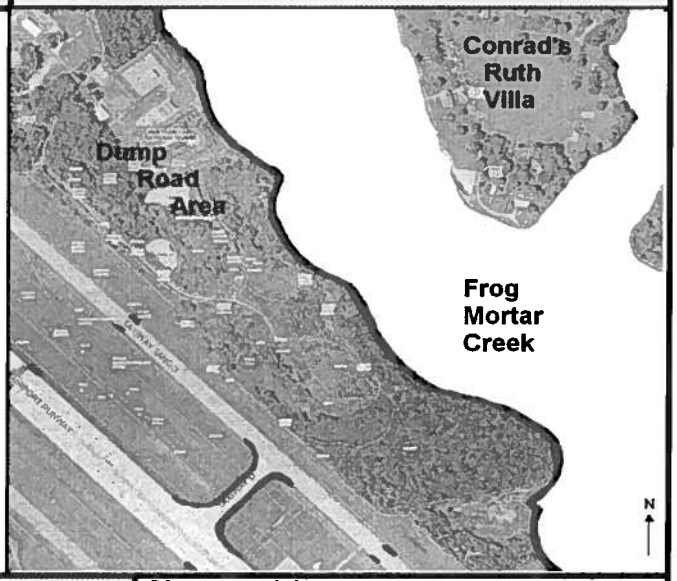
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 37A-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1734								
Depth: 1 foot	GY/BR	7.86	8.64	29.81	8.23	8.14	4.77	160.2
Method: Grab								

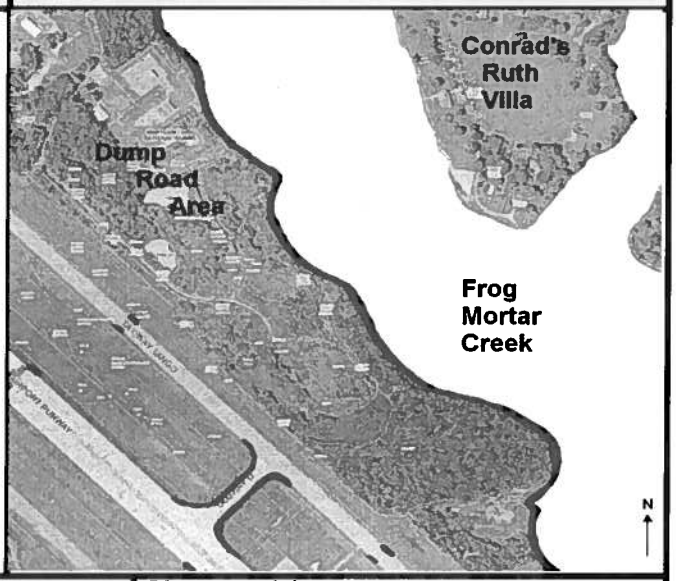
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW37B-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1142								
Depth: 1 foot	GR/BR	7.90	8.65	29.77	7.04	8.59	4.79	142.6
Method: Grab								

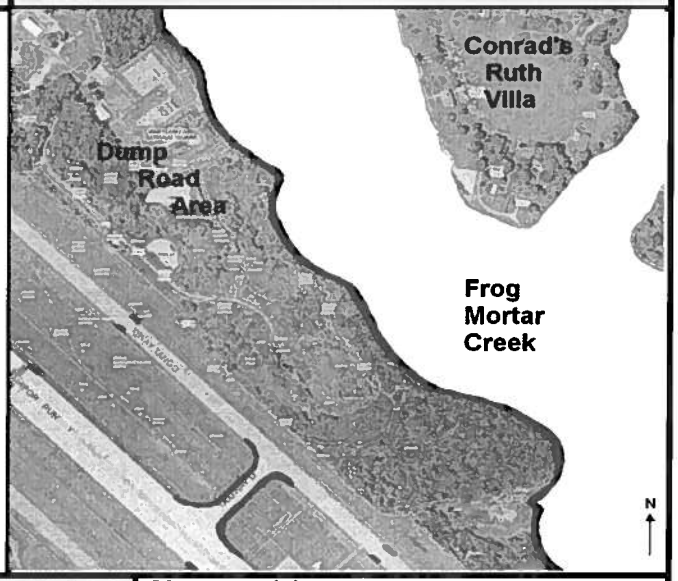
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Josh Mullis

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 37C-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1147								
Depth: 1 foot	GR/BR	7.96	8.70	29.76	8.18	7.89	4.81	130.2
Method: Grab								

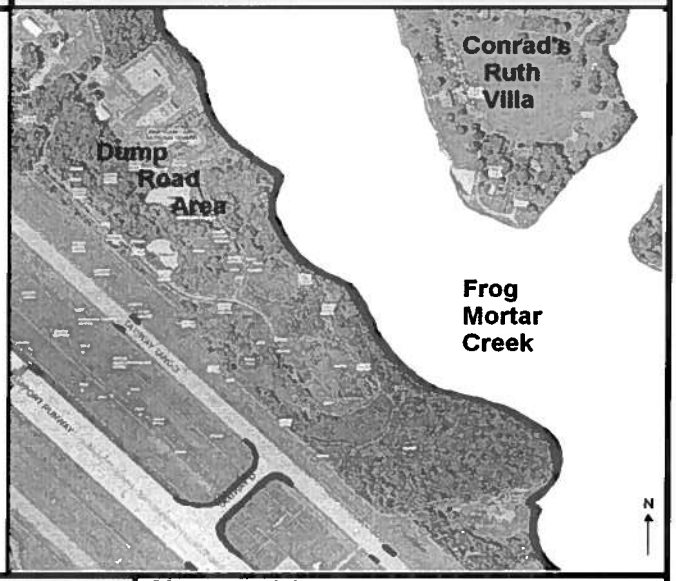
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 370-081712
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/17/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1152								
Depth: 1 foot	GR/BR	7.95	8.68	29.61	8.32	8.35	4.80	117.8
Method: Grab								

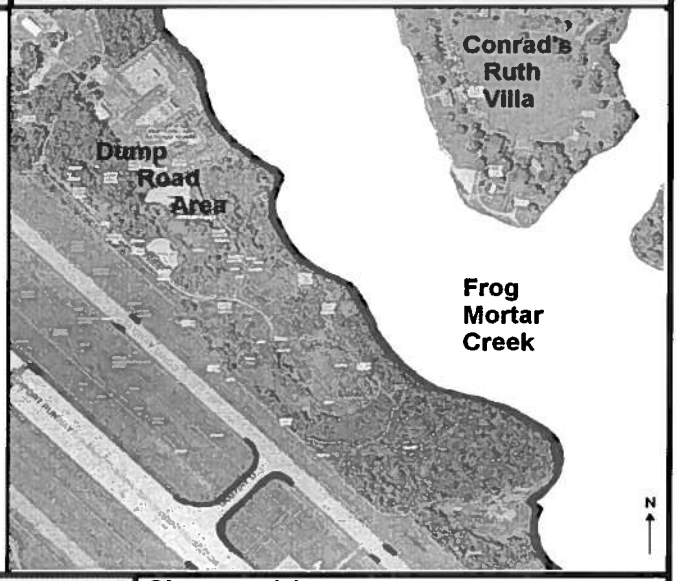
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 38A-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1248								
Depth: 1 foot	GR/BR	8.08	8.76	30.32	9.77	8.48	4.85	130.4
Method: Grab								

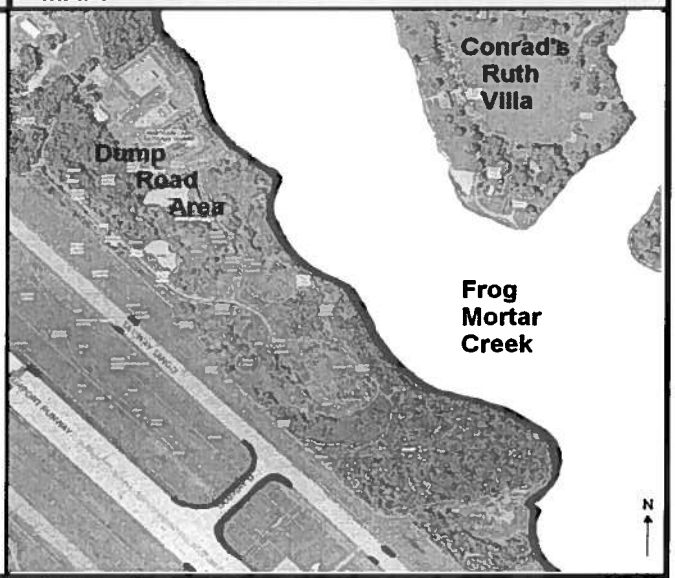
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW38B-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1253								
Depth: 1 foot	GR/BR	8.04	8.77	29.92	9.18	5.56	4.85	94.0
Method: Grab								

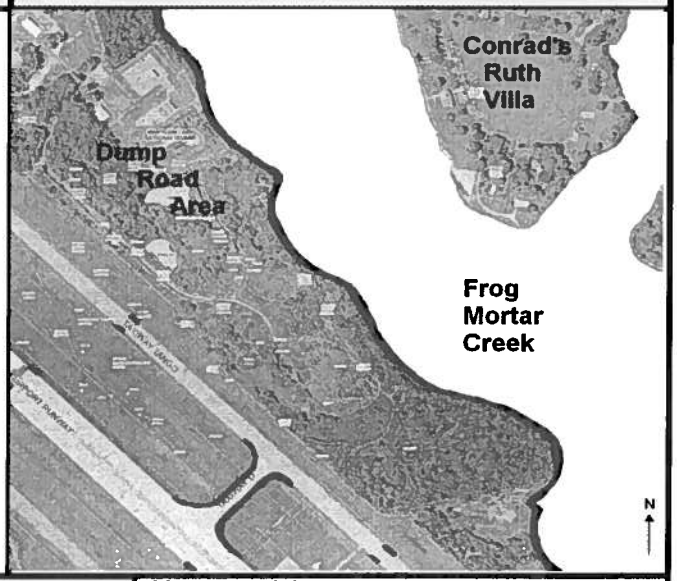
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 38C-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1258								
Depth: 1 foot	brn/gry	7.96	8.78	29.71	10.43	8.58	9.86	93.4
Method: Grab								

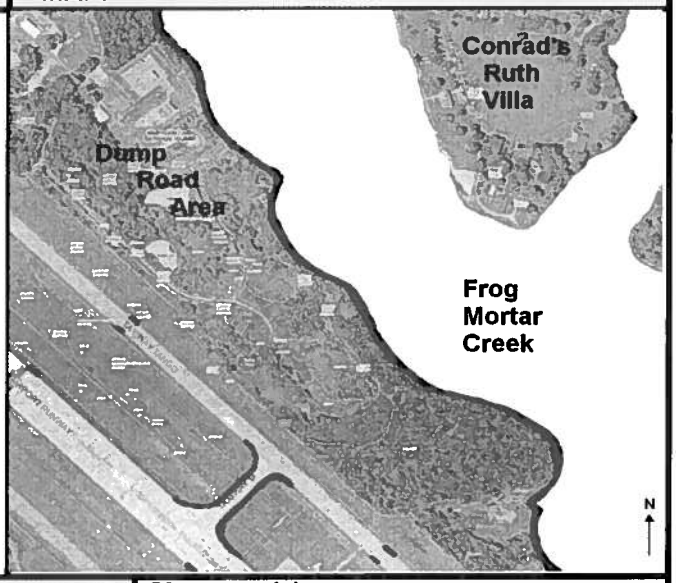
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW380-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1302								
Depth: 1 foot	BR/BR	7.96	8.8	29.74	10.26	8.43	4.87	114.6
Method: Grab								

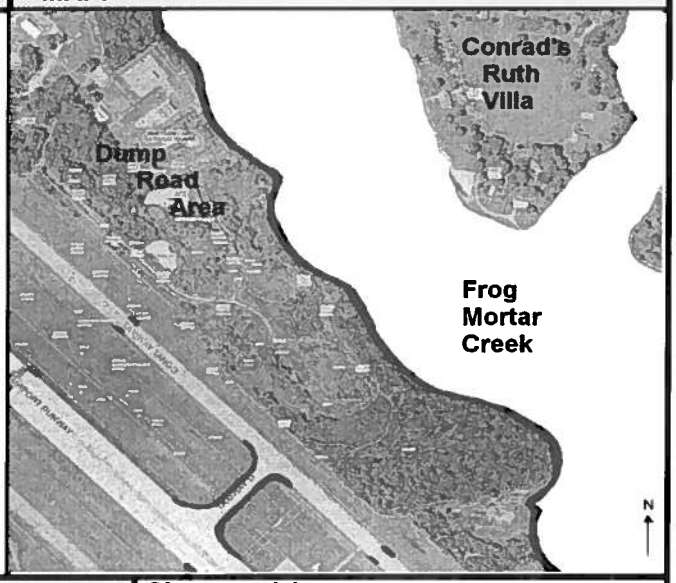
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Jack Mullis

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 39A-08/13/12
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1436	(Visual)	(S.U.)	(mS/cm)	(^{0}C)	(NTU)	(mg/l)	(%)	ORP
Depth: 1 foot	GY/BR	7.80	9.03	29.69	15.3	8.17	5.03	143.2
Method: Grab								

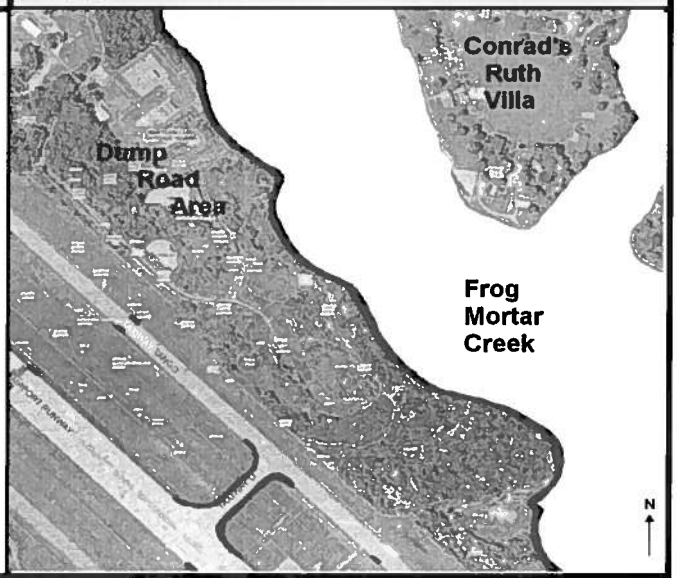
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW-FMC-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1441								
Depth: 1 foot	BR/BR	8.06	9.08	29.79	10.53	8.59	5.08	123.7
Method: Grab								

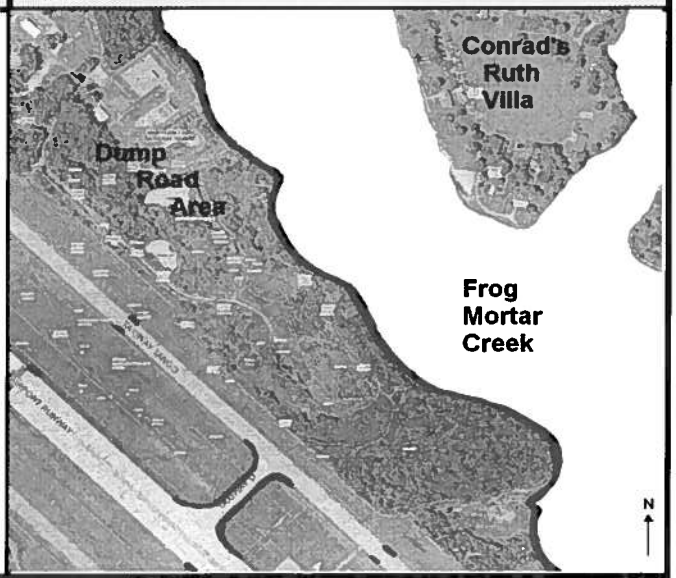
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Josh Mullis

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 39C-080312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other DAP
Time: 1445								
Depth: 1 foot	GN/BR	8.09	9.22	29.47	9.35	8.23	5.12	113.7
Method: Grab								

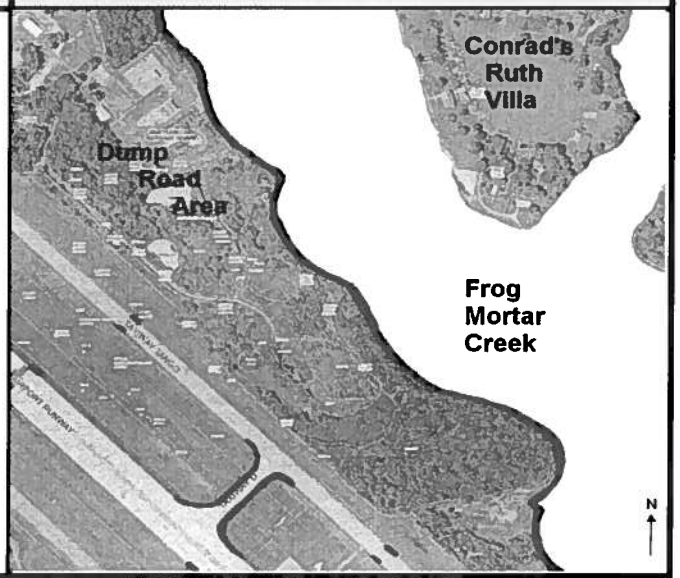
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 39D-08/3/12
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1452								
Depth: 1 foot	GR/BR	8.12	9.27	29.50	8.51	8.76	5.15	102.0
Method: Grab								

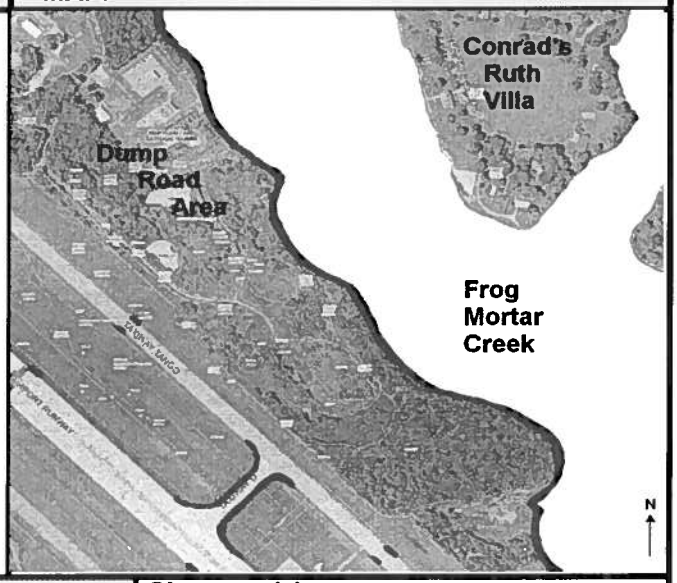
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Josh Mullis

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW-40A-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1225								
Depth: 1 foot	GY/BR	8.01	8.79	31.07	20.0	8.42	4.86	79.7
Method: Grab								

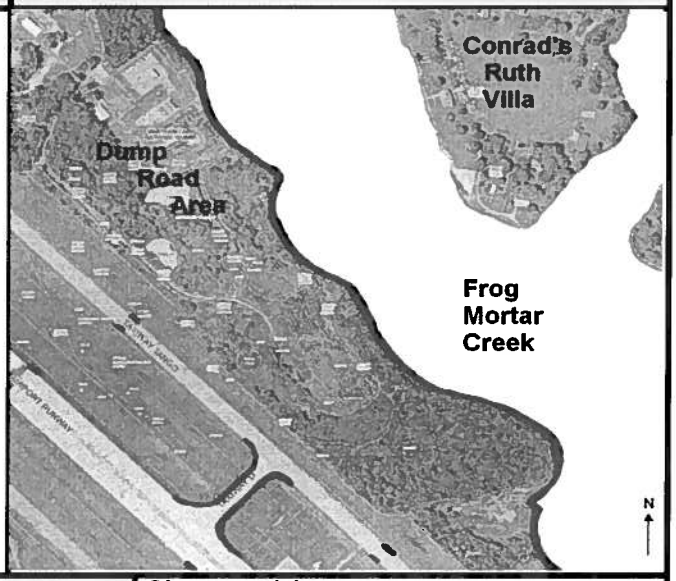
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW40B-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1232								
Depth: 1 foot	GY/BR	8.07	8.79	30.13	9.93	8.62	4.86	80.6
Method: Grab								

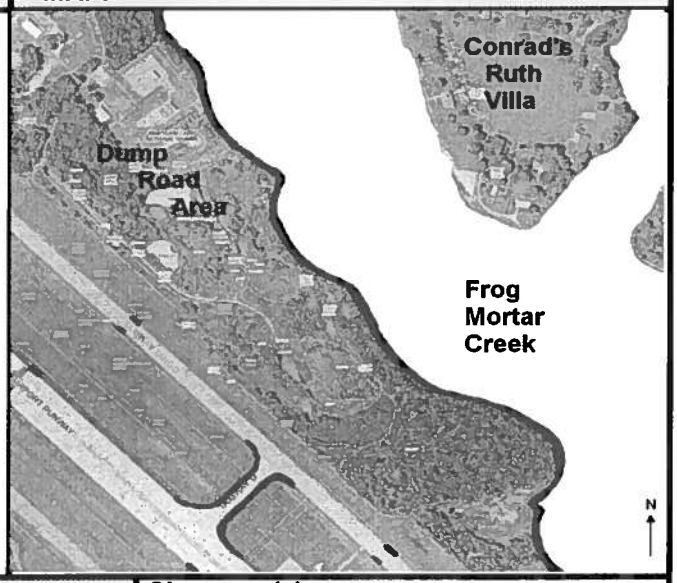
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 40C-08/3/12
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1237								
Depth: 1 foot	brn/gr	8.04	8.76	29.92	10.71	8.69	4.85	96.6
Method: Grab								

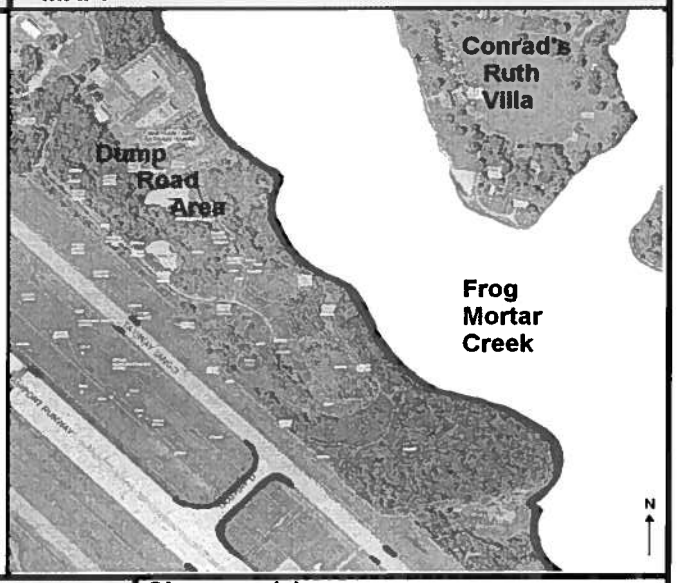
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Jack Mullis

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW400-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1742								
Depth: 1 foot	GR/BR	7.44	8.78	29.57	6.65	6.26	4.86	91.2
Method: Grab								

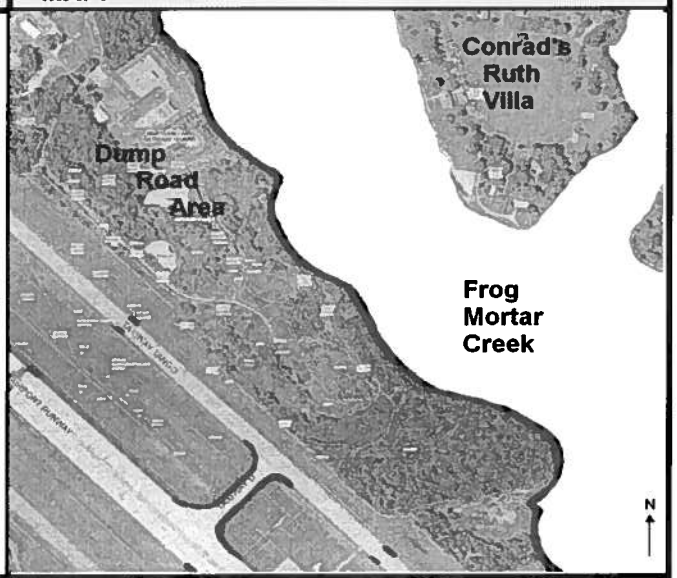
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW-MA-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/13/12								
Time:	1308								
Depth:	1 foot	GR/BR	7.87	8.75	29.69	12.5	8.51	4.84	127.7
Method:	Grab								

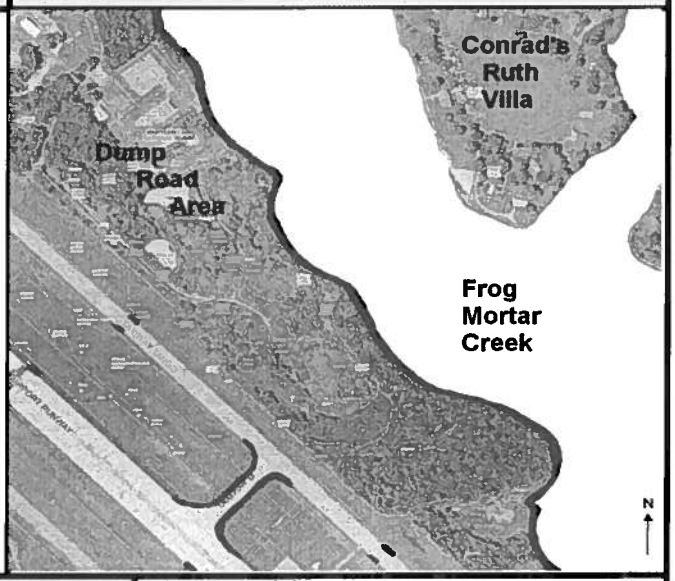
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 413-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1312								
Depth: 1 foot	GY/gr	8.01	8.78	29.62	8.29	8.26	4.86	117.3
Method: Grab								

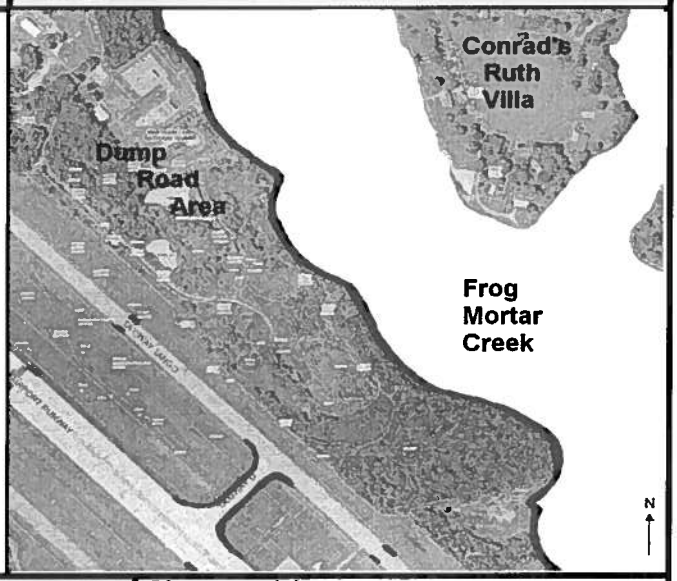
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW-FMC-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1318								
Depth: 1 foot	Gr/Br	7.93	8.79	29.44	8.99	8.07	4.86	107.1
Method: Grab								

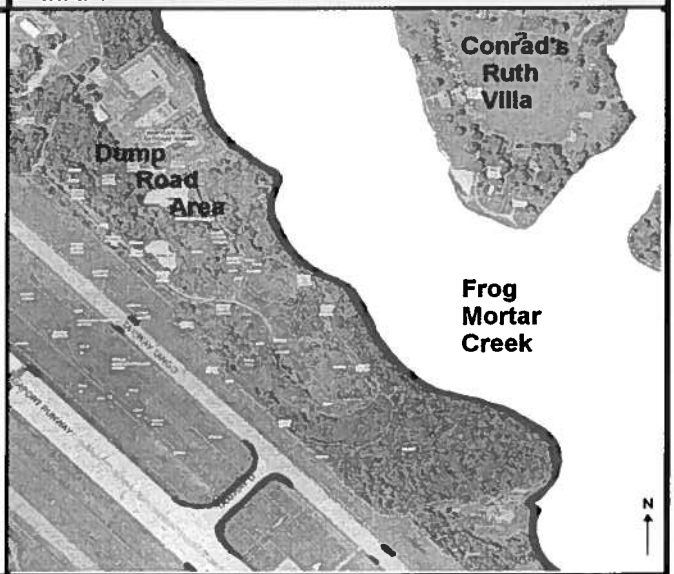
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 410 - 081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1322								
Depth: 1 foot	GR/BR	7.89	8.82	29.58	8.97	8.10	4.89	99.6
Method: Grab								

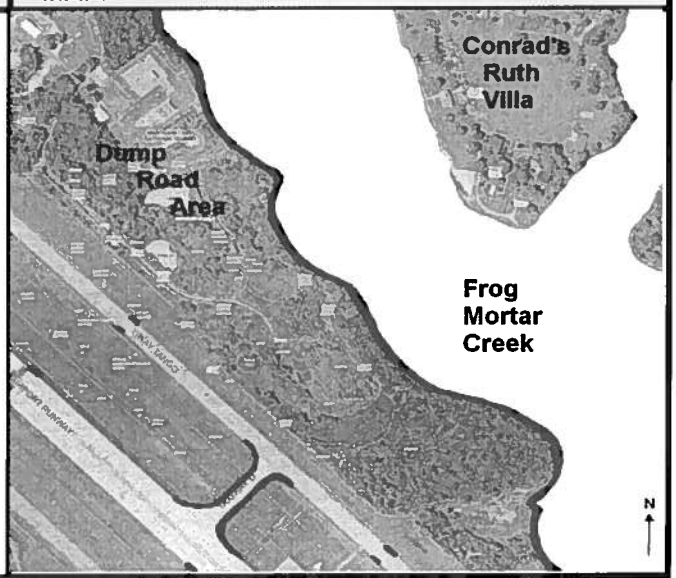
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW42A-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1200								
Depth: 1 foot	GY/BR	7.98	8.72	30.01	17.5	8.52	4.82	124.9
Method: Grab								

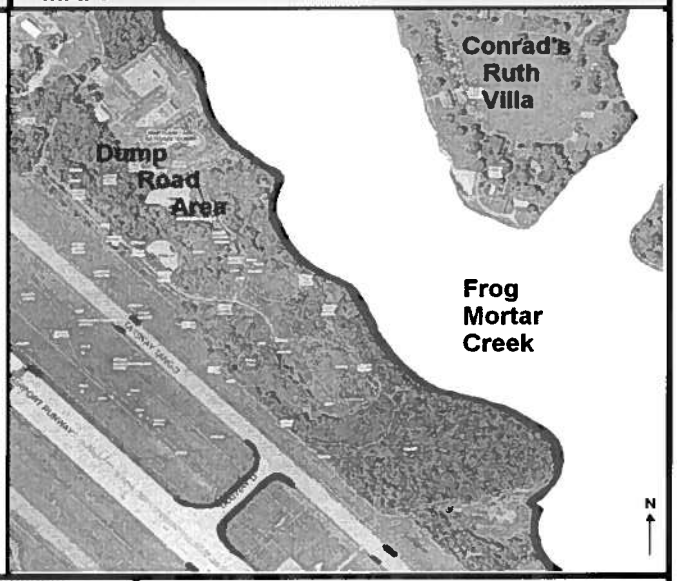
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 42B-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1205								
Depth: 1 foot	BR/BR	8.01	8.71	29.92	11.6	8.69	4.82	108.1
Method: Grab								

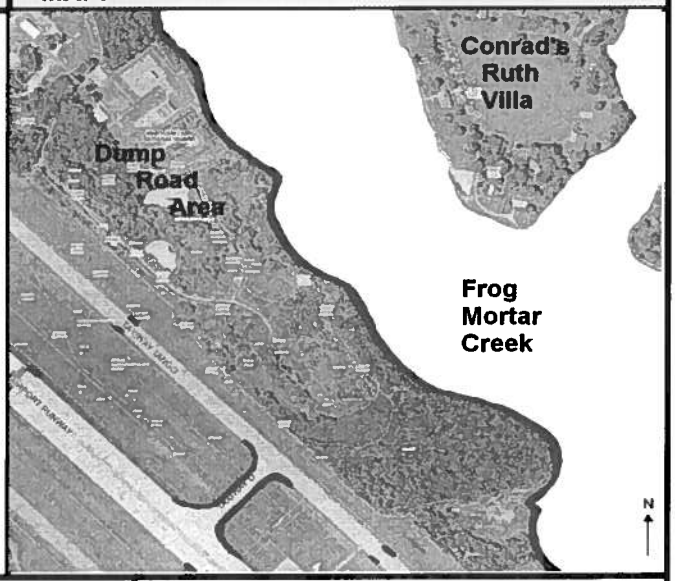
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW42L-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1212								
Depth: 1 foot	GR/BR	8.04	8.71	29.81	8.58	8.86	4.82	99.5
Method: Grab								

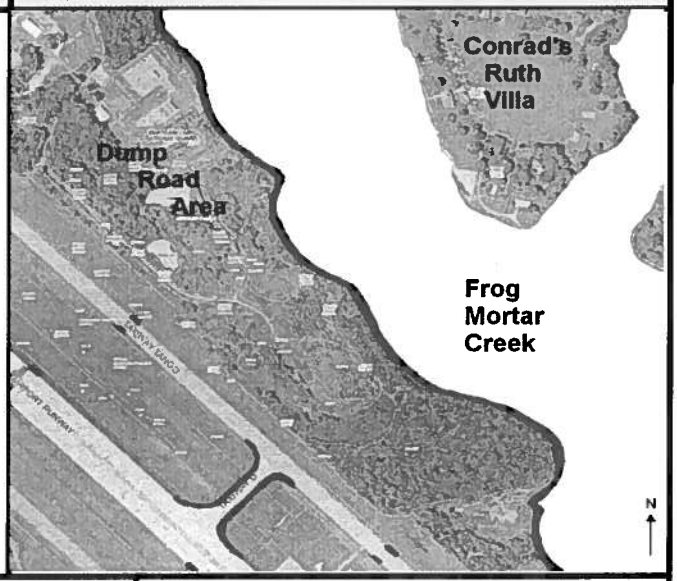
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW42D-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other DRP
Time: 1218								
Depth: 1 foot	GR/BR	8.03	8.72	29.77	8.72	8.61	4.82	96.0
Method: Grab								

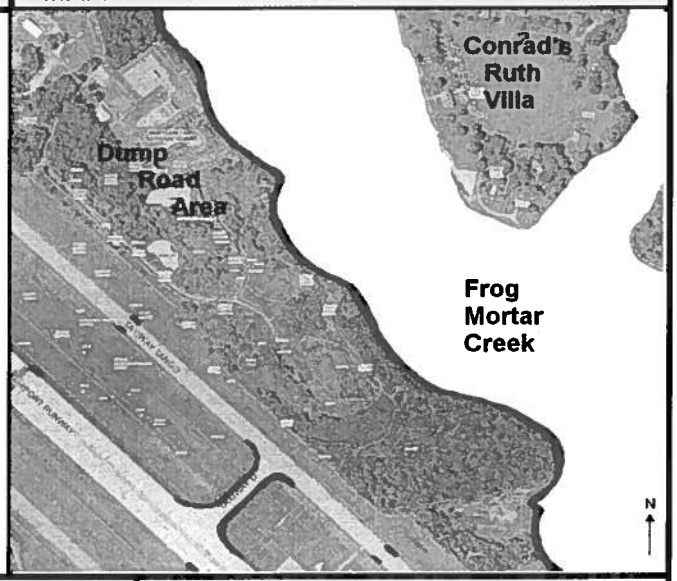
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 43A-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1325								
Depth: 1 foot	GR/BR	7.64	8.73	29.93	15.2	7.98	4.84	126.2
Method: Grab								

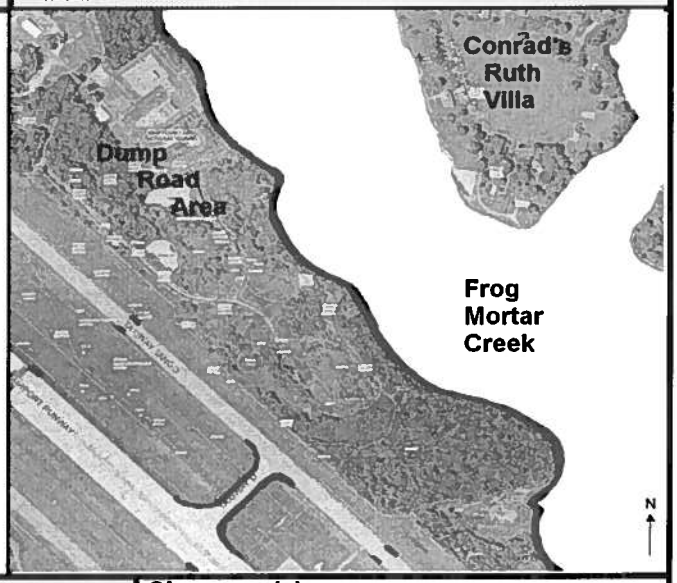
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 438-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1334								
Depth: 1 foot	GY/BR	7.87	8.76	29.96	11.4	8.26	4.85	112.4
Method: Grab								

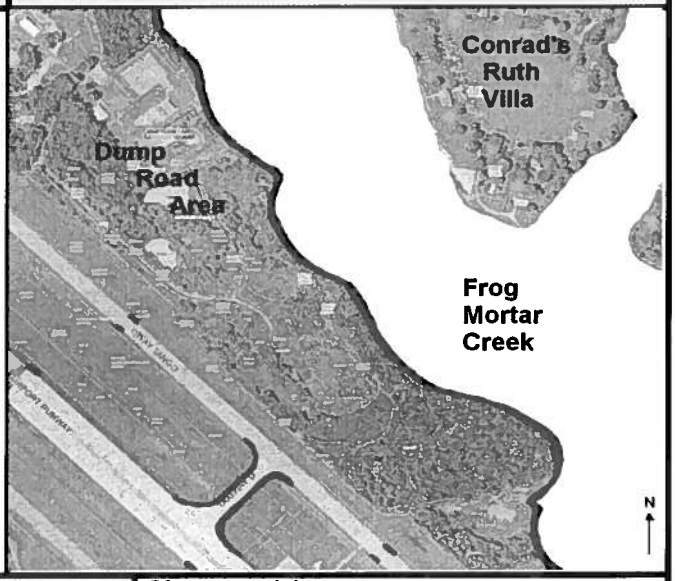
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW-43C-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1337								
Depth: 1 foot	GR/BR	8.02	8.79	29.86	8.54	8.46	4.87	104.8
Method: Grab								

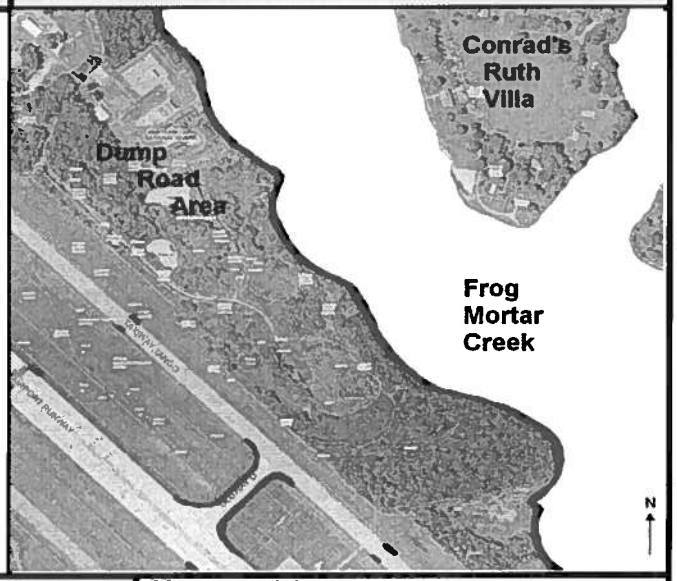
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW430-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1345								
Depth: 1 foot	Gn/Br	7.95	8.81	29.56	9.98	6.25	4.88	104.3
Method: Grab								

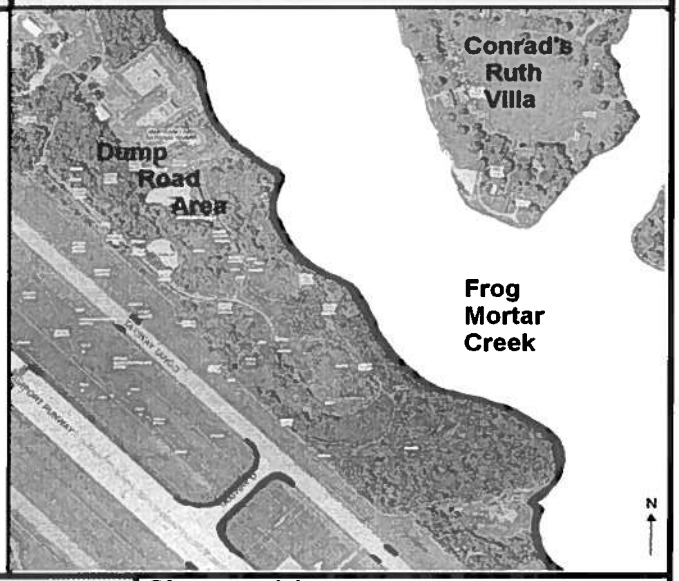
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW-44A-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1351								
Depth: 1 foot	GR/BR	7.84	8.74	29.32	13.6	7.86	4.84	170.8
Method: Grab								

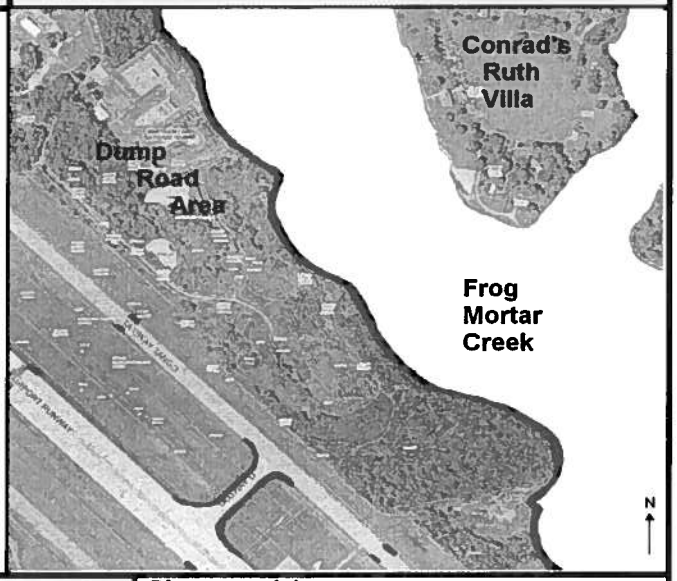
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW44B-08/3/12
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1356								
Depth: 1 foot	BR/BR	7.84	8.76	29.34	11.5	8.08	4.85	109.4
Method: Grab								

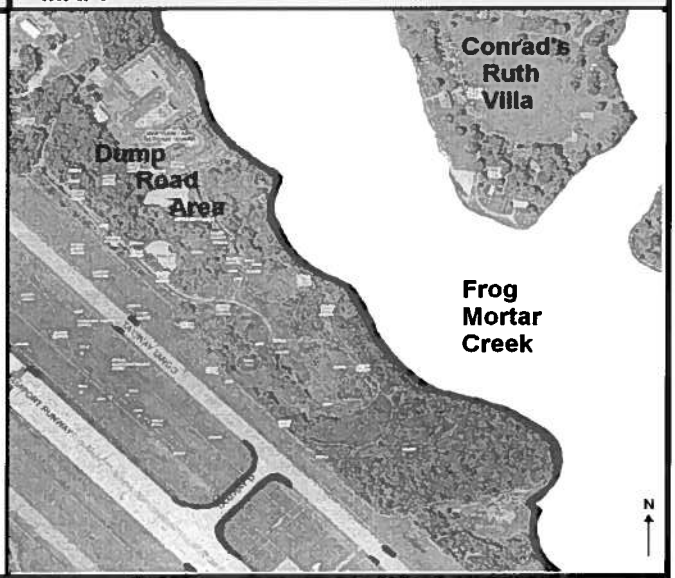
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW442-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1400								
Depth: 1 foot	GR/BR	7.73	8.66	29.26	10.27	7.60	4.92	105.9
Method: Grab								

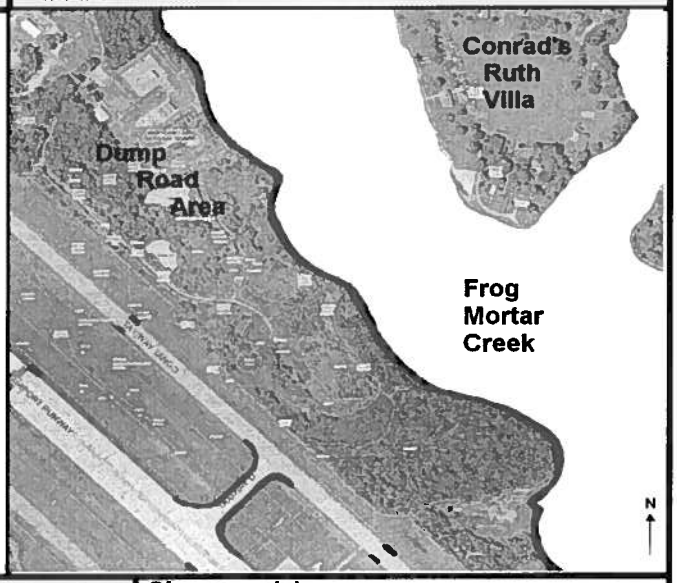
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

Sample ID No.: MSA-SW 440-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

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

SAMPLING DATA:

		Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Date:	8/13/12								
Time:	1407								
Depth:	1 foot	GY/BR	7.89	8.84	29.44	10.18	8.19	4.90	123.2
Method:	Grab								

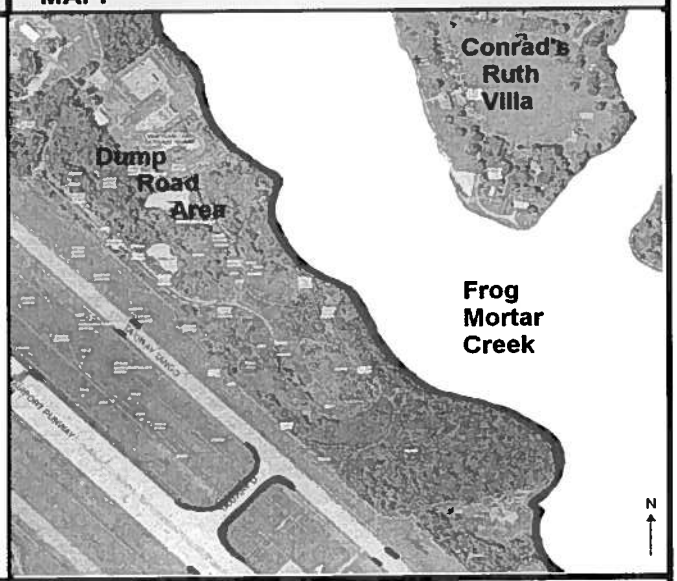
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW45A-08/312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1414								
Depth: 1 foot	GY/BR	7.72	8.99	29.53	32.7	7.73	4.97	132.1
Method: Grab								

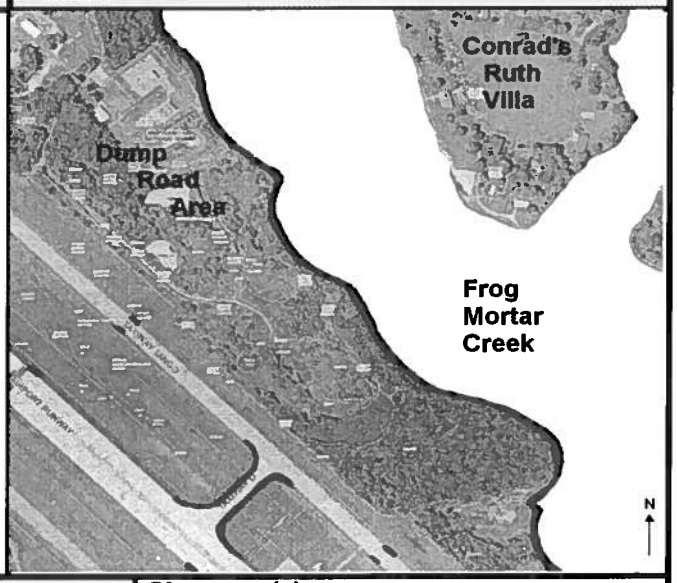
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW 45B - 081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1420								
Depth: 1 foot	BR/BL	7.94	9.13	29.38	9.86	8.04	5.06	113.7
Method: Grab								

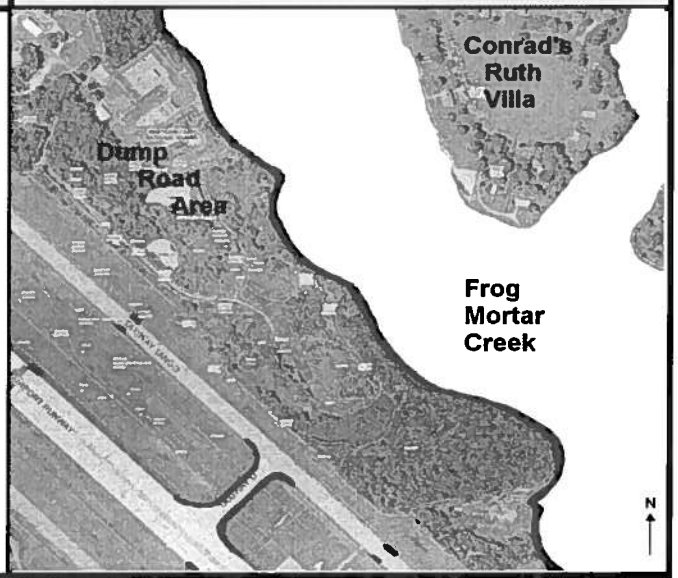
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW45C-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1426								
Depth: 1 foot	GR/SL	8.07	9.15	29.47	10.43	8.37	5.09	103.0
Method: Grab								

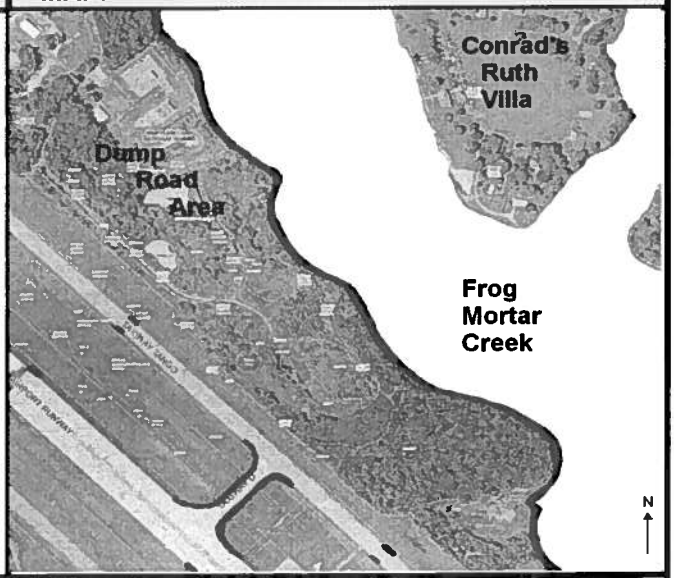
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4^{0}C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

Tetra Tech, Inc.

SURFACE WATER SAMPLE LOG SHEET

Project Site Name: Frog Mortar Creek, Martin State Airport
Project Number - Task: 112IC04021 - 07

[] Stream
[] Spring
[] Pond
[] Lake
[x] Other: Tidal creek - estuarine
[] QA Sample Type:

Sample ID No.: MSA-SW450-081312
Sample Location: FMC SW
Sampled By: S.Cameron/M.Bowersox
C.O.C. No.:

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

SAMPLING DATA:

Date: 8/13/12	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (^{0}C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other ORP
Time: 1430								
Depth: 1 foot	60/80	7.85	9.18	29.30	11.4	7.82	5.11	102.3
Method: Grab								

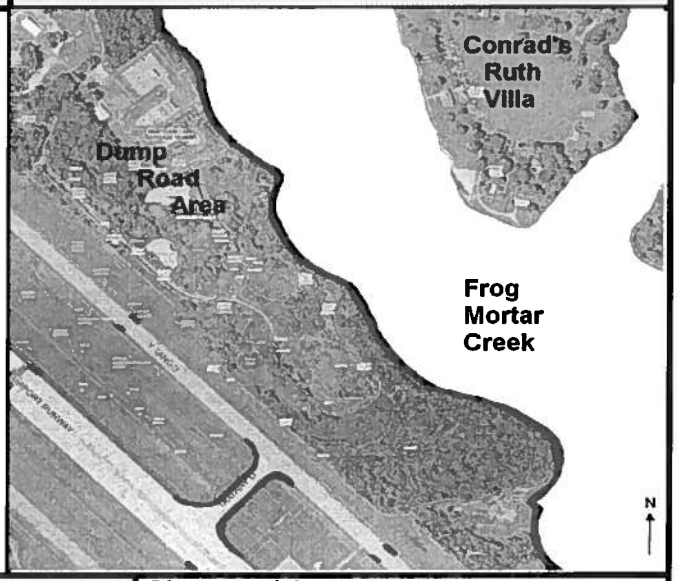
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOCs	HCl pH<2	3 - 40 mL glass vials	
Dissolved Metals	HNO^3 pH<2	1 - 500 mL plastic bottle	
Hexavalent Chromium	<4°C	1 - 250 mL plastic bottle	

OBSERVATIONS / NOTES:

GPS Coordinates:

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

APPENDIX B—DATA VALIDATION REPORTS (ON CD)

Tetra Tech, Inc. **INTERNAL CORRESPONDENCE**

TO: **A. APANAVAGE** **DATE:** **AUGUST 30, 2012**

FROM: **MICHELLE L. ALLEN** **COPIES:** **DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
SDG 240-14133-1

SAMPLES: 41/Aqueous/VOC

EL-SW01A-081312	EL-SW01B-081312	EL-SW01C-081312
EL-SW01D-081312	MSA-SW37A-081312	MSA-SW37B-081312
MSA-SW37C-081312	MSA-SW37D-081312	MSA-SW38A-081312
MSA-SW38B-081312	MSA-SW38C-081312	MSA-SW38D-081312
MSA-SW39A-081312	MSA-SW39B-081312	MSA-SW39C-081312
MSA-SW39D-081312	MSA-SW40A-081312	MSA-SW40B-081312
MSA-SW40C-081312	MSA-SW40D-081312	MSA-SW41A-081312
MSA-SW41B-081312	MSA-SW41C-081312	MSA-SW41D-081312
MSA-SW42A-081312	MSA-SW42B-081312	MSA-SW42C-081312
MSA-SW42D-081312	MSA-SW43A-081312	MSA-SW43B-081312
MSA-SW43C-081312	MSA-SW43D-081312	MSA-SW44A-081312
MSA-SW44B-081312	MSA-SW44C-081312	MSA-SW44D-081312
MSA-SW45A-081312	MSA-SW45B-081312	MSA-SW45C-081312
MSA-SW45D-081312	TB-081312	

Overview

The sample set for LMC-MSA, SDG 240-14133-1 consisted of forty (40) aqueous environmental samples and one (1) trip blank. All forty-one (41) aqueous samples were analyzed for volatile organic compounds (VOC). No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on August 13, 2012 and analyzed by Test America, Inc. All analyses were conducted in accordance with SW-846 Method 8260B 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 calibration performed on instrument A3UX12 had Relative Response Factors (RRFs) for acetone, tert-butyl alcohol, 2-butanone, and vinyl acetate below the 0.050 minimum response criterion. Furthermore, the continuing calibrations performed on this instrument had RRFs for tert-butyl alcohol, 2-butanone, and vinyl acetate below the 0.050 minimum response criterion. Samples EL-SW01A-081312, EL-SW01B-081312, EL-SW01C-081312, EL-SW01D-081312, MSA-SW42A-081312, MSA-SW42B-081312, MSA-SW42C-081312, MSA-SW42D-081312, MSA-SW43A-081312, MSA-SW43B-081312, MSA-SW43C-081312, MSA-SW43D-081312, MSA-SW44A-081312, MSA-SW44B-081312, MSA-SW44C-081312, MSA-SW44D-081312, MSA-

SW45A-081312, MSA-SW45B-081312, MSA-SW45C-081312, MSA-SW45D-081312, and TB-081312 were affected. The non-detected results reported for these compounds in the affected samples were qualified as rejected, (UR).

- The initial and continuing calibrations performed on instrument A3UX9 had RRFs for tert-butyl alcohol, vinyl acetate, and 2-butanone below the 0.050 minimum response criterion. In addition, the continuing calibrations performed on this instrument had RRFs for vinyl acetate below the 0.050 minimum response criterion. Samples MSA-SW37A-081312, MSA-SW37B-081312, MSA-SW37C-081312, MSA-SW37D-081312, MSA-SW38A-081312, MSA-SW38B-081312, MSA-SW38C-081312, MSA-SW38D-081312, MSA-SW39A-081312, MSA-SW39B-081312, MSA-SW39C-081312, MSA-SW39D-081312, MSA-SW40A-081312, MSA-SW40B-081312, MSA-SW40C-081312, MSA-SW40D-081312, MSA-SW41A-081312, MSA-SW41B-081312, MSA-SW41C-081312, and MSA-SW41D-081312 were affected. Only non-detected results were reported for these compounds in the affected samples and these non-detects were qualified as rejected, (UR).

Minor

- The continuing calibrations performed on instrument A3UX12 on 08/15/12 @ 20:41 and 08/16/12 @ 17:40 had Percent Differences (%Ds) for dichlorodifluoromethane which exceeded the 20% quality control limit and were greater than 50%. All twenty-one (21) samples analyzed on instrument A3UX12 were affected. The non-detected results reported for dichlorodifluoromethane were qualified as estimated, (UJ), in these affected samples.

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

Compound	Maximum Concentration (µg/L)	Action Level (µg/L)
Methylene Chloride [1]	0.665	6.65
1,2,3-Trichlorobenzene [1]	0.64	3.2
Hexachlorobutadiene [1]	1.19	5.95
n-Butylbenzene [1]	0.242	1.21
Methylene Chloride [2]	0.418	4.18
Hexachlorobutadiene [2]	0.845	4.23
Acetone [3]	5.35	53.5

[1] Maximum concentration detected in the laboratory method blank, MB240-54557/4, affecting samples associated with batch #240-54557.
[2] Maximum concentration detected in the laboratory method blank, MB240-54716/4, affecting sample TB-081312.
[3] Maximum concentration detected in the laboratory method blank, MB240-54545/4, affecting the samples associated with batch #240-54545.

An action level of 10X the maximum concentration was used for the common laboratory contaminants, acetone and methylene chloride, and an action level of 5X the maximum concentration was used for the remaining compounds to evaluate for blank contamination. Sample aliquot and dilution factor, if applicable, were taken into consideration when evaluating for blank contamination. No action was taken for the trip blank because trip blanks are not qualified for laboratory method blank contamination. Positive results reported for these compounds below the

established action levels in the affected samples were qualified as non-detected, (B), due to laboratory method blank contamination.

- Positive results reported below the Reporting Limit (RL) limit but above the Method Detection Limit (MDL) were qualified as estimated, (J).

Notes

The continuing calibration performed on instrument A3UX12 on 08/15/12 @ 20:41 had %Ds for bromomethane, trichlorotrifluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane, carbon tetrachloride, naphthalene, and 1,2,3-trichlorobenzene which exceeded the 20% quality control limit but were less than 50%. Samples associated with batch #240-54557 were affected. No action was taken in the affected samples because only non-detected results were reported for these compounds in the affected samples.

The continuing calibration performed on instrument A3UX12 on 08/16/12 @ 17:40 had %Ds which exceeded the 20% quality control limit but were less than 50% for bromomethane, trichlorotrifluoromethane, 1,1,2-trichloro-1,2,2-trifluoroethane n-propylbenzene, tert-butylbenzene, 1,2,4-trimethylbenzene, sec-butylbenzene, and n-butylbenzene, naphthalene, and 1,2,3-trichlorobenzene. No validation action was necessary because no positive results were reported for these compounds in the affected sample, TB-081312.

The continuing calibration performed on 08/15/12 @ 17:02 had %Ds and Percent Drifts (%Drifts) which exceeded the 20% quality control limit but were less than 50% for acetone, 1,1,2-trichloro-1,2,2-trifluoromethane, bromomethane, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, 1,1,1,2-tetrachloroethane, 1,2,3-trichloropropane, and dibromochloromethane. Samples associated with laboratory batch #240-54545 were affected. No validation action was necessary because no positive results were reported for these compounds in the affected samples.

The continuing calibration performed on 08/15/12 @ 17:02 had a %D which exceeded the 20% quality control limit and was greater than 50% for tert-butyl alcohol. Samples associated with laboratory batch #240-54545 were affected. No validation action was necessary because the non-detected results reported for this compound were previously rejected due to a calibration noncompliance.

The Percent Recoveries (%Rs) for dichlorodifluoromethane and carbon tetrachloride were above the upper quality control limits the blank spike samples associated with batches #240-54557. In addition, the %R for tert-butyl alcohol was above the upper quality control limit for the blank spike sample associated with batch #240-54545. No validation action was necessary because no positive results were reported for these compounds in the environmental samples associated with these laboratory batches.

2-Chloroethyl vinyl ether was not recovered in the Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses. No action was taken because the MS/MSD sample was not a sample of interest.

The trip blank, TB-081312, was mislabeled by the laboratory as TB-081213. The sample Form I was manually corrected to correspond with the sample Chain of Custody (COC) and database results.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: Initial and continuing calibration RRFs for acetone, tert-butyl alcohol, vinyl acetate, and 2-butanone were below the quality control criterion resulting in the rejection of the non-detected results. Laboratory method blank contamination was noted for some target compounds. The blank spike samples had a few high %Rs.

Other Factors Affecting Data Quality: The MS/MSD sample had zero %R for 2-chloroethyl vinyl ether. Positive results below the RL were estimated.

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 Method 8260B analytical and reporting protocols. The text of this report has been formulated to address only those problem areas affecting data quality.

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 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	EL-SW01A-081312			EL-SW01B-081312			EL-SW01C-081312			EL-SW01D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-37			240-14133-38			240-14133-39			240-14133-40		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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	UR	C	1.1	UR	C	1.1	UR	C	1.1	UR	C
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: 04021	NSAMPLE	MSA-SW37A-081312			MSA-SW37B-081312			MSA-SW37C-081312			MSA-SW37D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-1			240-14133-2			240-14133-3			240-14133-4		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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		2.6	B	A	1.4	B	A	5.3	B	A	2.2	B	A
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: 04021	NSAMPLE	MSA-SW38A-081312			MSA-SW38B-081312			MSA-SW38C-081312			MSA-SW38D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-5			240-14133-6			240-14133-7			240-14133-8		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.38	J	P	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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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		4.4	B	A	1.8	B	A	1.9	B	A	2.5	B	A
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: 04021	NSAMPLE	MSA-SW39A-081312			MSA-SW39B-081312			MSA-SW39C-081312			MSA-SW39D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-9			240-14133-10			240-14133-11			240-14133-12		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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		1.8	B	A	1.8	B	A	1.5	B	A	1.6	B	A
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: 04021	NSAMPLE	MSA-SW40A-081312			MSA-SW40B-081312			MSA-SW40C-081312			MSA-SW40D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-13			240-14133-14			240-14133-15			240-14133-16		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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		3.1	B	A	2.4	B	A	1.8	B	A	4.9	B	A
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: 04021	NSAMPLE	MSA-SW41A-081312			MSA-SW41B-081312			MSA-SW41C-081312			MSA-SW41D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-17			240-14133-18			240-14133-19			240-14133-20		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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	2.4	B	A	1.9	B	A	1.8	B	A	1.5	B	A
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: 04021	NSAMPLE	MSA-SW42A-081312			MSA-SW42B-081312			MSA-SW42C-081312			MSA-SW42D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-21			240-14133-22			240-14133-23			240-14133-24		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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	UR	C	1.1	UR	C	1.1	UR	C	1.1	UR	C
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: 04021	NSAMPLE	MSA-SW43A-081312			MSA-SW43B-081312			MSA-SW43C-081312			MSA-SW43D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-25			240-14133-26			240-14133-27			240-14133-28		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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	UR	C	1.1	UR	C	1.1	UR	C	1.1	UR	C
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: 04021	NSAMPLE	MSA-SW44A-081312			MSA-SW44B-081312			MSA-SW44C-081312			MSA-SW44D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-29			240-14133-30			240-14133-31			240-14133-32		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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	UR	C	1.1	UR	C	1.1	UR	C	1.1	UR	C
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: 04021	NSAMPLE	MSA-SW45A-081312			MSA-SW45B-081312			MSA-SW45C-081312			MSA-SW45D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-33			240-14133-34			240-14133-35			240-14133-36		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	UR	C	0.57	UR	C	0.57	UR	C	0.57	UR	C
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	UR	C	1.1	UR	C	1.1	UR	C	1.1	UR	C
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: 04021	NSAMPLE	TB-081312
SDG: 240-14133-1	LAB_ID	240-14133-41
FRACTION: OV	SAMP_DATE	8/13/2012
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	UR	C
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: 04021	NSAMPLE	EL-SW01A-081312			EL-SW01B-081312			EL-SW01C-081312			EL-SW01D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-37			240-14133-38			240-14133-39			240-14133-40		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.13	U		0.13	U		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		0.3	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	UJ	C	0.31	UJ	C	0.31	UJ	C	0.31	UJ	C
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		0.13	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	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW37A-081312			MSA-SW37B-081312			MSA-SW37C-081312			MSA-SW37D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-1			240-14133-2			240-14133-3			240-14133-4		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.6	J	P	0.13	U		0.23	J	P	0.36	J	P
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		0.3	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		0.13	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		0.28	J	P	0.43	J	P	0.32	J	P	0.25	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW38A-081312			MSA-SW38B-081312			MSA-SW38C-081312			MSA-SW38D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-5			240-14133-6			240-14133-7			240-14133-8		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.24	J	P	0.13	U		0.2	J	P	0.13	U	
CARBON TETRACHLORIDE		0.13	U		0.13	U		0.13	U		0.13	U	
CHLOROBENZENE		0.22	J	P	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		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		1.5			0.46	J	P	0.55	J	P	0.41	J	P
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		0.13	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		0.73	J	P	0.99	J	P	0.96	J	P	0.69	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW39A-081312			MSA-SW39B-081312			MSA-SW39C-081312			MSA-SW39D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-9			240-14133-10			240-14133-11			240-14133-12		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.13	U		0.13	U		0.3	J	P	0.16	J	P
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		0.3	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		0.13	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		0.2	J	P	0.17	U		0.17	U	
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW40A-081312			MSA-SW40B-081312			MSA-SW40C-081312			MSA-SW40D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-13			240-14133-14			240-14133-15			240-14133-16		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.88	J	P	0.53	J	P	0.13	J	P	0.34	J	P
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		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.6	J	P	0.95	J	P	1.3			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		0.13	U		0.13	U		0.33	J	P
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		0.48	J	P	1.8			2.5			0.5	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW41A-081312			MSA-SW41B-081312			MSA-SW41C-081312			MSA-SW41D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-17			240-14133-18			240-14133-19			240-14133-20		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.17	J	P	0.13	U		0.26	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		0.3	U		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		1.4			0.53	J	P	0.5	J	P	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		0.13	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		1.9			1			0.86	J	P	0.62	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW42A-081312			MSA-SW42B-081312			MSA-SW42C-081312			MSA-SW42D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-21			240-14133-22			240-14133-23			240-14133-24		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.36	J	P	0.13	U		0.13	U		0.39	J	P
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		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.38	J	P	0.32	J	P	0.17	U		0.32	J	P
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	UJ	C	0.31	UJ	C	0.31	UJ	C	0.31	UJ	C
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		0.77	B	A	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		0.13	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		0.59	J	P	0.53	J	P	0.72	J	P	0.52	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW43A-081312			MSA-SW43B-081312			MSA-SW43C-081312			MSA-SW43D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-25			240-14133-26			240-14133-27			240-14133-28		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.13	U		0.29	J	P	0.25	J	P	0.14	J	P
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		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		3.6			0.59	J	P	0.45	J	P	0.4	J	P
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	UJ	C	0.31	UJ	C	0.31	UJ	C	0.31	UJ	C
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		0.13	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		3.7			0.95	J	P	0.83	J	P	0.71	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW44A-081312			MSA-SW44B-081312			MSA-SW44C-081312			MSA-SW44D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-29			240-14133-30			240-14133-31			240-14133-32		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.13	U		0.13	U		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		0.3	U		0.3	U	
CIS-1,2-DICHLOROETHENE		0.73	J	P	0.82	J	P	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	UJ	C	0.31	UJ	C	0.31	UJ	C	0.31	UJ	C
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		0.13	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		1.3			1.4			0.56	J	P	0.69	J	P
TRICHLOROFLUOROMETHANE		0.21	U		0.21	U		0.21	U		0.21	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW45A-081312			MSA-SW45B-081312			MSA-SW45C-081312			MSA-SW45D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-33			240-14133-34			240-14133-35			240-14133-36		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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	0.48	J	P	0.19	J	P	0.13	U		0.15	J	P
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		0.3	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	UJ	C	0.31	UJ	C	0.31	UJ	C	0.31	UJ	C
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		0.13	U		0.13	U		0.19	J	P
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: 04021	NSAMPLE	TB-081312
SDG: 240-14133-1	LAB_ID	240-14133-41
FRACTION: OV	SAMP_DATE	8/13/2012
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	UJ	C
DIISOPROPYL ETHER	1.5	U	
ETHYL TERT-BUTYL ETHER	0.11	U	
ETHYLBENZENE	0.17	U	
HEXACHLOROBUTADIENE	0.44	J	P
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: 04021	NSAMPLE	EL-SW01A-081312			EL-SW01B-081312			EL-SW01C-081312			EL-SW01D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-37			240-14133-38			240-14133-39			240-14133-40		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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: 04021	NSAMPLE	MSA-SW37A-081312			MSA-SW37B-081312			MSA-SW37C-081312			MSA-SW37D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-1			240-14133-2			240-14133-3			240-14133-4		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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: 04021	NSAMPLE	MSA-SW38A-081312			MSA-SW38B-081312			MSA-SW38C-081312			MSA-SW38D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-5			240-14133-6			240-14133-7			240-14133-8		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		3			0.22	U		0.22	U		0.22	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW39A-081312			MSA-SW39B-081312			MSA-SW39C-081312			MSA-SW39D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-9			240-14133-10			240-14133-11			240-14133-12		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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: 04021	NSAMPLE	MSA-SW40A-081312			MSA-SW40B-081312			MSA-SW40C-081312			MSA-SW40D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-13			240-14133-14			240-14133-15			240-14133-16		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		1.1			0.22	U		0.22	U		0.22	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW41A-081312			MSA-SW41B-081312			MSA-SW41C-081312			MSA-SW41D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-17			240-14133-18			240-14133-19			240-14133-20		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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: 04021	NSAMPLE	MSA-SW42A-081312			MSA-SW42B-081312			MSA-SW42C-081312			MSA-SW42D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-21			240-14133-22			240-14133-23			240-14133-24		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.29	J	P	0.29	J	P	0.32	J	P	0.22	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW43A-081312			MSA-SW43B-081312			MSA-SW43C-081312			MSA-SW43D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-25			240-14133-26			240-14133-27			240-14133-28		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.61			0.29	J	P	0.24	J	P	0.23	J	P

PROJ_NO: 04021	NSAMPLE	MSA-SW44A-081312			MSA-SW44B-081312			MSA-SW44C-081312			MSA-SW44D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-29			240-14133-30			240-14133-31			240-14133-32		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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		0.38	J	P	0.42	J	P	0.24	J	P	0.22	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW45A-081312			MSA-SW45B-081312			MSA-SW45C-081312			MSA-SW45D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-33			240-14133-34			240-14133-35			240-14133-36		
FRACTION: OV	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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: 04021	NSAMPLE	TB-081312		
SDG: 240-14133-1	LAB_ID	240-14133-41		
FRACTION: OV	SAMP_DATE	8/13/2012		
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	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01A-081312 Lab Sample ID: 240-14133-37

Matrix: Water Lab File ID: UX125646.D

Analysis Method: 8260B Date Collected: 08/13/2012 10:46

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:04

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01A-081312 Lab Sample ID: 240-14133-37

Matrix: Water Lab File ID: UX125646.D

Analysis Method: 8260B Date Collected: 08/13/2012 10:46

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:04

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01A-081312 Lab Sample ID: 240-14133-37

Matrix: Water Lab File ID: UX125646.D

Analysis Method: 8260B Date Collected: 08/13/2012 10:46

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:04

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.: 54557 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)	104		63-129
460-00-4	4-Bromofluorobenzene (Surr)	99		66-117
1868-53-7	Dibromofluoromethane (Surr)	120		75-121
2037-26-5	Toluene-d8 (Surr)	108		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01B-081312 Lab Sample ID: 240-14133-38

Matrix: Water Lab File ID: UX125647.D

Analysis Method: 8260B Date Collected: 08/13/2012 10:52

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:29

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01B-081312 Lab Sample ID: 240-14133-38

Matrix: Water Lab File ID: UX125647.D

Analysis Method: 8260B Date Collected: 08/13/2012 10:52

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:29

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01B-081312 Lab Sample ID: 240-14133-38

Matrix: Water Lab File ID: UX125647.D

Analysis Method: 8260B Date Collected: 08/13/2012 10:52

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:29

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.: 54557 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)	102		63-129
460-00-4	4-Bromofluorobenzene (Surr)	98		66-117
1868-53-7	Dibromofluoromethane (Surr)	119		75-121
2037-26-5	Toluene-d8 (Surr)	109		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01C-081312 Lab Sample ID: 240-14133-39

Matrix: Water Lab File ID: UX125648.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:55

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01C-081312 Lab Sample ID: 240-14133-39

Matrix: Water Lab File ID: UX125648.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:55

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01C-081312 Lab Sample ID: 240-14133-39

Matrix: Water Lab File ID: UX125648.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 05:55

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.: 54557 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)	109		63-129
460-00-4	4-Bromofluorobenzene (Surr)	94		66-117
1868-53-7	Dibromofluoromethane (Surr)	119		75-121
2037-26-5	Toluene-d8 (Surr)	106		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01D-081312 Lab Sample ID: 240-14133-40

Matrix: Water Lab File ID: UX125649.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:34

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 06:20

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01D-081312 Lab Sample ID: 240-14133-40

Matrix: Water Lab File ID: UX125649.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:34

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 06:20

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: EL-SW01D-081312 Lab Sample ID: 240-14133-40

Matrix: Water Lab File ID: UX125649.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:34

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 06:20

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.: 54557 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)	107		63-129
460-00-4	4-Bromofluorobenzene (Surr)	95		66-117
1868-53-7	Dibromofluoromethane (Surr)	121		75-121
2037-26-5	Toluene-d8 (Surr)	110		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37A-081312 Lab Sample ID: 240-14133-1

Matrix: Water Lab File ID: UX933288.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:34

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 18:43

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	2.6	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.60	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37A-081312 Lab Sample ID: 240-14133-1

Matrix: Water Lab File ID: UX933288.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:34

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 18:43

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.28	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37A-081312 Lab Sample ID: 240-14133-1

Matrix: Water Lab File ID: UX933288.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:34

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 18:43

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.: 54545 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)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
1868-53-7	Dibromofluoromethane (Surr)	98		75-121
2037-26-5	Toluene-d8 (Surr)	95		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37B-081312 | Lab Sample ID: 240-14133-2

Matrix: Water | Lab File ID: UX933289.D

Analysis Method: 8260B | Date Collected: 08/13/2012 11:42

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 19:08

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.: 54545 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.4	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37B-081312 | Lab Sample ID: 240-14133-2

Matrix: Water | Lab File ID: UX933289.D

Analysis Method: 8260B | Date Collected: 08/13/2012 11:42

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 19:08

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.: 54545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.43	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37B-081312 Lab Sample ID: 240-14133-2

Matrix: Water Lab File ID: UX933289.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:42

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 19:08

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.: 54545 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)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
2037-26-5	Toluene-d8 (Surr)	93		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37C-081312 Lab Sample ID: 240-14133-3

Matrix: Water Lab File ID: UX933290.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 19:33

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.3	B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.23	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37C-081312 Lab Sample ID: 240-14133-3

Matrix: Water Lab File ID: UX933290.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:47

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 19:33

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.32	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37C-081312 | Lab Sample ID: 240-14133-3

Matrix: Water | Lab File ID: UX933290.D

Analysis Method: 8260B | Date Collected: 08/13/2012 11:47

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 19:33

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.: 54545 | 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)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	92		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37D-081312 Lab Sample ID: 240-14133-4

Matrix: Water Lab File ID: UX933291.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:52

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 19:59

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	2.2	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.36	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37D-081312 Lab Sample ID: 240-14133-4

Matrix: Water Lab File ID: UX933291.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:52

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 19:59

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.25	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW37D-081312 Lab Sample ID: 240-14133-4

Matrix: Water Lab File ID: UX933291.D

Analysis Method: 8260B Date Collected: 08/13/2012 11:52

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 19:59

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.: 54545 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)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	97		75-121
2037-26-5	Toluene-d8 (Surr)	94		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38A-081312 | Lab Sample ID: 240-14133-5

Matrix: Water | Lab File ID: UX933292.D

Analysis Method: 8260B | Date Collected: 08/13/2012 12:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 20:23

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.: 54545 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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	0.38	J	1.0	0.13
594-20-7	2,2-Dichloropropane	1.0	U	1.0	0.13
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	4.4	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.24	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38A-081312 Lab Sample ID: 240-14133-5

Matrix: Water Lab File ID: UX933292.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:48

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 20:23

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.13
108-90-7	Chlorobenzene	0.22	J	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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.5		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.73	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	3.0		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38A-081312 | Lab Sample ID: 240-14133-5

Matrix: Water | Lab File ID: UX933292.D

Analysis Method: 8260B | Date Collected: 08/13/2012 12:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 20:23

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.: 54545 | 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)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	97		75-121
2037-26-5	Toluene-d8 (Surr)	93		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38B-081312 | Lab Sample ID: 240-14133-6

Matrix: Water | Lab File ID: UX933293.D

Analysis Method: 8260B | Date Collected: 08/13/2012 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 20:48

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.: 54545 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.8	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38B-081312 Lab Sample ID: 240-14133-6

Matrix: Water Lab File ID: UX933293.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:53

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 20:48

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.46	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.99	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38B-081312 | Lab Sample ID: 240-14133-6

Matrix: Water | Lab File ID: UX933293.D

Analysis Method: 8260B | Date Collected: 08/13/2012 12:53

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 20:48

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.: 54545 | 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)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	90		66-117
1868-53-7	Dibromofluoromethane (Surr)	97		75-121
2037-26-5	Toluene-d8 (Surr)	91		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38C-081312 Lab Sample ID: 240-14133-7

Matrix: Water Lab File ID: UX933294.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 21:11

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.9	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.20	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38C-081312 Lab Sample ID: 240-14133-7

Matrix: Water Lab File ID: UX933294.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 21:11

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.55	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.96	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38C-081312 Lab Sample ID: 240-14133-7

Matrix: Water Lab File ID: UX933294.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:58

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 21:11

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.: 54545 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)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	94		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39A-081312 Lab Sample ID: 240-14133-9

Matrix: Water Lab File ID: UX933296.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:36

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:01

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39A-081312 Lab Sample ID: 240-14133-9

Matrix: Water Lab File ID: UX933296.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:36

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:01

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.: 54545 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)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	93		75-121
2037-26-5	Toluene-d8 (Surr)	91		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39B-081312 Lab Sample ID: 240-14133-10

Matrix: Water Lab File ID: UX933297.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:41

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:25

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.8	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39B-081312 Lab Sample ID: 240-14133-10

Matrix: Water Lab File ID: UX933297.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:41

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:25

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.20	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39B-081312 Lab Sample ID: 240-14133-10

Matrix: Water Lab File ID: UX933297.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:41

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:25

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.: 54545 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)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	91		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39C-081312 | Lab Sample ID: 240-14133-11

Matrix: Water | Lab File ID: UX933298.D

Analysis Method: 8260B | Date Collected: 08/13/2012 14:45

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 22:50

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.: 54545 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.5	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.30	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39C-081312 Lab Sample ID: 240-14133-11

Matrix: Water Lab File ID: UX933298.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:45

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:50

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39C-081312 Lab Sample ID: 240-14133-11

Matrix: Water Lab File ID: UX933298.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:45

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:50

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.: 54545 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)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	92		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39D-081312 | Lab Sample ID: 240-14133-12

Matrix: Water | Lab File ID: UX933299.D

Analysis Method: 8260B | Date Collected: 08/13/2012 14:52

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 23:15

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.: 54545 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.6	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39D-081312 Lab Sample ID: 240-14133-12

Matrix: Water Lab File ID: UX933299.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:52

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:15

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39D-081312 Lab Sample ID: 240-14133-12

Matrix: Water Lab File ID: UX933299.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:52

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:15

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.: 54545 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)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	92		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40A-081312 Lab Sample ID: 240-14133-13

Matrix: Water Lab File ID: UX933300.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:25

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:40

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	3.1	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.88	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40A-081312 Lab Sample ID: 240-14133-13

Matrix: Water Lab File ID: UX933300.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:25

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:40

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.60	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.48	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	1.1		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40A-081312 Lab Sample ID: 240-14133-13

Matrix: Water Lab File ID: UX933300.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:25

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:40

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.: 54545 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)	98		63-129
460-00-4	4-Bromofluorobenzene (Surr)	90		66-117
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	90		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40B-081312 Lab Sample ID: 240-14133-14

Matrix: Water Lab File ID: UX933301.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:32

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:05

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	2.4	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.53	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40B-081312 | Lab Sample ID: 240-14133-14

Matrix: Water | Lab File ID: UX933301.D

Analysis Method: 8260B | Date Collected: 08/13/2012 12:32

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 00:05

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.: 54545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.95	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	1.8		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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40B-081312 Lab Sample ID: 240-14133-14

Matrix: Water Lab File ID: UX933301.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:32

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:05

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.: 54545 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)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
2037-26-5	Toluene-d8 (Surr)	93		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40C-081312 Lab Sample ID: 240-14133-15

Matrix: Water Lab File ID: UX933302.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:37

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:30

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.8	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40C-081312 Lab Sample ID: 240-14133-15

Matrix: Water Lab File ID: UX933302.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:37

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:30

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.3		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	2.5		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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40C-081312 Lab Sample ID: 240-14133-15

Matrix: Water Lab File ID: UX933302.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:37

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:30

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.: 54545 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)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
2037-26-5	Toluene-d8 (Surr)	92		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40D-081312 Lab Sample ID: 240-14133-16

Matrix: Water Lab File ID: UX933303.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:42

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:55

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	4.9	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.34	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40D-081312 Lab Sample ID: 240-14133-16

Matrix: Water Lab File ID: UX933303.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:42

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:55

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.33	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	0.50	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW40D-081312 Lab Sample ID: 240-14133-16

Matrix: Water Lab File ID: UX933303.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:42

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:55

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.: 54545 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)	100		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	95		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41A-081312 Lab Sample ID: 240-14133-17

Matrix: Water Lab File ID: UX933304.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:08

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:21

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	2.4	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.17	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41A-081312 Lab Sample ID: 240-14133-17

Matrix: Water Lab File ID: UX933304.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:08

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:21

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	1.4		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	1.9		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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41A-081312 Lab Sample ID: 240-14133-17

Matrix: Water Lab File ID: UX933304.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:08

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:21

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.: 54545 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)	97		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
2037-26-5	Toluene-d8 (Surr)	90		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41B-081312 Lab Sample ID: 240-14133-18

Matrix: Water Lab File ID: UX933305.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:12

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:46

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.9	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41B-081312 Lab Sample ID: 240-14133-18

Matrix: Water Lab File ID: UX933305.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:12

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:46

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.53	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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		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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41B-081312 Lab Sample ID: 240-14133-18

Matrix: Water Lab File ID: UX933305.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:12

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:46

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.: 54545 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)	102		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	95		75-121
2037-26-5	Toluene-d8 (Surr)	94		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41C-081312 Lab Sample ID: 240-14133-19

Matrix: Water Lab File ID: UX933306.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:18

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:11

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.8	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.26	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41C-081312 | Lab Sample ID: 240-14133-19

Matrix: Water | Lab File ID: UX933306.D

Analysis Method: 8260B | Date Collected: 08/13/2012 13:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 02:11

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.: 54545 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.50	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.86	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41C-081312 | Lab Sample ID: 240-14133-19

Matrix: Water | Lab File ID: UX933306.D

Analysis Method: 8260B | Date Collected: 08/13/2012 13:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 02:11

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.: 54545 | 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)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	89		66-117
1868-53-7	Dibromofluoromethane (Surr)	98		75-121
2037-26-5	Toluene-d8 (Surr)	94		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41D-081312 Lab Sample ID: 240-14133-20

Matrix: Water Lab File ID: UX933307.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:22

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:36

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.5	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41D-081312 Lab Sample ID: 240-14133-20

Matrix: Water Lab File ID: UX933307.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:22

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:36

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.62	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW41D-081312 Lab Sample ID: 240-14133-20

Matrix: Water Lab File ID: UX933307.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:22

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:36

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.: 54545 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)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	86		66-117
1868-53-7	Dibromofluoromethane (Surr)	96		75-121
2037-26-5	Toluene-d8 (Surr)	91		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42A-081312 Lab Sample ID: 240-14133-21

Matrix: Water Lab File ID: UX125630.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:19

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.36	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42A-081312 Lab Sample ID: 240-14133-21

Matrix: Water Lab File ID: UX125630.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:19

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.38	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	0.77	J B	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.59	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	0.29	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42A-081312 Lab Sample ID: 240-14133-21

Matrix: Water Lab File ID: UX125630.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:00

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:19

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.: 54557 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)	104		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
1868-53-7	Dibromofluoromethane (Surr)	119		75-121
2037-26-5	Toluene-d8 (Surr)	110		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42B-081312 Lab Sample ID: 240-14133-22

Matrix: Water Lab File ID: UX125631.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:43

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42B-081312 Lab Sample ID: 240-14133-22

Matrix: Water Lab File ID: UX125631.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:43

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.32	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.53	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	0.29	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42B-081312 Lab Sample ID: 240-14133-22

Matrix: Water Lab File ID: UX125631.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:05

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:43

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.: 54557 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)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	99		66-117
1868-53-7	Dibromofluoromethane (Surr)	119		75-121
2037-26-5	Toluene-d8 (Surr)	110		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42C-081312 | Lab Sample ID: 240-14133-23

Matrix: Water | Lab File ID: UX125632.D

Analysis Method: 8260B | Date Collected: 08/13/2012 12:12

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 23:08

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.: 54557 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42C-081312 Lab Sample ID: 240-14133-23

Matrix: Water Lab File ID: UX125632.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:12

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:08

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.72	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	0.32	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42C-081312 Lab Sample ID: 240-14133-23

Matrix: Water Lab File ID: UX125632.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:12

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:08

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.: 54557 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)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
1868-53-7	Dibromofluoromethane (Surr)	117		75-121
2037-26-5	Toluene-d8 (Surr)	109		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42D-081312 Lab Sample ID: 240-14133-24

Matrix: Water Lab File ID: UX125633.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:18

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:33

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.39	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42D-081312 | Lab Sample ID: 240-14133-24

Matrix: Water | Lab File ID: UX125633.D

Analysis Method: 8260B | Date Collected: 08/13/2012 12:18

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 23:33

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.: 54557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.32	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.52	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW42D-081312 Lab Sample ID: 240-14133-24

Matrix: Water Lab File ID: UX125633.D

Analysis Method: 8260B Date Collected: 08/13/2012 12:18

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:33

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.: 54557 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)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
1868-53-7	Dibromofluoromethane (Surr)	116		75-121
2037-26-5	Toluene-d8 (Surr)	109		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43A-081312 | Lab Sample ID: 240-14133-25

Matrix: Water | Lab File ID: UX125634.D

Analysis Method: 8260B | Date Collected: 08/13/2012 13:25

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 23:59

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.: 54557 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43A-081312 Lab Sample ID: 240-14133-25

Matrix: Water Lab File ID: UX125634.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:25

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:59

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	3.6		1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	3.7		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	0.61		0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43A-081312 Lab Sample ID: 240-14133-25

Matrix: Water Lab File ID: UX125634.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:25

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 23:59

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.: 54557 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)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	98		66-117
1868-53-7	Dibromofluoromethane (Surr)	116		75-121
2037-26-5	Toluene-d8 (Surr)	109		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43B-081312 Lab Sample ID: 240-14133-26

Matrix: Water Lab File ID: UX125635.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:34

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:24

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.29	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43B-081312 | Lab Sample ID: 240-14133-26

Matrix: Water | Lab File ID: UX125635.D

Analysis Method: 8260B | Date Collected: 08/13/2012 13:34

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 00:24

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.: 54557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.59	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.95	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	0.29	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43B-081312 | Lab Sample ID: 240-14133-26

Matrix: Water | Lab File ID: UX125635.D

Analysis Method: 8260B | Date Collected: 08/13/2012 13:34

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 00:24

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.: 54557 | 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)	104		63-129
460-00-4	4-Bromofluorobenzene (Surr)	95		66-117
1868-53-7	Dibromofluoromethane (Surr)	118		75-121
2037-26-5	Toluene-d8 (Surr)	109		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43C-081312 Lab Sample ID: 240-14133-27

Matrix: Water Lab File ID: UX125636.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:37

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:50

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.25	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43C-081312 Lab Sample ID: 240-14133-27

Matrix: Water Lab File ID: UX125636.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:37

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 00:50

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.45	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.83	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	0.24	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43C-081312 | Lab Sample ID: 240-14133-27

Matrix: Water | Lab File ID: UX125636.D

Analysis Method: 8260B | Date Collected: 08/13/2012 13:37

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 00:50

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.: 54557 | 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)	106		63-129
460-00-4	4-Bromofluorobenzene (Surr)	94		66-117
1868-53-7	Dibromofluoromethane (Surr)	115		75-121
2037-26-5	Toluene-d8 (Surr)	109		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43D-081312 Lab Sample ID: 240-14133-28

Matrix: Water Lab File ID: UX125637.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:45

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:15

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.14	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43D-081312 Lab Sample ID: 240-14133-28

Matrix: Water Lab File ID: UX125637.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:45

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:15

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.40	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.71	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	0.23	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW43D-081312 Lab Sample ID: 240-14133-28

Matrix: Water Lab File ID: UX125637.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:45

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:15

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.: 54557 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)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
1868-53-7	Dibromofluoromethane (Surr)	114		75-121
2037-26-5	Toluene-d8 (Surr)	112		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44A-081312 Lab Sample ID: 240-14133-29

Matrix: Water Lab File ID: UX125638.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:51

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:41

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44A-081312 Lab Sample ID: 240-14133-29

Matrix: Water Lab File ID: UX125638.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:51

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:41

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.73	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	1.3		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	0.38	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44A-081312 Lab Sample ID: 240-14133-29

Matrix: Water Lab File ID: UX125638.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:51

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 01:41

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.: 54557 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)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	95		66-117
1868-53-7	Dibromofluoromethane (Surr)	117		75-121
2037-26-5	Toluene-d8 (Surr)	110		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44B-081312 Lab Sample ID: 240-14133-30

Matrix: Water Lab File ID: UX125639.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:56

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:06

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44B-081312 Lab Sample ID: 240-14133-30

Matrix: Water Lab File ID: UX125639.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:56

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:06

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.82	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	1.4		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	0.42	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44B-081312 Lab Sample ID: 240-14133-30

Matrix: Water Lab File ID: UX125639.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:56

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:06

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.: 54557 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)	104		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
1868-53-7	Dibromofluoromethane (Surr)	114		75-121
2037-26-5	Toluene-d8 (Surr)	109		74-115

FORM I

GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44C-081312 Lab Sample ID: 240-14133-31

Matrix: Water Lab File ID: UX125640.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:31

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44C-081312 Lab Sample ID: 240-14133-31

Matrix: Water Lab File ID: UX125640.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:31

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.56	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	0.24	J	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44C-081312 Lab Sample ID: 240-14133-31

Matrix: Water Lab File ID: UX125640.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:00

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:31

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.: 54557 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)	101		63-129
460-00-4	4-Bromofluorobenzene (Surr)	98		66-117
1868-53-7	Dibromofluoromethane (Surr)	115		75-121
2037-26-5	Toluene-d8 (Surr)	110		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44D-081312 | Lab Sample ID: 240-14133-32

Matrix: Water | Lab File ID: UX125641.D

Analysis Method: 8260B | Date Collected: 08/13/2012 14:07

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 02:57

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.: 54557 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44D-081312 Lab Sample ID: 240-14133-32

Matrix: Water Lab File ID: UX125641.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:07

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:57

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.69	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW44D-081312 Lab Sample ID: 240-14133-32

Matrix: Water Lab File ID: UX125641.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:07

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 02:57

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.: 54557 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)	107		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
1868-53-7	Dibromofluoromethane (Surr)	120		75-121
2037-26-5	Toluene-d8 (Surr)	109		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45A-081312 Lab Sample ID: 240-14133-33

Matrix: Water Lab File ID: UX125642.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:14

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 03:22

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.48	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45A-081312 Lab Sample ID: 240-14133-33

Matrix: Water Lab File ID: UX125642.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:14

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 03:22

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45A-081312 Lab Sample ID: 240-14133-33

Matrix: Water Lab File ID: UX125642.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:14

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 03:22

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.: 54557 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)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	99		66-117
1868-53-7	Dibromofluoromethane (Surr)	118		75-121
2037-26-5	Toluene-d8 (Surr)	110		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45B-081312 | Lab Sample ID: 240-14133-34

Matrix: Water | Lab File ID: UX125643.D

Analysis Method: 8260B | Date Collected: 08/13/2012 14:20

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 03:48

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.: 54557 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.19	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45B-081312 Lab Sample ID: 240-14133-34

Matrix: Water Lab File ID: UX125643.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:20

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 03:48

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45B-081312 Lab Sample ID: 240-14133-34

Matrix: Water Lab File ID: UX125643.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:20

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 03:48

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.: 54557 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)	102		63-129
460-00-4	4-Bromofluorobenzene (Surr)	97		66-117
1868-53-7	Dibromofluoromethane (Surr)	119		75-121
2037-26-5	Toluene-d8 (Surr)	107		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45C-081312 Lab Sample ID: 240-14133-35

Matrix: Water Lab File ID: UX125644.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:26

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 04:13

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45C-081312 Lab Sample ID: 240-14133-35

Matrix: Water Lab File ID: UX125644.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:26

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 04:13

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45C-081312 Lab Sample ID: 240-14133-35

Matrix: Water Lab File ID: UX125644.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:26

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 04:13

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.: 54557 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)	104		63-129
460-00-4	4-Bromofluorobenzene (Surr)	95		66-117
1868-53-7	Dibromofluoromethane (Surr)	121		75-121
2037-26-5	Toluene-d8 (Surr)	108		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45D-081312 Lab Sample ID: 240-14133-36

Matrix: Water Lab File ID: UX125645.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 04:39

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.: 54557 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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	0.15	J	1.0	0.13

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45D-081312 Lab Sample ID: 240-14133-36

Matrix: Water Lab File ID: UX125645.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 04:39

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.19	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW45D-081312 Lab Sample ID: 240-14133-36

Matrix: Water Lab File ID: UX125645.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:30

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 04:39

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.: 54557 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)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	96		66-117
1868-53-7	Dibromofluoromethane (Surr)	120		75-121
2037-26-5	Toluene-d8 (Surr)	107		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: TB-081~~213~~ 1312 MA 81312 | Lab Sample ID: 240-14133-41

Matrix: Water | Lab File ID: UX125654.D

Analysis Method: 8260B | Date Collected: 08/13/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 19:20

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.: 54716 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: TB-081~~213~~ 1312 MA 9/18/12 | Lab Sample ID: 240-14133-41

Matrix: Water | Lab File ID: UX125654.D

Analysis Method: 8260B | Date Collected: 08/13/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 19:20

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.: 54716 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	0.44	J B	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: TB-081213 1312 | Lab Sample ID: 240-14133-41

Matrix: Water | Lab File ID: UX125654.D

Analysis Method: 8260B | Date Collected: 08/13/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 19:20

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.: 54716 | 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)	107		63-129
460-00-4	4-Bromofluorobenzene (Surr)	98		66-117
1868-53-7	Dibromofluoromethane (Surr)	116		75-121
2037-26-5	Toluene-d8 (Surr)	112		74-115

Appendix C

Support Documentation

LMC - MARTIN STATE AIRPORT
SDG 240-14133-1

SAMPLE IDENTIFICATION	MSA-SW43A-081312
COMPOUND	CIS-1,2-DICHLOROETHENE
COMPOUND AREA	65206
INTERNAL STANDARD AMOUNT (ng)	100
VOLUME WATER PURGED (ml)	5
DILUTION FACTOR	1
INTERNAL STANDARD AREA	1184587
AVERAGE RRF	0.308
ml to µl	1000
ng to µg	1000

3.57 µg/L

65206 x 100ng x 1 X 1000ml X 1µg /1184587 x 0.308 x 5ml x 1L x 1000ng

TestAmerica Laboratories
Target Compound Quantitation Report

Data File:	\\Ncchrom\ChromData\A3UX12\20120815-12425.b\UX125634.D		
Lims ID:	240-14133-C-25	Client ID:	MSA-SW43A-081312
Inject. Date:	15-Aug-2012 23:59:30	Dil. Factor:	1.0000
Sample Type:	Client		
Sample ID:	240-0012425-010		
Misc. Info.:			
Operator:	1904	Instrument ID:	A3UX12
Vol. Injected:	1.0000	ALS Bottle#:	10
Lims Batch ID:	54557	Lims Sample ID:	10
Detector:	MS SCAN		
Method:	\\Ncchrom\ChromData\A3UX12\20120815-12425.b\8260_12.m		
Last Update:	16-Aug-2012 15:35:16	Calib Date:	24-Jul-2012 19:20:30
Quant Method:	Internal Standard	Quant By:	Initial Calibration
Last ICal File:	\\Ncchrom\ChromData\A3UX12\20120724-11800.b\UX125213.D		
Limit Group:	MSV 8260B ICAL		
Integrator:	RTE	ID Type:	Deconvolution ID
Process Host:	CORP-CTX-17		
First Level Reviewer: laveyt		Date:	16-Aug-2012 15:35:16

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
* 1 Fluorobenzene	96	5.333	5.322	0.011	100	1184587	20.0	
* 2 Chlorobenzene-d5	117	7.996	7.996	0.0	82	899378	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.232	10.232	0.0	94	407812	20.0	
$ 5 Dibromofluoromethane (Surr)	113	4.765	4.766	-0.001	57	274162	23.1	
$ 6 1,2-Dichloroethane-d4 (Surr)	65	5.049	5.050	-0.001	91	290722	21.1	
$ 7 Toluene-d8 (Surr)	98	6.682	6.683	0.0	82	1091551	21.8	
$ 131 4-Bromofluorobenzene (Surr)	95	9.108	9.108	0.0	91	384246	19.5	
12 Dichlorodifluoromethane	85		1.654					
13 Chloromethane	50		1.796					
14 Vinyl chloride	62	1.902	1.902	0.0	42	11271	0.6063	
15 Bromomethane	94		2.198					
16 Chloroethane	64		2.304					
18 Trichlorofluoromethane	101		2.517					
23 1,1,2-Trichloro-1,2,2-trifluoroe	101		2.955					
21 1,1-Dichloroethene	61		2.955					
22 Acetone	43		2.967					
26 Carbon disulfide	76	3.156	3.144	0.012	61	5243	0.1140	
30 Methylene Chloride	49		3.369					
31 2-Methyl-2-propanol	59		3.393					
34 Methyl tert-butyl ether	73		3.547					
33 trans-1,2-Dichloroethene	61		3.559					9
36 1,1-Dichloroethane	63		3.902					
37 Vinyl acetate	86		3.925					
38 Isopropyl ether	87		3.937					
40 Tert-butyl ethyl ether	59		4.233					9
43 2,2-Dichloropropane	77		4.375					
→ 42 cis-1,2-Dichloroethene	61	4.375	4.375	0.0	65	65206	3.61	
41 2-Butanone (MEK)	72		4.375					9
47 Chlorobromomethane	49		4.576					
49 Chloroform	83		4.635					
50 1,1,1-Trichloroethane	97		4.801					

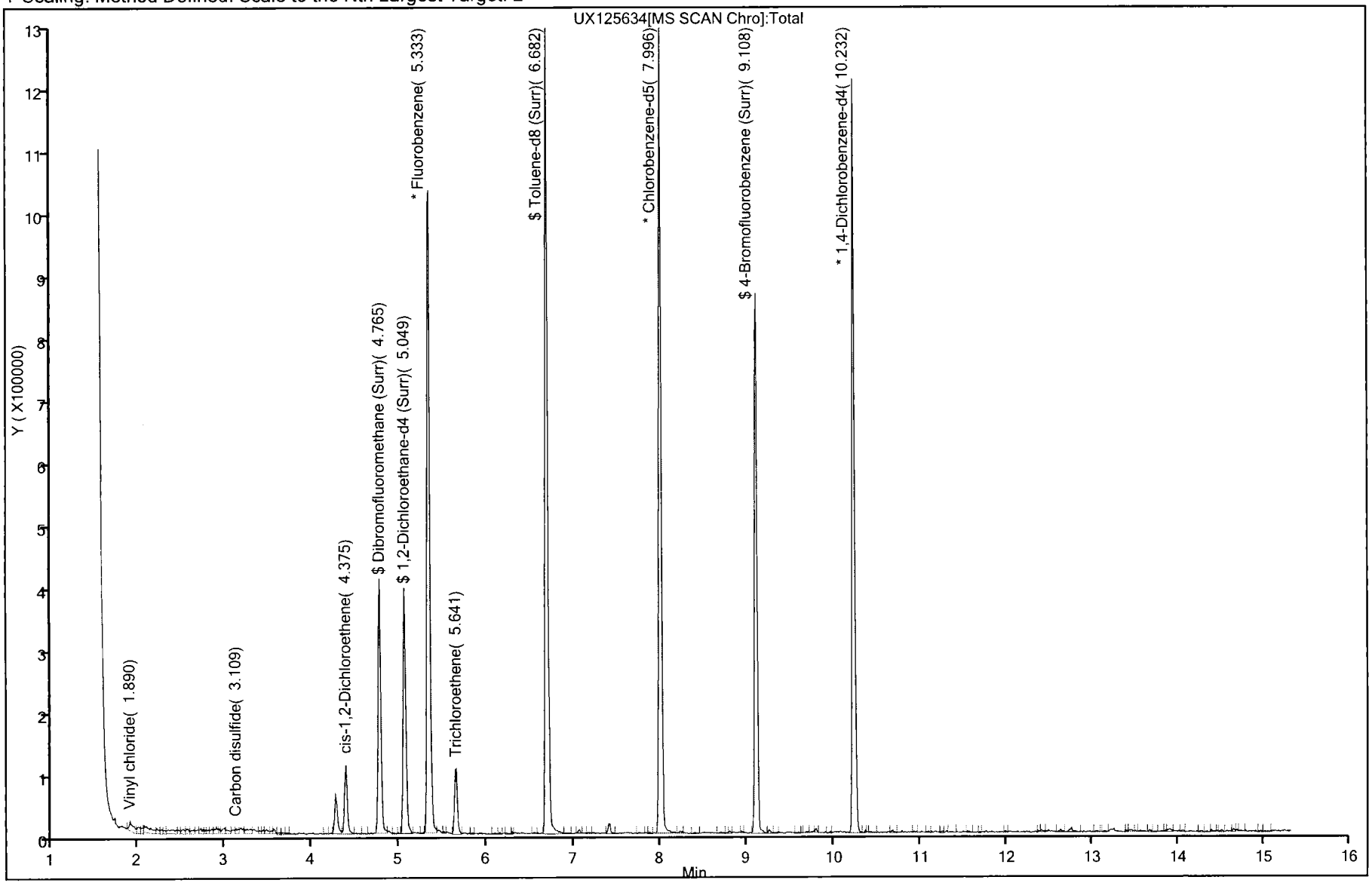
RRF = 0.3048

Compound	Sig	RT	EXP RT	DLT RT	Q	Response	On-Col Amt ug/l	Flags
52 1,1-Dichloropropene	75		4.931					
53 Carbon tetrachloride	117		4.943					
56 1,2-Dichloroethane	62		5.109					
55 Benzene	78		5.109					9
57 Tert-amyl methyl ether	73		5.180					
60 Trichloroethene	130	5.641	5.641	0.0	86	46773	3.67	
62 1,2-Dichloropropane	63		5.831					
65 Dibromomethane	174		5.937					
67 Dichlorobromomethane	83		6.055					
69 2-Chloroethyl vinyl ether	63		6.292					
70 cis-1,3-Dichloropropene	75		6.434					
71 4-Methyl-2-pentanone (MIBK)	43		6.564					
72 Toluene	91		6.742					9
73 trans-1,3-Dichloropropene	75		6.919					
77 Tetrachloroethene	166		7.239					
76 1,3-Dichloropropane	76		7.250					
78 2-Hexanone	43		7.298					
79 Chlorodibromomethane	129		7.452					
123 Ethylene Dibromide	107		7.570					
82 Chlorobenzene	112		8.020					
83 1,1,1,2-Tetrachloroethane	131		8.091					
84 Ethylbenzene	106		8.114					
10 m-Xylene & p-Xylene	106		8.221					
85 o-Xylene	106		8.599					
86 Styrene	104		8.611					
87 Bromoform	173		8.801					
88 Isopropylbenzene	105		8.954					
90 1,1,2,2-Tetrachloroethane	83		9.227					
91 Bromobenzene	156		9.262					
92 1,2,3-Trichloropropane	110		9.286					
94 N-Propylbenzene	120		9.345					
95 2-Chlorotoluene	126		9.440					
104 4-Chlorotoluene	126		9.546					
97 tert-Butylbenzene	119		9.842					
98 1,2,4-Trimethylbenzene	105		9.889					
99 sec-Butylbenzene	105		10.055					
100 1,3-Dichlorobenzene	146		10.173					9
101 4-Isopropyltoluene	119		10.197					9
102 1,4-Dichlorobenzene	146		10.256					9
103 1,2,3-Trimethylbenzene	105		10.303					
105 n-Butylbenzene	91		10.599					9
106 1,2-Dichlorobenzene	146		10.635					
107 1,2-Dibromo-3-Chloropropane	157		11.404					
109 1,2,4-Trichlorobenzene	180		12.244					
110 Hexachlorobutadiene	225		12.410					
111 Naphthalene	128		12.492					9
112 1,2,3-Trichlorobenzene	180		12.741					
S 114 Xylenes, Total	106		16.530					

QC Flag Legend

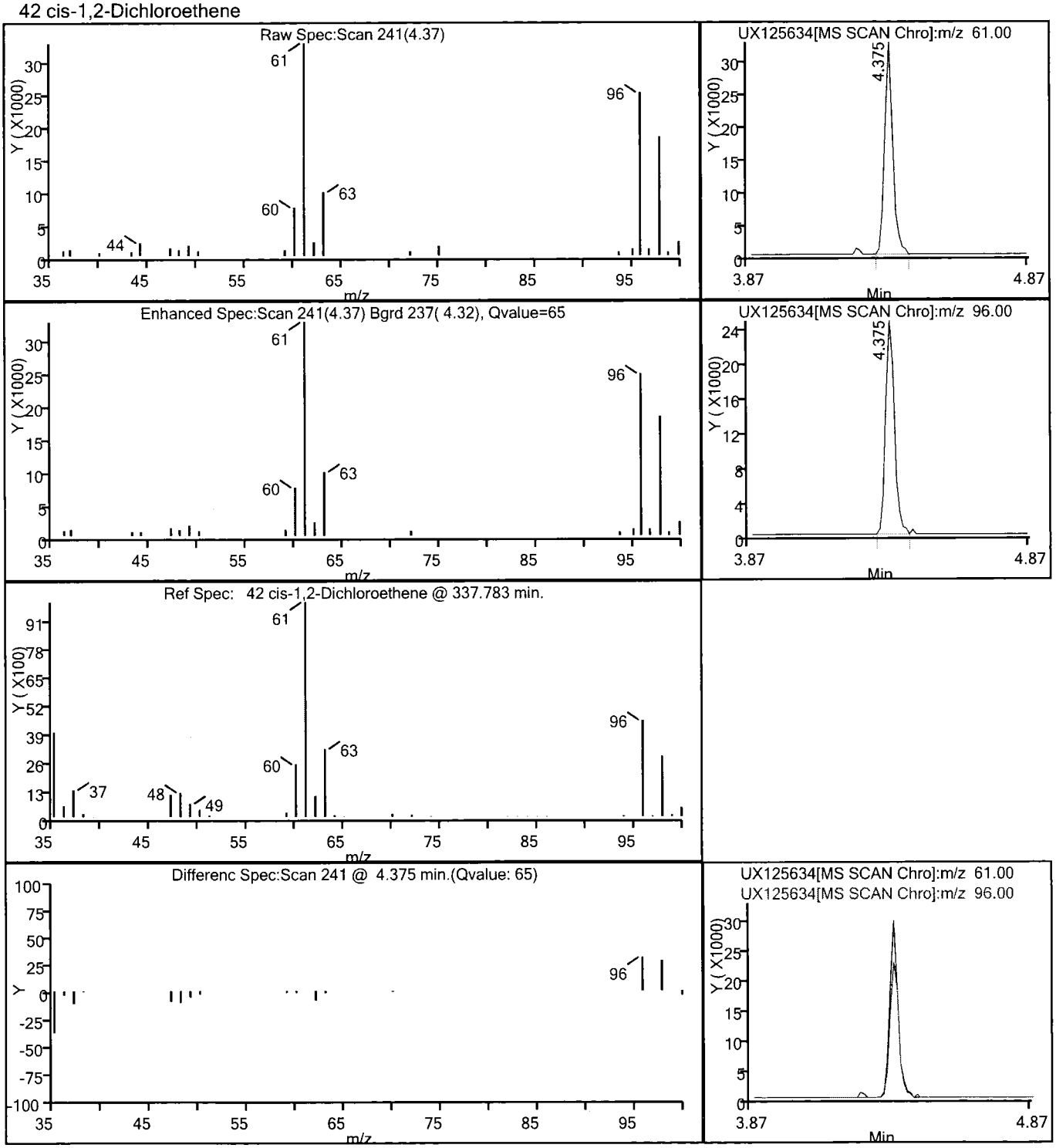
Processing Flags
9 - Failed A Reference Spectral Test

Report Date: 16-Aug-2012 15:35:17 Chrom Revision: 2.0 17-Jul-2012 17:32:54
Data File: \\Ncchrom\ChromData\A3UX12\20120815-12425.b\UX125634.D
Injection Date: 15-Aug-2012 23:59:30 Limit Group: MSV 8260B ICAL
Client ID: MSA-SW43A-081312 Instrument ID: A3UX12
Lims Batch ID: 54557 Lims Sample ID: 10
Operator ID: 1904
Column Type: DB-624 Column Dia: 0.18 mm
Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 16-Aug-2012 15:35:17 Chrom Revision: 2.0 17-Jul-2012 17:32:54
Data File: \\Ncchrom\ChromData\A3UX12\20120815-12425.b\UX125634.D
Injection Date: 15-Aug-2012 23:59:30 Limit Group: MSV 8260B ICAL
Client ID: MSA-SW43A-081312 Instrument ID: A3UX12
Lims Batch ID: 54557 Lims Sample ID: 10
Operator ID: 1904
Column Type: DB-624 Column Dia: 0.18 mm

42 cis-1,2-Dichloroethene



CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MSA Surface Water

Report Number: 240-14133-1

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 08/14/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.2 and 0.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MSA-SW37A-081312 (240-14133-1), MSA-SW37B-081312 (240-14133-2), MSA-SW37C-081312 (240-14133-3), MSA-SW37D-081312 (240-14133-4), MSA-SW38A-081312 (240-14133-5), MSA-SW38B-081312 (240-14133-6), MSA-SW38C-081312 (240-14133-7), MSA-SW38D-081312 (240-14133-8), MSA-SW39A-081312 (240-14133-9), MSA-SW39B-081312 (240-14133-10), MSA-SW39C-081312 (240-14133-11), MSA-SW39D-081312 (240-14133-12), MSA-SW40A-081312 (240-14133-13), MSA-SW40B-081312 (240-14133-14), MSA-SW40C-081312 (240-14133-15), MSA-SW40D-081312 (240-14133-16), MSA-SW41A-081312 (240-14133-17), MSA-SW41B-081312 (240-14133-18), MSA-SW41C-081312 (240-14133-19), MSA-SW41D-081312 (240-14133-20), MSA-SW42A-081312 (240-14133-21), MSA-SW42B-081312 (240-14133-22), MSA-SW42C-081312 (240-14133-23), MSA-SW42D-081312 (240-14133-24), MSA-SW43A-081312 (240-14133-25), MSA-SW43B-081312 (240-14133-26), MSA-SW43C-081312 (240-14133-27), MSA-SW43D-081312 (240-14133-28), MSA-SW44A-081312 (240-14133-29), MSA-SW44B-081312 (240-14133-30), MSA-SW44C-081312 (240-14133-31), MSA-SW44D-081312 (240-14133-32), MSA-SW45A-081312 (240-14133-33), MSA-SW45B-081312 (240-14133-34), MSA-SW45C-081312 (240-14133-35), MSA-SW45D-081312 (240-14133-36), EL-SW01A-081312 (240-14133-37), EL-SW01B-081312 (240-14133-38), EL-SW01C-081312 (240-14133-39), EL-SW01D-081312 (240-14133-40) and TB-081213 (240-14133-41) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/15/2012 and 08/16/2012.

Acetone was detected in method blank MB 240-54545/4 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.

Hexachlorobutadiene was detected in method blank MB 240-54557/4 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.

1,2,3-Trichlorobenzene, Methylene Chloride and n-Butylbenzene were detected in method blank MB 240-54557/4 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.

Hexachlorobutadiene and Methylene Chloride were detected in method blank MB 240-54716/4 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.

Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for 240-13970-C-2 MSD.

The laboratory control sample (LCS) for batch 54545 exceeded control limits for the following analyte: tert-Butyl alcohol. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The results have been reported and qualified.

The laboratory control sample (LCS) for batch 54557 exceeded control limits for the following analyte: carbon tetrachloride and hexachlorobutadiene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS/MSD of sample 240-13970-2 in batch 240-54716.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples MSA-SW37A-081312 (240-14133-1), MSA-SW37B-081312 (240-14133-2), MSA-SW37C-081312 (240-14133-3), MSA-SW37D-081312 (240-14133-4), MSA-SW38A-081312 (240-14133-5), MSA-SW38B-081312 (240-14133-6), MSA-SW38C-081312 (240-14133-7), MSA-SW38D-081312 (240-14133-8), MSA-SW39A-081312 (240-14133-9), MSA-SW39B-081312 (240-14133-10), MSA-SW39C-081312 (240-14133-11), MSA-SW39D-081312 (240-14133-12), MSA-SW40A-081312 (240-14133-13), MSA-SW40B-081312 (240-14133-14), MSA-SW40C-081312 (240-14133-15), MSA-SW40D-081312 (240-14133-16), MSA-SW41A-081312 (240-14133-17), MSA-SW41B-081312 (240-14133-18), MSA-SW41C-081312 (240-14133-19), MSA-SW41D-081312 (240-14133-20), MSA-SW42A-081312 (240-14133-21), MSA-SW42B-081312 (240-14133-22), MSA-SW42C-081312 (240-14133-23), MSA-SW42D-081312 (240-14133-24), MSA-SW43A-081312 (240-14133-25), MSA-SW43B-081312 (240-14133-26), MSA-SW43C-081312 (240-14133-27), MSA-SW43D-081312 (240-14133-28), MSA-SW44A-081312 (240-14133-29), MSA-SW44B-081312 (240-14133-30), MSA-SW44C-081312 (240-14133-31), MSA-SW44D-081312 (240-14133-32), MSA-SW45A-081312 (240-14133-33), MSA-SW45B-081312 (240-14133-34), MSA-SW45C-081312 (240-14133-35) and MSA-SW45D-081312 (240-14133-36) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 08/14/2012 and analyzed on 08/15/2012.

Chromium failed the recovery criteria high for the MS of sample MSA-SW42A-081312MS (240-14133-21) in batch 240-54676.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples MSA-SW37A-081312 (240-14133-1), MSA-SW37B-081312 (240-14133-2), MSA-SW37C-081312 (240-14133-3), MSA-SW37D-081312 (240-14133-4), MSA-SW38A-081312 (240-14133-5), MSA-SW38B-081312 (240-14133-6), MSA-SW38C-081312 (240-14133-7), MSA-SW38D-081312 (240-14133-8), MSA-SW39A-081312 (240-14133-9), MSA-SW39B-081312 (240-14133-10), MSA-SW39C-081312 (240-14133-11), MSA-SW39D-081312 (240-14133-12), MSA-SW40A-081312 (240-14133-13), MSA-SW40B-081312 (240-14133-14), MSA-SW40C-081312 (240-14133-15), MSA-SW40D-081312 (240-14133-16), MSA-SW41A-081312 (240-14133-17), MSA-SW41B-081312 (240-14133-18), MSA-SW41C-081312 (240-14133-19), MSA-SW41D-081312 (240-14133-20), MSA-SW42A-081312 (240-14133-21), MSA-SW42B-081312 (240-14133-22), MSA-SW42C-081312 (240-14133-23), MSA-SW42D-081312 (240-14133-24), MSA-SW43A-081312 (240-14133-25), MSA-SW43B-081312 (240-14133-26), MSA-SW43C-081312 (240-14133-27), MSA-SW43D-081312 (240-14133-28), MSA-SW44A-081312 (240-14133-29), MSA-SW44B-081312 (240-14133-30), MSA-SW44C-081312 (240-14133-31), MSA-SW44D-081312 (240-14133-32), MSA-SW45A-081312 (240-14133-33), MSA-SW45B-081312 (240-14133-34), MSA-SW45C-081312 (240-14133-35) and MSA-SW45D-081312 (240-14133-36) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/14/2012 and analyzed on 08/15/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Sample Specific Notes:
MSA-SW37A-081312	8/13/2012	1134	SW	Water	4	x	x	x	
MSA-SW37B-081312	8/13/2012	1142	SW	Water	4	x	x	x	
MSA-SW37C-081312	8/13/2012	1147	SW	Water	4	x	x	x	
MSA-SW37D-081312	8/13/2012	1152	SW	Water	4	x	x	x	
MSA-SW38A-081312	8/13/2012	1248	SW	Water	4	x	x	x	
MSA-SW38B-081312	8/13/2012	1253	SW	Water	4	x	x	x	
MSA-SW38C-081312	8/13/2012	1258	SW	Water	4	x	x	x	
MSA-SW38D-081312	8/13/2012	1302	SW	Water	4	x	x	x	
MSA-SW39A-081312	8/13/2012	1436	SW	Water	4	x	x	x	
MSA-SW39B-081312	8/13/2012	1441	SW	Water	4	x	x	x	
MSA-SW39C-081312	8/13/2012	1445	SW	Water	4	x	x	x	
MSA-SW39D-081312	8/13/2012	1452	SW	Water	4	x	x	x	

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	8/13/12 1800		TA Canton	14 AUG 2012 0910
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

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08/21/2012

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	2 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Sample Specific Notes:
MSA-SW40A-081312	8/13/2012	1225	SW	Water	4	x	x	x	
MSA-SW40B-081312	8/13/2012	1232	SW	Water	4	x	x	x	
MSA-SW40C-081312	8/13/2012	1237	SW	Water	4	x	x	x	
MSA-SW40D-081312	8/13/2012	1242	SW	Water	4	x	x	x	
MSA-SW41A-081312	8/13/2012	1308	SW	Water	4	x	x	x	
MSA-SW41B-081312	8/13/2012	1312	SW	Water	4	x	x	x	
MSA-SW41C-081312	8/13/2012	1318	SW	Water	4	x	x	x	
MSA-SW41D-081312	8/13/2012	1322	SW	Water	4	x	x	x	
MSA-SW42A-081312	8/13/2012	1200	SW	Water	4	x	x	x	
MSA-SW42B-081312	8/13/2012	1205	SW	Water	4	x	x	x	
MSA-SW42C-081312	8/13/2012	1212	SW	Water	4	x	x	x	
MSA-SW42D-081312	8/13/2012	1218	SW	Water	4	x	x	x	

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	8/13/12 1500	[signature]	TAcanton	13 Aug 2012 0910

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	3 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Sample Specific Notes:
MSA-SW43A-081312	8/13/2012	1325	SW	Water	4	x	x	x	
MSA-SW43B-081312	8/13/2012	1334	SW	Water	4	x	x	x	
MSA-SW43C-081312	8/13/2012	1337	SW	Water	4	x	x	x	
MSA-SW43D-081312	8/13/2012	1345	SW	Water	4	x	x	x	
MSA-SW44A-081312	8/13/2012	1351	SW	Water	4	x	x	x	
MSA-SW44B-081312	8/13/2012	1356	SW	Water	4	x	x	x	
MSA-SW44C-081312	8/13/2012	1400	SW	Water	4	x	x	x	
MSA-SW44D-081312	8/13/2012	1407	SW	Water	4	x	x	x	
MSA-SW45A-081312	8/13/2012	1414	SW	Water	4	x	x	x	
MSA-SW45B-081312	8/13/2012	1420	SW	Water	4	x	x	x	
MSA-SW45C-081312	8/13/2012	1426	SW	Water	4	x	x	x	
MSA-SW45D-081312	8/13/2012	1430	SW	Water	4	x	x	x	

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	8/13/12 1880	[signature]	TA CANTON	14 AUG 2012 0910
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

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	4 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals	Sample Specific Notes:
EL-SW01A-081312	8/13/2012	1046	SW	AQ	3		x		
EL-SW01B-081312	8/13/2012	1052	SW	AQ	3		x		
EL-SW01C-081312	8/13/2012	1100	SW	AQ	3		x		
EL-SW01D-081312	8/13/2012	1134	SW	AQ	3		x		
TB-081312				AQ	3		x		

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	8/13/12 1500	[signature]	TA CANTON	14 AUG 2012 0910
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 North Canton Sample Receipt Form/Narrative Login # : 14033

Client TETRA TECH Site Name MSA By: Matthew Lenz (Signature)

Cooler Received on 14 AUG 2012 Opened on 14 AUG 2012

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # BACK 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	(X) 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._____°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

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number:_____
North Canton Facility

Client ID		pH	Date	Initials
37A		<2	14AUG2012	MAF
37B		<2		
37C		<2		
37D		<2		
38A		<2		
38B		<2		
38C		<2		
38D		<2		
39A		<2		
39B		<2		
39C		<2		
39D		<2		
40A		<2		
40B		<2		
40C		<2		
40D		<2		
41A		<2		
42A	41B	<2		
43A	41C	<2		
44A	41D	<2		
42A		<2		
42B		<2		
42C		<2		
42D		<2		
43A		<2		
43B		<2		
43C		<2		
43D		<2		
44A		<2		
44B		<2		
44C		<2		
44D		<2		
45A		<2		
45B		<2		
45C		<2		
45D		<2		
EB 1A		<2		
EB 1B		<2		

8/14 M

TestAmerica Multiple Cooler Receipt Form/Narrative Lot Number:_____
North Canton Facility

Client ID	pH	Date	Initials
EIC	<2	14AUG2012	MAF
ETD	<2		

Login Sample Receipt Checklist

Client: Tetra Tech, Inc

Job Number: 240-14133-1

Login Number: 14133
List Number: 1
Creator: Maddux, Ann

List Source: TestAmerica Canton

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	REFER TO COOLER RECEIPT FORM
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	N/A	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the sample IDs on the containers and the COC.	N/A	
Samples are received within Holding Time.	N/A	
Sample containers have legible labels.	N/A	
Containers are not broken or leaking.	N/A	
Sample collection date/times are provided.	N/A	
Appropriate sample containers are used.	N/A	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14133-1

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 #
MSA-SW37A-081312	240-14133-1	98	97	95	91
MSA-SW37B-081312	240-14133-2	95	100	93	91
MSA-SW37C-081312	240-14133-3	96	101	92	88
MSA-SW37D-081312	240-14133-4	97	101	94	89
MSA-SW38A-081312	240-14133-5	97	99	93	89
MSA-SW38B-081312	240-14133-6	97	100	91	90
MSA-SW38C-081312	240-14133-7	96	98	94	88
MSA-SW38D-081312	240-14133-8	97	102	92	88
MSA-SW39A-081312	240-14133-9	93	98	91	88
MSA-SW39B-081312	240-14133-10	96	101	91	88
MSA-SW39C-081312	240-14133-11	94	99	92	89
MSA-SW39D-081312	240-14133-12	96	100	92	88
MSA-SW40A-081312	240-14133-13	96	98	90	90
MSA-SW40B-081312	240-14133-14	95	99	93	91
MSA-SW40C-081312	240-14133-15	95	97	92	89
MSA-SW40D-081312	240-14133-16	94	100	95	91
MSA-SW41A-081312	240-14133-17	95	97	90	89
MSA-SW41B-081312	240-14133-18	95	102	94	89
MSA-SW41C-081312	240-14133-19	98	101	94	89
MSA-SW41D-081312	240-14133-20	96	101	91	86
MSA-SW42A-081312	240-14133-21	119	104	110	97
MSA-SW42B-081312	240-14133-22	119	105	110	99
MSA-SW42C-081312	240-14133-23	117	103	109	97
MSA-SW42D-081312	240-14133-24	116	105	109	97
MSA-SW43A-081312	240-14133-25	116	106	109	98
MSA-SW43B-081312	240-14133-26	118	104	109	95
MSA-SW43C-081312	240-14133-27	115	106	109	94
MSA-SW43D-081312	240-14133-28	114	103	112	97
MSA-SW44A-081312	240-14133-29	117	105	110	95
MSA-SW44B-081312	240-14133-30	114	104	109	97
MSA-SW44C-081312	240-14133-31	115	101	110	98
MSA-SW44D-081312	240-14133-32	120	107	109	97
MSA-SW45A-081312	240-14133-33	118	105	110	99
MSA-SW45B-081312	240-14133-34	119	102	107	97
MSA-SW45C-081312	240-14133-35	121	104	108	95

	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.: 240-14133-1

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 #
MSA-SW45D-081312	240-14133-36	120	103	107	96
EL-SW01A-081312	240-14133-37	120	104	108	99
EL-SW01B-081312	240-14133-38	119	102	109	98
EL-SW01C-081312	240-14133-39	119	109	106	94
EL-SW01D-081312	240-14133-40	121	107	110	95
TB-081213	240-14133-41	116	107	112	98
	MB 240-54545/4	94	99	93	91
	MB 240-54557/4	117	105	111	98
	MB 240-54716/4	113	103	111	94
	LCS 240-54545/5	98	102	95	95
	LCS 240-54557/5	112	106	114	99
	LCS 240-54716/8	119	103	110	98
	240-13970-C-2 MS	120	110	108	98
	240-13970-C-2 MSD	122 X	110	110	102

	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 VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14133-1

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 240-54557/2		1273681	5.33	963569	8.00	438788	10.23
CCVIS 240-54716/2		1183168	5.33	906173	8.00	441381	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.: 240-14133-1

SDG No.:

Sample No.: CCVIS 240-54557/2 Date Analyzed: 08/15/2012 20:41

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX125626.D Heated Purge: (Y/N) N

Calibration ID: 10282

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1273681	5.33	963569	8.00	438788	10.23
UPPER LIMIT		2547362	5.83	1927138	8.50	877576	10.73
LOWER LIMIT		636841	4.83	481785	7.50	219394	9.73
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-54557/5		1273627	5.32	923634	8.00	433738	10.23
CCV 240-54557/3		1235658	5.32	918503	8.00	407887	10.23
MB 240-54557/4		1206393	5.33	910412	8.00	412174	10.23
240-14133-21	MSA-SW42A-081312	1203366	5.33	913704	8.00	420206	10.23
240-14133-22	MSA-SW42B-081312	1177954	5.33	900519	8.00	408453	10.23
240-14133-23	MSA-SW42C-081312	1190923	5.33	887810	8.00	405147	10.23
240-14133-24	MSA-SW42D-081312	1184830	5.33	906953	8.00	408140	10.23
240-14133-25	MSA-SW43A-081312	1184587	5.33	899378	8.00	407812	10.23
240-14133-26	MSA-SW43B-081312	1171915	5.33	886482	8.00	395378	10.23
240-14133-27	MSA-SW43C-081312	1168198	5.33	895953	8.00	397419	10.23
240-14133-28	MSA-SW43D-081312	1189229	5.33	880895	8.00	381563	10.23
240-14133-29	MSA-SW44A-081312	1166089	5.33	883349	8.00	406897	10.23
240-14133-30	MSA-SW44B-081312	1164162	5.33	879961	8.00	398823	10.23
240-14133-31	MSA-SW44C-081312	1171991	5.32	876609	8.00	402001	10.23
240-14133-32	MSA-SW44D-081312	1156814	5.33	885298	8.00	387245	10.23
240-14133-33	MSA-SW45A-081312	1169428	5.33	877510	8.00	406691	10.23
240-14133-34	MSA-SW45B-081312	1183176	5.33	887358	8.00	399793	10.23
240-14133-35	MSA-SW45C-081312	1138376	5.33	885279	8.00	389053	10.23
240-14133-36	MSA-SW45D-081312	1179069	5.33	882471	8.00	410943	10.23
240-14133-37	EL-SW01A-081312	1135504	5.32	863518	8.00	396349	10.23
240-14133-38	EL-SW01B-081312	1150243	5.32	875159	8.00	388834	10.23
240-14133-39	EL-SW01C-081312	1146011	5.33	895309	8.00	395618	10.23
240-14133-40	EL-SW01D-081312	1122589	5.33	861660	8.00	398686	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.: 240-14133-1

SDG No.:

Sample No.: CCVIS 240-54716/2 Date Analyzed: 08/16/2012 17:40

Instrument ID: A3UX12 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX125650.D Heated Purge: (Y/N) N

Calibration ID: 10282

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1183168	5.33	906173	8.00	441381	10.23
UPPER LIMIT		2366336	5.83	1812346	8.50	882762	10.73
LOWER LIMIT		591584	4.83	453087	7.50	220691	9.73
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-54716/3		1158807	5.33	892758	8.00	419621	10.23
MB 240-54716/4		1162558	5.33	857462	8.00	408729	10.23
240-14133-41	TB-081213	1141846	5.33	862628	8.00	400736	10.23
LCS 240-54716/8		1175217	5.33	908499	8.00	429421	10.23
240-13970-C-2 MS		1119659	5.33	881673	8.00	436493	10.23
240-13970-C-2 MSD		1130591	5.33	890760	8.00	418437	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.: 240-14133-1

SDG No.:

Sample No.: STD8260 240-51898/5 Date Analyzed: 07/24/2012 19:34

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX932940.D Heated Purge: (Y/N) N

Calibration ID: 10284

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1300921	5.29	1047183	7.96	537003	10.19
UPPER LIMIT		2601842	5.79	2094366	8.46	1074006	10.69
LOWER LIMIT		650461	4.79	523592	7.46	268502	9.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-51898/14		1323674	5.30	1044972	7.96	550096	10.18
CCVIS 240-54545/2		1423089	5.30	1105696	7.96	584875	10.18

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.: 240-14133-1

SDG No.:

Sample No.: CCVIS 240-54545/2 Date Analyzed: 08/15/2012 17:02

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX933284.D Heated Purge: (Y/N) N

Calibration ID: 10287

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1423089	5.30	1105696	7.96	584875	10.18
UPPER LIMIT		2846178	5.80	2211392	8.46	1169750	10.68
LOWER LIMIT		711545	4.80	552848	7.46	292438	9.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-54545/5		1360868	5.30	1078540	7.96	571201	10.18
CCV 240-54545/3		1351621	5.30	1048825	7.96	536866	10.18
MB 240-54545/4		1318600	5.29	1031829	7.96	516075	10.19
240-14133-1	MSA-SW37A-081312	1299587	5.30	1003708	7.96	482026	10.19
240-14133-2	MSA-SW37B-081312	1272115	5.30	1010151	7.96	481535	10.18
240-14133-3	MSA-SW37C-081312	1289370	5.29	1024875	7.96	492333	10.19
240-14133-4	MSA-SW37D-081312	1270835	5.29	1009722	7.96	500077	10.19
240-14133-5	MSA-SW38A-081312	1287656	5.30	1012199	7.96	482359	10.19
240-14133-6	MSA-SW38B-081312	1283854	5.30	1010066	7.96	492028	10.18
240-14133-7	MSA-SW38C-081312	1278735	5.29	998990	7.96	501850	10.19
240-14133-8	MSA-SW38D-081312	1278744	5.30	1014163	7.96	491716	10.19
240-14133-9	MSA-SW39A-081312	1309863	5.31	1032268	7.96	495330	10.19
240-14133-10	MSA-SW39B-081312	1294003	5.30	1028488	7.96	484797	10.19
240-14133-11	MSA-SW39C-081312	1275885	5.30	995123	7.96	494373	10.18
240-14133-12	MSA-SW39D-081312	1284204	5.30	1027252	7.96	485908	10.19
240-14133-13	MSA-SW40A-081312	1292517	5.30	1027177	7.96	492092	10.19
240-14133-14	MSA-SW40B-081312	1269257	5.30	1000332	7.96	488769	10.18
240-14133-15	MSA-SW40C-081312	1280555	5.30	1011071	7.96	492576	10.19
240-14133-16	MSA-SW40D-081312	1285866	5.29	1016336	7.96	504962	10.19
240-14133-17	MSA-SW41A-081312	1306377	5.30	1021240	7.96	490313	10.18
240-14133-18	MSA-SW41B-081312	1269831	5.29	1012095	7.96	489955	10.19
240-14133-19	MSA-SW41C-081312	1260976	5.29	994424	7.96	499743	10.19
240-14133-20	MSA-SW41D-081312	1247105	5.29	1024187	7.96	472218	10.19

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 V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-14133-1

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
	STDA9 240-33074/10	UX122183.D	02/07/2012	22:48
	STDA9 240-33074/11	UX122184.D	02/07/2012	23:13
	STDA9 240-33074/12	UX122185.D	02/07/2012	23:38
	STDA9 240-33074/13	UX122186.D	02/08/2012	00:03
	STDA9 240-33074/14	UX122187.D	02/08/2012	00:29
	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.: 240-14133-1 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

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.: 240-14133-1 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								
tert-Butyl alcohol	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	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			
Bromochloromethane	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.: 240-14133-1 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			
Bromodichloromethane	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	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			
Dibromochloromethane	0.2270 0.2541	0.2093	0.2319	0.2424	0.2475	Ave		0.2354				6.9		15.0			
1,2-Dibromoethane	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.: 240-14133-1 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			
p-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.: 240-14133-1 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 VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14133-1 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 22:48 Calibration End Date: 02/08/2012 00:29 Calibration ID: 6868

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-33074/10	UX122183.D
Level 2	STDA9 240-33074/11	UX122184.D
Level 3	STDA9 240-33074/12	UX122185.D
Level 4	STDA9 240-33074/13	UX122186.D
Level 5	STDA9 240-33074/14	UX122187.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorofluoromethane	0.4218	0.4512	0.4283	0.4578	0.4660	Ave		0.4450				4.3		15.0			
Ethyl ether	0.1470	0.1560	0.1564	0.1671	0.1603	Ave		0.1573				4.6		15.0			
3-Chloro-1-propene	0.1124	0.1137	0.1106	0.1152	0.1178	Ave		0.1139				2.4		15.0			
Diisopropyl ether	0.1845	0.1854	0.1778	0.1915	0.1940	Ave		0.1866				3.4		15.0			
2-Chloro-1,3-butadiene	0.2444	0.2787	0.2684	0.2987	0.2932	Ave		0.2767				7.8		15.0			
Ethyl-t-butyl ether (ETBE)	0.6502	0.6029	0.5687	0.6324	0.6174	Ave		0.6143				5.0		15.0			
Ethyl acetate	0.1709	0.1369	0.1360	0.1529	0.1389	Ave		0.1471				10.0		15.0			
Propionitrile	0.0198	0.0241	0.0228	0.0256	0.0232	Ave		0.0231				9.2		15.0			
Methacrylonitrile	0.0960	0.0990	0.0972	0.1076	0.0993	Ave		0.0998				4.5		15.0			
Isobutyl alcohol	0.0069	0.0050	0.0054	0.0061	0.0056	Ave		0.0058				12.0		15.0			
Tert-amyl-methyl ether (TAME)	0.6033	0.5718	0.5545	0.6103	0.6058	Ave		0.5891				4.2		15.0			
n-Heptane	0.0187	0.0319	0.0349	0.0401	0.0421	Lin1	-0.031	0.0408							0.9950		0.9900
n-Butanol	0.0060	0.0056	0.0056	0.0066	0.0062	Ave		0.0060				6.9		15.0			
Methyl methacrylate	0.1745	0.1432	0.1431	0.1561	0.1464	Ave		0.1526				8.7		15.0			
2-Nitropropane	0.0316	0.0251	0.0255	0.0283	0.0265	Ave		0.0274				9.7		15.0			
Cyclohexanone	0.0294	0.0278	0.0197	0.0239	0.0282	Ave		0.0258				16.0	*	15.0			
1,2,3-Trimethylbenzene	2.2419	2.2082	2.0039	2.2556	2.2920	Ave		2.2003				5.2		15.0			
2-Methylnaphthalene	0.1662	0.1377	0.2342	0.3585	0.2812	Ave		0.2355				38.0	*	15.0			
n-Butyl acetate	0.3761	0.3079	0.3151	0.3550	0.3269	Ave		0.3362				8.5		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
no Samples

Lab Name: TestAmerica Canton Job No.: 240-14133-1

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: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.1574	0.1692		21.5	20.0	7.5	50.0
Chloromethane	Ave	0.2632	0.2739	0.1000	20.8	20.0	4.1	50.0
Vinyl chloride	Ave	0.3139	0.3135		20.0	20.0	-0.1	20.0
Bromomethane	Ave	0.1774	0.1698		19.1	20.0	-4.3	50.0
Chloroethane	Ave	0.1983	0.1944		19.6	20.0	-2.0	50.0
Trichlorofluoromethane	Lin1		0.2929		21.1	20.0	5.5	50.0
Acrolein	Ave	0.0214	0.0384		108	60.0	79.8*	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1933	0.2221		23.0	20.0	14.9	50.0
1,1-Dichloroethene	Ave	0.3664	0.4054		22.1	20.0	10.6	20.0
Acetone	Lin1		0.0543		40.6	40.0	1.5	50.0
Iodomethane	Ave	0.3632	0.3757		20.7	20.0	3.4	50.0
Carbon disulfide	Ave	0.7762	0.7965		20.5	20.0	2.6	50.0
Acetonitrile	Lin1		0.0256		60.7	60.0	1.2	50.0
Methyl acetate	Lin1		0.1372		19.0	20.0	-5.0	50.0
Methylene Chloride	Lin1		0.3132		21.0	20.0	5.0	50.0
tert-Butyl alcohol	Lin1		0.0183		467	400	16.7	50.0
Acrylonitrile	Lin1		0.0765		66.4	60.0	10.7	50.0
Methyl tert-butyl ether	Ave	0.6154	0.6332		20.6	20.0	2.9	50.0
trans-1,2-Dichloroethene	Ave	0.2849	0.2992		21.0	20.0	5.0	50.0
Hexane	Ave	0.1765	0.1810		20.5	20.0	2.6	20.0
1,1-Dichloroethane	Ave	0.3611	0.3771	0.1000	20.9	20.0	4.4	50.0
Vinyl acetate	Ave	0.0312	0.0542		34.7	20.0	73.5*	50.0
2,2-Dichloropropane	Ave	0.1653	0.1655		20.0	20.0	0.1	50.0
2-Butanone	Lin1		0.0234		42.9	40.0	7.3	50.0
cis-1,2-Dichloroethene	Ave	0.3048	0.3122		20.5	20.0	2.4	50.0
Bromochloromethane	Ave	0.1816	0.1748		19.3	20.0	-3.7	50.0
Tetrahydrofuran	Lin1		0.0523		20.7	20.0	3.5	50.0
Chloroform	Ave	0.3503	0.3651		20.8	20.0	4.2	20.0
1,1,1-Trichloroethane	Ave	0.2285	0.2277		19.9	20.0	-0.3	50.0
Cyclohexane	Ave	0.2866	0.2753		19.2	20.0	-3.9	50.0
1,1-Dichloropropene	Ave	0.2617	0.2731		20.9	20.0	4.4	50.0
Carbon tetrachloride	Ave	0.1673	0.1766		21.1	20.0	5.5	50.0
1,2-Dichloroethane	Ave	0.2543	0.2648		20.8	20.0	4.1	50.0
Benzene	Ave	0.8969	0.8696		19.4	20.0	-3.0	50.0
Trichloroethene	Ave	0.2154	0.2144		19.9	20.0	-0.4	50.0
Methylcyclohexane	Ave	0.1795	0.1650		18.4	20.0	-8.1	50.0
1,2-Dichloropropane	Ave	0.2093	0.2178		20.8	20.0	4.0	20.0
Dibromomethane	Ave	0.1269	0.1324		20.9	20.0	4.3	50.0
Bromodichloromethane	Ave	0.2584	0.2544		19.7	20.0	-1.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1312	0.1413		21.5	20.0	7.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

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: 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	0.3580	0.3448		19.3	20.0	-3.7	50.0
4-Methyl-2-pentanone	Lin1		0.1714		44.3	40.0	10.8	50.0
Toluene	Ave	1.223	1.217		19.9	20.0	-0.5	20.0
trans-1,3-Dichloropropene	Ave	0.4302	0.4304		20.0	20.0	0.0	50.0
1,1,2-Trichloroethane	Ave	0.2500	0.2492		19.9	20.0	-0.3	50.0
Tetrachloroethene	Ave	0.2370	0.2279		19.2	20.0	-3.8	50.0
1,3-Dichloropropane	Ave	0.4589	0.4792		20.9	20.0	4.4	50.0
2-Hexanone	Ave	0.1537	0.1607		41.8	40.0	4.5	50.0
Dibromochloromethane	Ave	0.2354	0.2245		19.1	20.0	-4.6	50.0
1,2-Dibromoethane	Ave	0.2558	0.2585		20.2	20.0	1.1	50.0
Chlorobenzene	Ave	0.8070	0.8029	0.3000	19.9	20.0	-0.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2517	0.2443		19.4	20.0	-2.9	50.0
Ethylbenzene	Ave	0.3681	0.3810		20.7	20.0	3.5	20.0
m-Xylene & p-Xylene	Ave	0.4821	0.4747		39.4	40.0	-1.5	50.0
o-Xylene	Ave	0.4971	0.4838		19.5	20.0	-2.7	50.0
Styrene	Ave	0.9268	0.9264		20.0	20.0	-0.0	50.0
Bromoform	Ave	0.1546	0.1439	0.1000	18.6	20.0	-6.9	50.0
Isopropylbenzene	Ave	1.093	1.096		20.1	20.0	0.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8260	0.7638	0.3000	18.5	20.0	-7.5	50.0
Bromobenzene	Ave	0.7698	0.7017		18.2	20.0	-8.8	50.0
1,2,3-Trichloropropane	Ave	0.2482	0.2560		20.6	20.0	3.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2312	0.2149		37.2	40.0	-7.0	50.0
n-Propylbenzene	Ave	0.6701	0.6308		18.8	20.0	-5.9	50.0
2-Chlorotoluene	Ave	0.6402	0.5835		18.2	20.0	-8.9	50.0
1,3,5-Trimethylbenzene	Ave	2.150	1.957		18.2	20.0	-9.0	50.0
4-Chlorotoluene	Ave	0.6834	0.6460		18.9	20.0	-5.5	50.0
tert-Butylbenzene	Ave	1.770	1.626		18.4	20.0	-8.1	50.0
1,2,4-Trimethylbenzene	Ave	2.262	2.039		18.0	20.0	-9.9	50.0
sec-Butylbenzene	Ave	2.559	2.273		17.8	20.0	-11.2	50.0
1,3-Dichlorobenzene	Ave	1.310	1.202		18.3	20.0	-8.3	50.0
p-Isopropyltoluene	Ave	2.137	2.018		18.9	20.0	-5.6	50.0
1,4-Dichlorobenzene	Ave	1.385	1.257		18.2	20.0	-9.2	50.0
n-Butylbenzene	Ave	1.946	1.729		17.8	20.0	-11.2	50.0
1,2-Dichlorobenzene	Ave	1.251	1.157		18.5	20.0	-7.5	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1218	0.1240		20.4	20.0	1.8	50.0
1,2,4-Trichlorobenzene	Ave	0.6371	0.5481		17.2	20.0	-14.0	50.0
Hexachlorobutadiene	Ave	0.3109	0.2588		16.7	20.0	-16.7	50.0
Naphthalene	Ave	1.434	1.435		20.0	20.0	0.0	50.0
1,2,3-Trichlorobenzene	Ave	0.4111	0.3983		19.4	20.0	-3.1	50.0
Dibromofluoromethane (Surr)	Ave	0.2001	0.2190		21.9	20.0	9.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2323	0.2433		20.9	20.0	4.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

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: 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	1.114	1.228		22.1	20.0	10.3	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4374	0.4605		21.1	20.0	5.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

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: 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	0.1573	0.1810		23.0	20.0	15.0	50.0
Diisopropyl ether	Ave	0.1866	0.1986		21.3	20.0	6.4	50.0
Isobutyl alcohol	Ave	0.0058	0.0070		1200	1000	19.8	50.0
Cyclohexanone	Ave	0.0258	0.0235		365	400	-8.8	50.0
1,2,3-Trimethylbenzene	Ave	2.200	2.230		20.3	20.0	1.3	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab File ID: BFB1945.D BFB Injection Date: 08/15/2012

Instrument ID: A3UX12 BFB Injection Time: 20:17

Analysis Batch No.: 54557

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.8	
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	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	83.0	
175	5.0 - 9.0 % of mass 174	6.4	(7.7)1
176	95.0 - 101.0 % of mass 174	81.1	(97.7)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
	CCVIS 240-54557/2	UX125626.D	08/15/2012	20:41
	LCS 240-54557/5	UX125627.D	08/15/2012	21:06
	CCV 240-54557/3	UX125628.D	08/15/2012	21:29
	MB 240-54557/4	UX125629.D	08/15/2012	21:54
MSA-SW42A-081312	240-14133-21	UX125630.D	08/15/2012	22:19
MSA-SW42B-081312	240-14133-22	UX125631.D	08/15/2012	22:43
MSA-SW42C-081312	240-14133-23	UX125632.D	08/15/2012	23:08
MSA-SW42D-081312	240-14133-24	UX125633.D	08/15/2012	23:33
MSA-SW43A-081312	240-14133-25	UX125634.D	08/15/2012	23:59
MSA-SW43B-081312	240-14133-26	UX125635.D	08/16/2012	00:24
MSA-SW43C-081312	240-14133-27	UX125636.D	08/16/2012	00:50
MSA-SW43D-081312	240-14133-28	UX125637.D	08/16/2012	01:15
MSA-SW44A-081312	240-14133-29	UX125638.D	08/16/2012	01:41
MSA-SW44B-081312	240-14133-30	UX125639.D	08/16/2012	02:06
MSA-SW44C-081312	240-14133-31	UX125640.D	08/16/2012	02:31
MSA-SW44D-081312	240-14133-32	UX125641.D	08/16/2012	02:57
MSA-SW45A-081312	240-14133-33	UX125642.D	08/16/2012	03:22
MSA-SW45B-081312	240-14133-34	UX125643.D	08/16/2012	03:48
MSA-SW45C-081312	240-14133-35	UX125644.D	08/16/2012	04:13
MSA-SW45D-081312	240-14133-36	UX125645.D	08/16/2012	04:39
EL-SW01A-081312	240-14133-37	UX125646.D	08/16/2012	05:04
EL-SW01B-081312	240-14133-38	UX125647.D	08/16/2012	05:29
EL-SW01C-081312	240-14133-39	UX125648.D	08/16/2012	05:55
EL-SW01D-081312	240-14133-40	UX125649.D	08/16/2012	06:20

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54557/2 Calibration Date: 08/15/2012 20:41

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: UX125626.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	0.1574	0.3024		38.4	20.0	92.1*	50.0
Chloromethane	Ave	0.2632	0.3051	0.1000	23.2	20.0	15.9	50.0
Vinyl chloride	Ave	0.3139	0.3543		22.6	20.0	12.9	20.0
Bromomethane	Ave	0.1774	0.2152		24.3	20.0	21.3	50.0
Chloroethane	Ave	0.1983	0.2145		21.6	20.0	8.2	50.0
Trichlorofluoromethane	Lin1		0.3526		25.3	20.0	26.6	50.0
Acrolein	Ave	0.0214	0.0192		180	200	-10.1	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1933	0.2335		24.2	20.0	20.8	50.0
1,1-Dichloroethene	Ave	0.3664	0.3641		19.9	20.0	-0.6	20.0
Acetone	Lin1		0.0481		35.1	40.0	-12.2	50.0
Iodomethane	Ave	0.3632	0.4175		23.0	20.0	14.9	50.0
Carbon disulfide	Ave	0.7762	0.8355		21.5	20.0	7.6	50.0
Acetonitrile	Lin1		0.0230		191	200	-4.6	50.0
Methyl acetate	Lin1		0.1357		38.6	40.0	-3.4	50.0
Methylene Chloride	Lin1		0.2976		19.9	20.0	-0.3	50.0
tert-Butyl alcohol	Lin1		0.0147		373	400	-6.7	50.0
Acrylonitrile	Lin1		0.0703		40.5	40.0	1.2	50.0
Methyl tert-butyl ether	Ave	0.6154	0.5656		18.4	20.0	-8.1	50.0
trans-1,2-Dichloroethene	Ave	0.2849	0.2534		17.8	20.0	-11.1	50.0
Hexane	Ave	0.1765	0.1544		17.5	20.0	-12.6	20.0
1,1-Dichloroethane	Ave	0.3611	0.3221	0.1000	17.8	20.0	-10.8	50.0
Vinyl acetate	Ave	0.0312	0.0332		21.3	20.0	6.4	50.0
2,2-Dichloropropane	Ave	0.1653	0.1602		19.4	20.0	-3.1	50.0
2-Butanone	Lin1		0.0216		39.7	40.0	-0.9	50.0
cis-1,2-Dichloroethene	Ave	0.3048	0.2696		17.7	20.0	-11.5	50.0
Bromochloromethane	Ave	0.1816	0.1771		19.5	20.0	-2.5	50.0
Tetrahydrofuran	Lin1		0.0438		17.2	20.0	-14.0	50.0
Chloroform	Ave	0.3503	0.3204		18.3	20.0	-8.5	20.0
1,1,1-Trichloroethane	Ave	0.2285	0.2468		21.6	20.0	8.0	50.0
Cyclohexane	Ave	0.2866	0.2654		18.5	20.0	-7.4	50.0
1,1-Dichloropropene	Ave	0.2617	0.2537		19.4	20.0	-3.0	50.0
Carbon tetrachloride	Ave	0.1673	0.2162		25.8	20.0	29.2	50.0
1,2-Dichloroethane	Ave	0.2543	0.2365		18.6	20.0	-7.0	50.0
Benzene	Ave	0.8969	0.8228		18.3	20.0	-8.3	50.0
Trichloroethene	Ave	0.2154	0.2048		19.0	20.0	-4.9	50.0
Methylcyclohexane	Ave	0.1795	0.1470		16.4	20.0	-18.1	50.0
1,2-Dichloropropane	Ave	0.2093	0.1886		18.0	20.0	-9.9	20.0
1,4-Dioxane	Ave	0.0022	0.0025		1140	1000	14.3	50.0
Dibromomethane	Ave	0.1269	0.1338		21.1	20.0	5.5	50.0
Bromodichloromethane	Ave	0.2584	0.2497		19.3	20.0	-3.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54557/2 Calibration Date: 08/15/2012 20:41

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: UX125626.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	0.1312	0.1110		33.8	40.0	-15.4	50.0
cis-1,3-Dichloropropene	Ave	0.3580	0.3230		18.0	20.0	-9.8	50.0
4-Methyl-2-pentanone	Lin1		0.1411		36.4	40.0	-9.0	50.0
Toluene	Ave	1.223	1.135		18.6	20.0	-7.1	20.0
trans-1,3-Dichloropropene	Ave	0.4302	0.3647		17.0	20.0	-15.2	50.0
Ethyl methacrylate	Ave	0.3748	0.3237		17.3	20.0	-13.6	50.0
1,1,2-Trichloroethane	Ave	0.2500	0.2362		18.9	20.0	-5.5	50.0
Tetrachloroethene	Ave	0.2370	0.2354		19.9	20.0	-0.7	50.0
1,3-Dichloropropane	Ave	0.4589	0.4264		18.6	20.0	-7.1	50.0
2-Hexanone	Ave	0.1537	0.1271		33.1	40.0	-17.3	50.0
Dibromochloromethane	Ave	0.2354	0.2404		20.4	20.0	2.1	50.0
1,2-Dibromoethane	Ave	0.2558	0.2371		18.5	20.0	-7.3	50.0
Chlorobenzene	Ave	0.8070	0.7595	0.3000	18.8	20.0	-5.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2517	0.2582		20.5	20.0	2.6	50.0
Ethylbenzene	Ave	0.3681	0.3576		19.4	20.0	-2.9	20.0
m-Xylene & p-Xylene	Ave	0.4821	0.4404		36.5	40.0	-8.7	50.0
o-Xylene	Ave	0.4971	0.4519		18.2	20.0	-9.1	50.0
Styrene	Ave	0.9268	0.8321		18.0	20.0	-10.2	50.0
Bromoform	Ave	0.1546	0.1438	0.1000	18.6	20.0	-7.0	50.0
Isopropylbenzene	Ave	1.093	0.9649		17.7	20.0	-11.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8260	0.6768	0.3000	16.4	20.0	-18.1	50.0
Bromobenzene	Ave	0.7698	0.6853		17.8	20.0	-11.0	50.0
1,2,3-Trichloropropane	Ave	0.2482	0.2236		18.0	20.0	-9.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2312	0.1275		11.0	20.0	-44.9	50.0
n-Propylbenzene	Ave	0.6701	0.5800		17.3	20.0	-13.4	50.0
2-Chlorotoluene	Ave	0.6402	0.5495		17.2	20.0	-14.2	50.0
1,3,5-Trimethylbenzene	Ave	2.150	1.759		16.4	20.0	-18.2	50.0
4-Chlorotoluene	Ave	0.6834	0.6139		18.0	20.0	-10.2	50.0
tert-Butylbenzene	Ave	1.770	1.627		18.4	20.0	-8.1	50.0
1,2,4-Trimethylbenzene	Ave	2.262	1.853		16.4	20.0	-18.1	50.0
sec-Butylbenzene	Ave	2.559	2.155		16.8	20.0	-15.8	50.0
1,3-Dichlorobenzene	Ave	1.310	1.208		18.4	20.0	-7.8	50.0
p-Isopropyltoluene	Ave	2.137	1.873		17.5	20.0	-12.4	50.0
1,4-Dichlorobenzene	Ave	1.385	1.259		18.2	20.0	-9.1	50.0
n-Butylbenzene	Ave	1.946	1.634		16.8	20.0	-16.1	50.0
1,2-Dichlorobenzene	Ave	1.251	1.199		19.2	20.0	-4.2	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1218	0.1253		20.6	20.0	2.9	50.0
1,3,5-Trichlorobenzene	Ave	0.8158	0.7440		18.2	20.0	-8.8	50.0
1,2,4-Trichlorobenzene	Ave	0.6371	0.5405		17.0	20.0	-15.2	50.0
Hexachlorobutadiene	Ave	0.3109	0.2974		19.1	20.0	-4.3	50.0
Naphthalene	Ave	1.434	1.097		15.3	20.0	-23.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54557/2 Calibration Date: 08/15/2012 20:41

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: UX125626.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	0.4111	0.3190		15.5	20.0	-22.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2001	0.2325		23.2	20.0	16.2	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2323	0.2518		21.7	20.0	8.4	50.0
Toluene-d8 (Surr)	Ave	1.114	1.233		22.1	20.0	10.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4374	0.4172		19.1	20.0	-4.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCV 240-54557/3 Calibration Date: 08/15/2012 21:29

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: UX125628.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	0.4450	0.4957		22.3	20.0	11.4	50.0
Ethyl ether	Ave	0.1573	0.1622		20.6	20.0	3.1	50.0
3-Chloro-1-propene	Ave	0.1139	0.1210		21.2	20.0	6.2	50.0
Diisopropyl ether	Ave	0.1866	0.1988		106	100	6.5	50.0
2-Chloro-1,3-butadiene	Ave	0.2767	0.2751		19.9	20.0	-0.6	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6143	0.5705		18.6	20.0	-7.1	50.0
Ethyl acetate	Ave	0.1471	0.1345		36.6	40.0	-8.6	50.0
Propionitrile	Ave	0.0231	0.0243		42.0	40.0	5.0	50.0
Methacrylonitrile	Ave	0.0998	0.0968		19.4	20.0	-3.1	50.0
Isobutyl alcohol	Ave	0.0058	0.0048		331	400	-17.2	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5891	0.5884		20.0	20.0	-0.1	50.0
n-Heptane	Lin1		0.0430		21.8	20.0	9.1	50.0
n-Butanol	Ave	0.0060	0.0049		324	400	-18.9	50.0
Methyl methacrylate	Ave	0.1526	0.1322		17.3	20.0	-13.4	50.0
2-Nitropropane	Ave	0.0274	0.0312		45.5	40.0	13.7	50.0
Cyclohexanone	Ave	0.0258	0.0490		380	200	90.1*	50.0
1,2,3-Trimethylbenzene	Ave	2.200	2.148		19.5	20.0	-2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCV 240-54557/3 Calibration Date: 08/15/2012 21:29

Instrument ID: A3UX12 Calib Start Date: 07/24/2012 17:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 19:20

Lab File ID: UX125628.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-Methylnaphthalene	Lin		0.1022		22.0	40.0	-44.9	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab File ID: UX125629.D Lab Sample ID: MB 240-54557/4

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX12 Date Analyzed: 08/15/2012 21:54

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 240-54557/5	UX125627.D	08/15/2012 21:06
MSA-SW42A-081312	240-14133-21	UX125630.D	08/15/2012 22:19
MSA-SW42B-081312	240-14133-22	UX125631.D	08/15/2012 22:43
MSA-SW42C-081312	240-14133-23	UX125632.D	08/15/2012 23:08
MSA-SW42D-081312	240-14133-24	UX125633.D	08/15/2012 23:33
MSA-SW43A-081312	240-14133-25	UX125634.D	08/15/2012 23:59
MSA-SW43B-081312	240-14133-26	UX125635.D	08/16/2012 00:24
MSA-SW43C-081312	240-14133-27	UX125636.D	08/16/2012 00:50
MSA-SW43D-081312	240-14133-28	UX125637.D	08/16/2012 01:15
MSA-SW44A-081312	240-14133-29	UX125638.D	08/16/2012 01:41
MSA-SW44B-081312	240-14133-30	UX125639.D	08/16/2012 02:06
MSA-SW44C-081312	240-14133-31	UX125640.D	08/16/2012 02:31
MSA-SW44D-081312	240-14133-32	UX125641.D	08/16/2012 02:57
MSA-SW45A-081312	240-14133-33	UX125642.D	08/16/2012 03:22
MSA-SW45B-081312	240-14133-34	UX125643.D	08/16/2012 03:48
MSA-SW45C-081312	240-14133-35	UX125644.D	08/16/2012 04:13
MSA-SW45D-081312	240-14133-36	UX125645.D	08/16/2012 04:39
EL-SW01A-081312	240-14133-37	UX125646.D	08/16/2012 05:04
EL-SW01B-081312	240-14133-38	UX125647.D	08/16/2012 05:29
EL-SW01C-081312	240-14133-39	UX125648.D	08/16/2012 05:55
EL-SW01D-081312	240-14133-40	UX125649.D	08/16/2012 06:20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-54557/4

Matrix: Water Lab File ID: UX125629.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 21:54

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.: 54557 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	0.640	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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-54557/4

Matrix: Water Lab File ID: UX125629.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 21:54

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.: 54557 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.19		1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	0.665	J	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	0.242	J	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-54557/4

Matrix: Water Lab File ID: UX125629.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 21:54

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.: 54557 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)	105		63-129
460-00-4	4-Bromofluorobenzene (Surr)	98		66-117
1868-53-7	Dibromofluoromethane (Surr)	117		75-121
2037-26-5	Toluene-d8 (Surr)	111		74-115

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX125627.D

Lab ID: LCS 240-54557/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	20.4	102	72-116	
1,1,1-Trichloroethane	20.0	22.0	110	74-118	
1,1,2,2-Tetrachloroethane	20.0	16.8	84	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	26.0	130	74-151	
1,1-Dichloroethane	20.0	18.9	95	82-115	
1,1-Dichloroethene	20.0	20.8	104	78-131	
1,1-Dichloropropene	20.0	20.0	100	83-114	
1,2,3-Trichlorobenzene	20.0	19.8	99	54-126	
1,2,3-Trichloropropane	20.0	18.9	94	73-129	
1,2,3-Trimethylbenzene	20.0	19.0	95	70-130	
1,2,4-Trichlorobenzene	20.0	18.4	92	48-135	
1,2,4-Trimethylbenzene	20.0	17.2	86	76-120	
1,2-Dibromo-3-Chloropropane	20.0	20.9	105	42-136	
1,2-Dibromoethane	20.0	19.2	96	79-113	
1,2-Dichlorobenzene	20.0	19.7	98	81-110	
1,2-Dichloroethane	20.0	18.8	94	71-127	
1,2-Dichloropropane	20.0	18.0	90	81-115	
1,3-Dichlorobenzene	20.0	19.1	95	80-110	
1,3-Dichloropropane	20.0	19.9	99	79-116	
1,4-Dichlorobenzene	20.0	18.7	94	82-110	
2,2-Dichloropropane	20.0	20.8	104	50-129	
2-Butanone	40.0	40.0	100	60-126	
2-Chloroethyl vinyl ether	20.0	16.2	81	52-131	
2-Chlorotoluene	20.0	18.1	91	76-116	
2-Hexanone	40.0	32.9	82	55-133	
4-Chlorotoluene	20.0	18.9	95	77-115	
4-Methyl-2-pentanone	40.0	34.4	86	63-128	
Acetone	40.0	33.5	84	43-136	
Benzene	20.0	19.1	95	83-112	
Bromobenzene	20.0	18.8	94	76-115	
Bromochloromethane	20.0	16.2	81	77-120	
Bromodichloromethane	20.0	19.2	96	72-121	
Bromoform	20.0	19.6	98	40-131	
Bromomethane	20.0	21.6	108	11-185	
Carbon disulfide	20.0	22.2	111	62-142	
Carbon tetrachloride	20.0	26.5	132	66-128	*
Chlorobenzene	20.0	19.6	98	85-110	
Chloroethane	20.0	19.7	98	25-153	
Chloroform	20.0	18.8	94	79-117	
Chloromethane	20.0	21.9	109	44-126	
cis-1,2-Dichloroethene	20.0	18.3	91	80-113	

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.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX125627.D

Lab ID: LCS 240-54557/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	20.0	17.5	88	61-115	
Dibromochloromethane	20.0	20.7	104	64-119	
Dibromomethane	20.0	22.0	110	81-120	
Dichlorodifluoromethane	20.0	31.4	157	19-129	*
Diisopropyl ether	20.0	20.1	101	77-118	
Ethylbenzene	20.0	20.1	100	83-112	
Hexachlorobutadiene	20.0	20.5	102	36-134	
Isopropylbenzene	20.0	18.5	92	75-114	
Methyl tert-butyl ether	20.0	18.4	92	52-144	
Methylene Chloride	20.0	20.2	101	66-131	
m-Xylene & p-Xylene	40.0	39.3	98	83-113	
Naphthalene	20.0	16.5	82	32-141	
n-Butylbenzene	20.0	17.9	90	66-125	
n-Propylbenzene	20.0	18.5	93	74-121	
o-Xylene	20.0	19.4	97	83-113	
p-Isopropyltoluene	20.0	19.5	97	74-120	
sec-Butylbenzene	20.0	17.6	88	70-117	
Styrene	20.0	19.1	95	79-114	
tert-Butyl alcohol	400	384	96	70-130	
tert-Butylbenzene	20.0	18.4	92	71-115	
Tetrachloroethene	20.0	20.5	102	79-114	
Toluene	20.0	19.9	99	84-111	
trans-1,2-Dichloroethene	20.0	17.9	89	83-117	
trans-1,3-Dichloropropene	20.0	18.0	90	58-117	
Trichloroethene	20.0	20.3	102	76-117	
Trichlorofluoromethane	20.0	26.2	131	49-157	
Vinyl acetate	20.0	27.6	138	46-161	
Vinyl chloride	20.0	20.9	104	53-127	
Xylenes, Total	60.0	58.7	98	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.: 240-14133-1

SDG No.:

Lab File ID: BFB1946.D BFB Injection Date: 08/16/2012

Instrument ID: A3UX12 BFB Injection Time: 17:09

Analysis Batch No.: 54716

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.4	
75	30.0 - 60.0 % of mass 95	45.0	
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	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	86.1	
175	5.0 - 9.0 % of mass 174	6.8	(7.9)1
176	95.0 - 101.0 % of mass 174	82.7	(96.1)1
177	5.0 - 9.0 % of mass 176	5.6	(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 240-54716/2	UX125650.D	08/16/2012	17:40
	CCV 240-54716/3	UX125652.D	08/16/2012	18:29
	MB 240-54716/4	UX125653.D	08/16/2012	18:54
TB-081213	240-14133-41	UX125654.D	08/16/2012	19:20
	LCS 240-54716/8	UX125656.D	08/16/2012	20:11
	240-13970-C-2 MS	UX125674.D	08/17/2012	03:46
	240-13970-C-2 MSD	UX125675.D	08/17/2012	04:11

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54716/2 Calibration Date: 08/16/2012 17:40

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: UX125650.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	0.1574	0.3069		39.0	20.0	95.0*	50.0
Chloromethane	Ave	0.2632	0.3149	0.1000	23.9	20.0	19.7	50.0
Vinyl chloride	Ave	0.3139	0.3575		22.8	20.0	13.9	20.0
Bromomethane	Ave	0.1774	0.2276		25.6	20.0	28.2	50.0
Chloroethane	Ave	0.1983	0.2345		23.7	20.0	18.3	50.0
Trichlorofluoromethane	Lin1		0.3773		27.1	20.0	35.3	50.0
Acrolein	Ave	0.0214	0.0182		170	200	-15.0	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Ave	0.1933	0.2342		24.2	20.0	21.1	50.0
1,1-Dichloroethene	Ave	0.3664	0.3560		19.4	20.0	-2.8	20.0
Acetone	Lin1		0.0506 ✓		37.3	40.0	-6.7	50.0
Iodomethane	Ave	0.3632	0.4415		24.3	20.0	21.5	50.0
Carbon disulfide	Ave	0.7762	0.8648		22.3	20.0	11.4	50.0
Acetonitrile	Lin1		0.0233		193	200	-3.6	50.0
Methyl acetate	Lin1		0.1394		39.7	40.0	-0.7	50.0
Methylene Chloride	Lin1		0.2947		19.7	20.0	-1.3	50.0
tert-Butyl alcohol	Lin1		0.0163		415	400	3.7	50.0
Acrylonitrile	Lin1		0.0712		41.0	40.0	2.5	50.0
Methyl tert-butyl ether	Ave	0.6154	0.5914		19.2	20.0	-3.9	50.0
trans-1,2-Dichloroethene	Ave	0.2849	0.2495		17.5	20.0	-12.4	50.0
Hexane	Ave	0.1765	0.1437		16.3	20.0	-18.6	20.0
1,1-Dichloroethane	Ave	0.3611	0.3224	0.1000	17.9	20.0	-10.7	50.0
Vinyl acetate	Ave	0.0312	0.0307		19.7	20.0	-1.6	50.0
2,2-Dichloropropane	Ave	0.1653	0.1493		18.1	20.0	-9.7	50.0
2-Butanone	Lin1		0.0229		42.0	40.0	5.0	50.0
cis-1,2-Dichloroethene	Ave	0.3048	0.2703		17.7	20.0	-11.3	50.0
Bromochloromethane	Ave	0.1816	0.1695		18.7	20.0	-6.7	50.0
Tetrahydrofuran	Lin1		0.0445		17.5	20.0	-12.7	50.0
Chloroform	Ave	0.3503	0.3283		18.7	20.0	-6.3	20.0
1,1,1-Trichloroethane	Ave	0.2285	0.2533		22.2	20.0	10.9	50.0
Cyclohexane	Ave	0.2866	0.2492		17.4	20.0	-13.0	50.0
1,1-Dichloropropene	Ave	0.2617	0.2622		20.0	20.0	0.2	50.0
Carbon tetrachloride	Ave	0.1673	0.2132		25.5	20.0	27.4	50.0
1,2-Dichloroethane	Ave	0.2543	0.2356		18.5	20.0	-7.4	50.0
Benzene	Ave	0.8969	0.8318		18.5	20.0	-7.3	50.0
Trichloroethene	Ave	0.2154	0.2250		20.9	20.0	4.5	50.0
Methylcyclohexane	Ave	0.1795	0.1361		15.2	20.0	-24.2	50.0
1,2-Dichloropropane	Ave	0.2093	0.1902		18.2	20.0	-9.1	20.0
1,4-Dioxane	Ave	0.0022	0.0028		1300	1000	30.0	50.0
Dibromomethane	Ave	0.1269	0.1492		23.5	20.0	17.6	50.0
Bromodichloromethane	Ave	0.2584	0.2490		19.3	20.0	-3.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54716/2 Calibration Date: 08/16/2012 17:40

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: UX125650.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	0.1312	0.1117		34.0	40.0	-14.9	50.0
cis-1,3-Dichloropropene	Ave	0.3580	0.3105		17.3	20.0	-13.3	50.0
4-Methyl-2-pentanone	Lin1		0.1402		36.2	40.0	-9.6	50.0
Toluene	Ave	1.223	1.155		18.9	20.0	-5.5	20.0
trans-1,3-Dichloropropene	Ave	0.4302	0.3549		16.5	20.0	-17.5	50.0
Ethyl methacrylate	Ave	0.3748	0.3439		18.3	20.0	-8.3	50.0
1,1,2-Trichloroethane	Ave	0.2500	0.2437		19.5	20.0	-2.5	50.0
Tetrachloroethene	Ave	0.2370	0.2413		20.4	20.0	1.8	50.0
1,3-Dichloropropane	Ave	0.4589	0.4471		19.5	20.0	-2.6	50.0
2-Hexanone	Ave	0.1537	0.1272		33.1	40.0	-17.2	50.0
Dibromochloromethane	Ave	0.2354	0.2474		21.0	20.0	5.1	50.0
1,2-Dibromoethane	Ave	0.2558	0.2509		19.6	20.0	-1.9	50.0
Chlorobenzene	Ave	0.8070	0.7815	0.3000	19.4	20.0	-3.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.2517	0.2392		19.0	20.0	-4.9	50.0
Ethylbenzene	Ave	0.3681	0.3544		19.3	20.0	-3.7	20.0
m-Xylene & p-Xylene	Ave	0.4821	0.4587		38.1	40.0	-4.9	50.0
o-Xylene	Ave	0.4971	0.4524		18.2	20.0	-9.0	50.0
Styrene	Ave	0.9268	0.8476		18.3	20.0	-8.5	50.0
Bromoform	Ave	0.1546	0.1576	0.1000	20.4	20.0	1.9	50.0
Isopropylbenzene	Ave	1.093	0.9603		17.6	20.0	-12.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.8260	0.7047	0.3000	17.1	20.0	-14.7	50.0
Bromobenzene	Ave	0.7698	0.6401		16.6	20.0	-16.9	50.0
1,2,3-Trichloropropane	Ave	0.2482	0.2417		19.5	20.0	-2.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2312	0.1229		10.6	20.0	-46.9	50.0
n-Propylbenzene	Ave	0.6701	0.5287		15.8	20.0	-21.1	50.0
2-Chlorotoluene	Ave	0.6402	0.5242		16.4	20.0	-18.1	50.0
1,3,5-Trimethylbenzene	Ave	2.150	1.603		14.9	20.0	-25.5	50.0
4-Chlorotoluene	Ave	0.6834	0.5962		17.5	20.0	-12.7	50.0
tert-Butylbenzene	Ave	1.770	1.400		15.8	20.0	-20.9	50.0
1,2,4-Trimethylbenzene	Ave	2.262	1.740		15.4	20.0	-23.1	50.0
sec-Butylbenzene	Ave	2.559	1.952		15.3	20.0	-23.7	50.0
1,3-Dichlorobenzene	Ave	1.310	1.125		17.2	20.0	-14.2	50.0
p-Isopropyltoluene	Ave	2.137	1.731		16.2	20.0	-19.0	50.0
1,4-Dichlorobenzene	Ave	1.385	1.206		17.4	20.0	-12.9	50.0
n-Butylbenzene	Ave	1.946	1.457		15.0	20.0	-25.2	50.0
1,2-Dichlorobenzene	Ave	1.251	1.162		18.6	20.0	-7.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1218	0.1198		19.7	20.0	-1.6	50.0
1,3,5-Trichlorobenzene	Ave	0.8158	0.7053		17.3	20.0	-13.5	50.0
1,2,4-Trichlorobenzene	Ave	0.6371	0.5605		17.6	20.0	-12.0	50.0
Hexachlorobutadiene	Ave	0.3109	0.2857		18.4	20.0	-8.1	50.0
Naphthalene	Ave	1.434	1.206		16.8	20.0	-16.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54716/2 Calibration Date: 08/16/2012 17:40

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: UX125650.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	0.4111	0.3644		17.7	20.0	-11.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2001	0.2449		24.5	20.0	22.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2323	0.2603		22.4	20.0	12.0	50.0
Toluene-d8 (Surr)	Ave	1.114	1.248		22.4	20.0	12.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4374	0.4463		20.4	20.0	2.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCV 240-54716/3 Calibration Date: 08/16/2012 18:29

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: UX125652.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	0.4450	0.4978		22.4	20.0	11.9	50.0
Ethyl ether	Ave	0.1573	0.1639		20.8	20.0	4.1	50.0
3-Chloro-1-propene	Ave	0.1139	0.1205		21.1	20.0	5.7	50.0
Diisopropyl ether	Ave	0.1866	0.2057		110	100	10.2	50.0
2-Chloro-1,3-butadiene	Ave	0.2767	0.2751		19.9	20.0	-0.6	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.6143	0.5525		18.0	20.0	-10.1	50.0
Ethyl acetate	Ave	0.1471	0.1427		38.8	40.0	-3.0	50.0
Propionitrile	Ave	0.0231	0.0260		45.0	40.0	12.5	50.0
Methacrylonitrile	Ave	0.0998	0.0938		18.8	20.0	-6.1	50.0
Isobutyl alcohol	Ave	0.0058	0.0044		304	400	-23.9	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.5891	0.5702		19.4	20.0	-3.2	50.0
n-Heptane	Lin1		0.0395		20.1	20.0	0.6	50.0
n-Butanol	Ave	0.0060	0.0049		329	400	-17.8	50.0
Methyl methacrylate	Ave	0.1526	0.1300		17.0	20.0	-14.8	50.0
2-Nitropropane	Ave	0.0274	0.0275		40.1	40.0	0.3	50.0
Cyclohexanone	Ave	0.0258	0.0536		415	200	107.7*	50.0
1,2,3-Trimethylbenzene	Ave	2.200	1.969		17.9	20.0	-10.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCV 240-54716/3 Calibration Date: 08/16/2012 18:29

Instrument ID: A3UX12 Calib Start Date: 07/24/2012 17:40

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 19:20

Lab File ID: UX125652.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-Methylnaphthalene	Lin		0.1044		22.3	40.0	-44.2	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab File ID: UX125653.D Lab Sample ID: MB 240-54716/4

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX12 Date Analyzed: 08/16/2012 18:54

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
TB-081213	240-14133-41	UX125654.D	08/16/2012 19:20
	LCS 240-54716/8	UX125656.D	08/16/2012 20:11
	240-13970-C-2 MS	UX125674.D	08/17/2012 03:46
	240-13970-C-2 MSD	UX125675.D	08/17/2012 04:11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-54716/4

Matrix: Water Lab File ID: UX125653.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 18:54

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.: 54716 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.0	U	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-54716/4

Matrix: Water Lab File ID: UX125653.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 18:54

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.: 54716 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	0.845	J	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	0.418	J	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-54716/4

Matrix: Water Lab File ID: UX125653.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/16/2012 18:54

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.: 54716 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)	103		63-129
460-00-4	4-Bromofluorobenzene (Surr)	94		66-117
1868-53-7	Dibromofluoromethane (Surr)	113		75-121
2037-26-5	Toluene-d8 (Surr)	111		74-115

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX125656.D

Lab ID: LCS 240-54716/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	18.8	94	72-116	
1,1,1-Trichloroethane	20.0	20.8	104	74-118	
1,1,2,2-Tetrachloroethane	20.0	16.2	81	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	23.1	115	74-151	
1,1-Dichloroethane	20.0	18.4	92	82-115	
1,1-Dichloroethene	20.0	19.4	97	78-131	
1,1-Dichloropropene	20.0	18.8	94	83-114	
1,2,3-Trichlorobenzene	20.0	16.7	83	54-126	
1,2,3-Trichloropropane	20.0	18.8	94	73-129	
1,2,3-Trimethylbenzene	20.0	17.7	89	70-130	
1,2,4-Trichlorobenzene	20.0	16.7	83	48-135	
1,2,4-Trimethylbenzene	20.0	15.8	79	76-120	
1,2-Dibromo-3-Chloropropane	20.0	18.3	92	42-136	
1,2-Dibromoethane	20.0	18.6	93	79-113	
1,2-Dichlorobenzene	20.0	18.9	94	81-110	
1,2-Dichloroethane	20.0	19.1	96	71-127	
1,2-Dichloropropane	20.0	18.4	92	81-115	
1,3-Dichlorobenzene	20.0	18.0	90	80-110	
1,3-Dichloropropane	20.0	18.5	92	79-116	
1,4-Dichlorobenzene	20.0	18.2	91	82-110	
2,2-Dichloropropane	20.0	18.0	90	50-129	
2-Butanone	40.0	40.2	100	60-126	
2-Chloroethyl vinyl ether	20.0	15.9	79	52-131	
2-Chlorotoluene	20.0	17.2	86	76-116	
2-Hexanone	40.0	30.4	76	55-133	
4-Chlorotoluene	20.0	17.4	87	77-115	
4-Methyl-2-pentanone	40.0	34.5	86	63-128	
Acetone	40.0	31.9	80	43-136	
Benzene	20.0	19.1	95	83-112	
Bromobenzene	20.0	18.2	91	76-115	
Bromochloromethane	20.0	15.8	79	77-120	
Bromodichloromethane	20.0	18.5	93	72-121	
Bromoform	20.0	17.1	85	40-131	
Bromomethane	20.0	22.7	114	11-185	
Carbon disulfide	20.0	20.4	102	62-142	
Carbon tetrachloride	20.0	23.6	118	66-128	
Chlorobenzene	20.0	19.1	95	85-110	
Chloroethane	20.0	18.6	93	25-153	
Chloroform	20.0	18.7	93	79-117	
Chloromethane	20.0	20.2	101	44-126	
cis-1,2-Dichloroethene	20.0	17.7	88	80-113	

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.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX125656.D

Lab ID: LCS 240-54716/8 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	20.0	16.1	80	61-115	
Dibromochloromethane	20.0	18.9	94	64-119	
Dibromomethane	20.0	21.8	109	81-120	
Dichlorodifluoromethane	20.0	24.7	124	19-129	
Diisopropyl ether	20.0	20.7	103	77-118	
Ethylbenzene	20.0	19.5	97	83-112	
Hexachlorobutadiene	20.0	16.3	82	36-134	
Isopropylbenzene	20.0	16.9	85	75-114	
Methyl tert-butyl ether	20.0	18.5	93	52-144	
Methylene Chloride	20.0	19.7	98	66-131	
m-Xylene & p-Xylene	40.0	36.9	92	83-113	
Naphthalene	20.0	16.0	80	32-141	
n-Butylbenzene	20.0	15.5	78	66-125	
n-Propylbenzene	20.0	16.6	83	74-121	
o-Xylene	20.0	18.5	92	83-113	
p-Isopropyltoluene	20.0	17.0	85	74-120	
sec-Butylbenzene	20.0	15.7	78	70-117	
Styrene	20.0	17.9	90	79-114	
tert-Butyl alcohol	400	389	97	70-130	
tert-Butylbenzene	20.0	17.1	86	71-115	
Tetrachloroethene	20.0	18.0	90	79-114	
Toluene	20.0	18.6	93	84-111	
trans-1,2-Dichloroethene	20.0	17.5	87	83-117	
trans-1,3-Dichloropropene	20.0	15.4	77	58-117	
Trichloroethene	20.0	21.2	106	76-117	
Trichlorofluoromethane	20.0	23.5	117	49-157	
Vinyl acetate	20.0	25.7	128	46-161	
Vinyl chloride	20.0	18.3	91	53-127	
Xylenes, Total	60.0	55.4	92	83-112	

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.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX125674.D

Lab ID: 240-13970-C-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	100	5.0 U	86.5	87	64-118	
1,1,1-Trichloroethane	100	5.0 U	103	103	68-121	
1,1,2,2-Tetrachloroethane	100	5.0 U	72.0	72	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	100	5.0 U	113	113	70-152	
1,1-Dichloroethane	100	5.0 U	89.6	90	79-116	
1,1-Dichloroethene	100	5.0 U	102	102	74-135	
1,1-Dichloropropene	100	5.0 U	91.9	92	80-114	
1,2,3-Trichlorobenzene	100	5.0 U	73.0	73	45-129	
1,2,3-Trichloropropane	100	5.0 U	87.3	87	67-132	
1,2,3-Trimethylbenzene	100	25 U	84.2	84	70-130	
1,2,4-Trichlorobenzene	100	5.0 U	78.7	79	38-138	
1,2,4-Trimethylbenzene	100	5.0 U	73.5	74	67-124	
1,2-Dibromo-3-Chloropropane	100	25 U	82.0	82	32-139	
1,2-Dibromoethane	100	5.0 U	89.9	90	74-113	
1,2-Dichlorobenzene	100	5.0 U	89.8	90	75-111	
1,2-Dichloroethane	100	5.0 U	91.3	91	68-129	
1,2-Dichloropropane	100	5.0 U	85.9	86	78-115	
1,3-Dichlorobenzene	100	5.0 U	85.1	85	73-110	
1,3-Dichloropropane	100	5.0 U	88.6	89	74-118	
1,4-Dichlorobenzene	100	5.0 U	84.8	85	75-110	
2,2-Dichloropropane	100	5.0 U	78.2	78	38-127	
2-Butanone	200	25 U	187	94	54-129	
2-Chloroethyl vinyl ether	100	50 U	50 U	0	10-150	F
2-Chlorotoluene	100	5.0 U	81.0	81	69-117	
2-Hexanone	200	25 U	134	67	47-139	
4-Chlorotoluene	100	5.0 U	83.1	83	71-116	
4-Methyl-2-pentanone	200	25 U	151	75	56-131	
Acetone	200	25 U	156	78	33-145	
Benzene	100	5.0 U	90.4	90	72-121	
Bromobenzene	100	5.0 U	82.1	82	71-116	
Bromochloromethane	100	5.0 U	75.0	75	73-121	
Bromodichloromethane	100	5.0 U	86.4	86	67-120	
Bromoform	100	5.0 U	74.9	75	32-128	
Bromomethane	100	5.0 U	109	109	10-186	
Carbon disulfide	100	5.0 U	105	105	57-147	
Carbon tetrachloride	100	5.0 U	116	116	59-129	
Chlorobenzene	100	5.0 U	89.9	90	80-110	
Chloroethane	100	5.0 U	93.8	94	21-165	
Chloroform	100	5.0 U	93.4	93	76-118	
Chloromethane	100	5.0 U	101	101	33-132	
cis-1,2-Dichloroethene	100	5.0 U	82.4	82	70-120	

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.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX125674.D

Lab ID: 240-13970-C-2 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	100	5.0 U	74.0	74	51-110	
Dibromochloromethane	100	5.0 U	87.9	88	56-118	
Dibromomethane	100	5.0 U	113	113	77-121	
Dichlorodifluoromethane	100	5.0 U	120	120	17-128	
Diisopropyl ether	100	25 U	93.6	94	73-118	
Ethylbenzene	100	5.0 U	94.0	94	75-116	
Hexachlorobutadiene	100	5.0 U	81.3	81	27-132	
Isopropylbenzene	100	5.0 U	87.5	87	68-116	
Methyl tert-butyl ether	100	25 U	88.9	89	46-144	
Methylene Chloride	100	5.0 U	79.2	79	63-128	
m-Xylene & p-Xylene	200	10 U	180	90	75-117	
Naphthalene	100	5.0 U	67.3	67	15-158	
n-Butylbenzene	100	5.0 U	71.5	71	56-127	
n-Propylbenzene	100	5.0 U	82.1	82	64-124	
o-Xylene	100	5.0 U	87.2	87	76-116	
p-Isopropyltoluene	100	5.0 U	79.3	79	64-122	
sec-Butylbenzene	100	5.0 U	74.7	75	60-119	
Styrene	100	5.0 U	86.1	86	71-117	
tert-Butyl alcohol	2000	100 U	1680	84	70-130	
tert-Butylbenzene	100	5.0 U	76.7	77	61-119	
Tetrachloroethene	100	5.0 U	93.3	93	70-117	
Toluene	100	5.0 U	88.3	88	78-114	
trans-1,2-Dichloroethene	100	5.0 U	85.4	85	80-119	
trans-1,3-Dichloropropene	100	5.0 U	66.6	67	46-116	
Trichloroethene	100	5.0 U	101	101	66-120	
Trichlorofluoromethane	100	5.0 U	126	126	46-157	
Vinyl acetate	100	10 U	120	120	43-157	
Vinyl chloride	100	2.5 U	93.6	94	49-130	
Xylenes, Total	300	10 U	267			

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.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX125675.D

Lab ID: 240-13970-C-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	100	85.5	86	1	30	64-118	
1,1,1-Trichloroethane	100	108	108	6	30	68-121	
1,1,2,2-Tetrachloroethane	100	73.5	74	2	30	63-122	
1,1,2-Trichloro-1,2,2-trichfluoroethane	100	117	117	4	30	70-152	
1,1-Dichloroethane	100	91.6	92	2	30	79-116	
1,1-Dichloroethene	100	100	100	1	30	74-135	
1,1-Dichloropropene	100	95.9	96	4	30	80-114	
1,2,3-Trichlorobenzene	100	94.0	94	25	30	45-129	
1,2,3-Trichloropropane	100	91.1	91	4	30	67-132	
1,2,3-Trimethylbenzene	100	90.6	91	7	30	70-130	
1,2,4-Trichlorobenzene	100	85.8	86	9	30	38-138	
1,2,4-Trimethylbenzene	100	79.5	79	8	30	67-124	
1,2-Dibromo-3-Chloropropane	100	74.3	74	10	30	32-139	
1,2-Dibromoethane	100	90.4	90	1	30	74-113	
1,2-Dichlorobenzene	100	95.2	95	6	30	75-111	
1,2-Dichloroethane	100	93.1	93	2	30	68-129	
1,2-Dichloropropane	100	89.0	89	4	30	78-115	
1,3-Dichlorobenzene	100	91.5	92	7	30	73-110	
1,3-Dichloropropane	100	87.7	88	1	30	74-118	
1,4-Dichlorobenzene	100	89.6	90	6	30	75-110	
2,2-Dichloropropane	100	82.4	82	5	30	38-127	
2-Butanone	200	181	90	3	30	54-129	
2-Chloroethyl vinyl ether	100	50 U	0	NC	30	10-150	F
2-Chlorotoluene	100	85.2	85	5	30	69-117	
2-Hexanone	200	135	68	1	30	47-139	
4-Chlorotoluene	100	89.4	89	7	30	71-116	
4-Methyl-2-pentanone	200	147	74	3	30	56-131	
Acetone	200	162	81	4	30	33-145	
Benzene	100	91.6	92	1	30	72-121	
Bromobenzene	100	88.4	88	7	30	71-116	
Bromochloromethane	100	75.0	75	0	30	73-121	
Bromodichloromethane	100	92.5	93	7	30	67-120	
Bromoform	100	75.8	76	1	30	32-128	
Bromomethane	100	107	107	1	30	10-186	
Carbon disulfide	100	105	105	0	30	57-147	
Carbon tetrachloride	100	121	121	4	30	59-129	
Chlorobenzene	100	95.0	95	5	30	80-110	
Chloroethane	100	94.4	94	1	30	21-165	
Chloroform	100	92.9	93	1	30	76-118	
Chloromethane	100	101	101	0	30	33-132	
cis-1,2-Dichloroethene	100	87.6	88	6	30	70-120	

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.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX125675.D

Lab ID: 240-13970-C-2 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
cis-1,3-Dichloropropene	100	77.5	77	5	30	51-110	
Dibromochloromethane	100	91.3	91	4	30	56-118	
Dibromomethane	100	119	119	5	30	77-121	
Dichlorodifluoromethane	100	126	126	5	30	17-128	
Diisopropyl ether	100	99.3	99	6	30	73-118	
Ethylbenzene	100	99.7	100	6	30	75-116	
Hexachlorobutadiene	100	94.6	95	15	30	27-132	
Isopropylbenzene	100	87.0	87	0	30	68-116	
Methyl tert-butyl ether	100	92.1	92	3	30	46-144	
Methylene Chloride	100	96.3	96	19	30	63-128	
m-Xylene & p-Xylene	200	183	91	1	30	75-117	
Naphthalene	100	79.4	79	16	30	15-158	
n-Butylbenzene	100	80.5	80	12	30	56-127	
n-Propylbenzene	100	84.7	85	3	30	64-124	
o-Xylene	100	89.9	90	3	30	76-116	
p-Isopropyltoluene	100	91.4	91	14	30	64-122	
sec-Butylbenzene	100	81.1	81	8	30	60-119	
Styrene	100	86.0	86	0	30	71-117	
tert-Butyl alcohol	2000	1730	87	3	30	70-130	
tert-Butylbenzene	100	83.7	84	9	30	61-119	
Tetrachloroethene	100	100	100	7	30	70-117	
Toluene	100	89.8	90	2	30	78-114	
trans-1,2-Dichloroethene	100	88.8	89	4	30	80-119	
trans-1,3-Dichloropropene	100	69.0	69	4	30	46-116	
Trichloroethene	100	106	106	6	30	66-120	
Trichlorofluoromethane	100	120	120	5	30	46-157	
Vinyl acetate	100	126	126	4	30	43-157	
Vinyl chloride	100	95.6	96	2	30	49-130	
Xylenes, Total	300	273					

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.: 240-14133-1

SDG No.:

Lab File ID: BFB2086.D BFB Injection Date: 07/24/2012

Instrument ID: A3UX9 BFB Injection Time: 17:57

Analysis Batch No.: 51898

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.6	
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	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0)1
174	50.0 - 120.00 % of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	6.4	(8.0)1
176	95.0 - 101.0 % of mass 174	78.5	(97.1)1
177	5.0 - 9.0 % of mass 176	5.0	(6.4)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 240-51898/2	UX932937.D	07/24/2012	18:21
	STD8260 240-51898/3	UX932938.D	07/24/2012	18:45
	STD8260 240-51898/4	UX932939.D	07/24/2012	19:08
	STD8260 240-51898/5	UX932940.D	07/24/2012	19:34
	STD8260 240-51898/6	UX932941.D	07/24/2012	19:59
	STD8260 240-51898/7	UX932942.D	07/24/2012	20:24
	STDA9 240-51898/8	UX932943.D	07/24/2012	21:16
	STDA9 240-51898/9	UX932944.D	07/24/2012	21:42
	STDA9 240-51898/10	UX932945.D	07/24/2012	22:07
	STDA9 240-51898/11	UX932946.D	07/24/2012	22:31
	STDA9 240-51898/12	UX932947.D	07/24/2012	22:56
	STDA9 240-51898/13	UX932948.D	07/24/2012	23:26
	ICV 240-51898/14	UX932949.D	07/24/2012	23:50

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-14133-1 Analy Batch No.: 51898

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 18:21 Calibration End Date: 07/24/2012 20:24 Calibration ID: 10284

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-51898/2	UX932937.D
Level 2	STD8260 240-51898/3	UX932938.D
Level 3	STD8260 240-51898/4	UX932939.D
Level 4	STD8260 240-51898/5	UX932940.D
Level 5	STD8260 240-51898/6	UX932941.D
Level 6	STD8260 240-51898/7	UX932942.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	0.2900 +++++	0.3110	0.3518	0.3527	0.3419	Ave		0.3295				8.4		15.0			
Chloromethane	0.4467 0.2875	0.3262	0.3070	0.3011	0.3105	Lin1	0.0659	0.2949			0.1000				0.9990		0.9900
Vinyl chloride	0.3065 0.2925	0.2997	0.3126	0.3124	0.3238	Ave		0.3079				3.6		15.0			
Bromomethane	0.2824 0.2322	0.2281	0.2179	0.2189	0.2268	Ave		0.2344				10.0		15.0			
Chloroethane	0.2475 0.2255	0.2249	0.2279	0.2216	0.2309	Ave		0.2297				4.0		15.0			
Acrolein	+++++ 0.0233	0.0168	0.0255	0.0226	0.0233	Ave		0.0223				15.0		15.0			
Acetone	+++++ 0.0529	0.0586	0.0590	0.0662	0.0592	Ave		0.0592				7.9		15.0			
Trichlorofluoromethane	0.2067 0.2954	0.3157	0.4187	0.4227	0.4072	Qua	-0.349	0.5112	-0.003						0.9990		0.9900
Acetonitrile	+++++ 0.0174	0.0343	0.0206	0.0194	0.0173	Lin1	0.1868	0.0173							0.9990		0.9900
Methyl acetate	+++++ 0.1546	0.3164	0.1796	0.1670	0.1624	Lin1	0.3420	0.1554							0.9990		0.9900
Methylene Chloride	+++++ 0.3241	0.7985	0.3805	0.3517	0.3416	Lin1	0.4894	0.3230							1.0000		0.9900
tert-Butyl alcohol	+++++ 0.0184	0.0208	0.0204	0.0203	0.0194	Ave		0.0199				4.8		15.0			
1,1,2-Trichloro-1,2,2-trichfluoroethane	0.3639 0.2388	0.2130	0.2277	0.2528	0.2380	Lin1	0.0320	0.2387							0.9990		0.9900
1,1-Dichloroethene	0.4771 0.4132	0.3674	0.4151	0.4220	0.4282	Ave		0.4205				8.4		15.0			
Iodomethane	0.3942 0.4021	0.3670	0.3888	0.4017	0.4134	Ave		0.3945				4.0		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.: 240-14133-1 Analy Batch No.: 51898

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 18:21 Calibration End Date: 07/24/2012 20:24 Calibration ID: 10284

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								
Carbon disulfide	0.9737 0.8280	0.6970	0.8035	0.8160	0.8397	Ave		0.8263				11.0		15.0			
Vinyl acetate	+++++ 0.0463	0.0415	0.0470	0.0427	0.0484	Ave		0.0452				6.5		15.0			
Acrylonitrile	0.1899 0.0772	0.1119	0.0839	0.0788	0.0787	Lin1	0.0999	0.0768							1.0000		0.9900
Methyl tert-butyl ether	0.9380 0.7258	0.7871	0.6902	0.7363	0.7202	Ave		0.7663				12.0		15.0			
trans-1,2-Dichloroethene	0.2786 0.3327	0.2767	0.3358	0.3244	0.3324	Ave		0.3134				8.9		15.0			
Hexane	0.2986 0.2089	0.1810	0.2114	0.2059	0.2012	Lin1	0.0226	0.2059							0.9990		0.9900
Tetrahydrofuran	+++++ 0.0512	0.1262	0.0684	0.0640	0.0564	Lin1	0.0849	0.0531							0.9940		0.9900
1,1-Dichloroethane	0.4059 0.3974	0.3700	0.4079	0.3987	0.4017	Ave		0.3969			0.1000	3.5		15.0			
2-Butanone	0.0386 0.0257	0.0274	0.0298	0.0292	0.0275	Ave		0.0297				15.0		15.0			
cis-1,2-Dichloroethene	0.4278 0.3257	0.3096	0.3410	0.3362	0.3368	Ave		0.3462				12.0		15.0			
2,2-Dichloropropane	0.2668 0.1740	0.1756	0.1838	0.1799	0.1805	Lin1	0.0324	0.1762							0.9990		0.9900
Bromochloromethane	0.2090 0.1815	0.1959	0.2161	0.1844	0.1876	Ave		0.1958				7.2		15.0			
Chloroform	0.5001 0.4363	0.4587	0.4399	0.4421	0.4426	Ave		0.4533				5.3		15.0			
1,1,1-Trichloroethane	0.3412 0.3141	0.2950	0.2740	0.3204	0.3185	Ave		0.3105				7.5		15.0			
Cyclohexane	0.4139 0.3204	0.3097	0.3010	0.3170	0.3132	Ave		0.3292				13.0		15.0			
1,1-Dichloropropene	0.3710 0.3269	0.3310	0.3236	0.3299	0.3205	Ave		0.3338				5.6		15.0			
Carbon tetrachloride	0.2285 0.2607	0.2130	0.2347	0.2547	0.2491	Ave		0.2401				7.5		15.0			
Benzene	1.1430 0.9995	0.9361	0.9821	0.9749	1.0158	Ave		1.0086				7.1		15.0			
1,2-Dichloroethane	0.4170 0.3359	0.3575	0.3390	0.3447	0.3417	Ave		0.3560				8.7		15.0			
Trichloroethene	0.3190 0.2723	0.2526	0.2710	0.2665	0.2751	Ave		0.2761				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.: 240-14133-1 Analy Batch No.: 51898

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 18:21 Calibration End Date: 07/24/2012 20:24 Calibration ID: 10284

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	0.3859 0.2113	0.2389	0.2082	0.2113	0.2039	Lin1	0.0678	0.2072							0.9990		0.9900
1,2-Dichloropropane	0.2422 0.2276	0.2342	0.2352	0.2288	0.2315	Ave		0.2333				2.3		15.0			
Dibromomethane	0.1754 0.1595	0.1677	0.1637	0.1668	0.1670	Ave		0.1667				3.1		15.0			
1,4-Dioxane	0.0040 0.0028	0.0028	0.0027	0.0027	0.0027	Lin1	0.0214	0.0028							1.0000		0.9900
Bromodichloromethane	0.3780 0.3296	0.3123	0.3232	0.3234	0.3295	Ave		0.3327				6.9		15.0			
2-Chloroethyl vinyl ether	0.1943 0.1598	0.1492	0.1577	0.1577	0.1617	Ave		0.1634				9.6		15.0			
cis-1,3-Dichloropropene	0.4585 0.4168	0.4146	0.4074	0.4024	0.4213	Ave		0.4202				4.7		15.0			
4-Methyl-2-pentanone	0.3618 0.1956	0.2213	0.2007	0.1968	0.1995	Lin1	0.1278	0.1953							1.0000		0.9900
Toluene	1.5722 1.5010	1.3772	1.4438	1.4151	1.4502	Ave		1.4599				4.7		15.0			
trans-1,3-Dichloropropene	0.5420 0.4975	0.4411	0.4732	0.4783	0.4882	Ave		0.4867				6.8		15.0			
Ethyl methacrylate	0.5143 0.4318	0.4203	0.4123	0.4237	0.4178	Ave		0.4367				8.8		15.0			
1,1,2-Trichloroethane	0.4482 0.2798	0.3195	0.2884	0.2802	0.2810	Lin1	0.0704	0.2788							1.0000		0.9900
Tetrachloroethene	0.3745 0.3089	0.2801	0.3159	0.3080	0.3032	Ave		0.3151				10.0		15.0			
1,3-Dichloropropane	0.6837 0.5175	0.5482	0.5239	0.5040	0.5213	Ave		0.5498				12.0		15.0			
2-Hexanone	0.2818 0.1787	0.1971	0.1793	0.1782	0.1823	Lin1	0.0791	0.1785							1.0000		0.9900
Dibromochloromethane	0.3441 0.3273	0.2737	0.3115	0.3078	0.3160	Ave		0.3134				7.5		15.0			
1,2-Dibromoethane	0.3852 0.2994	0.2709	0.2971	0.2964	0.2968	Ave		0.3076				13.0		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2067	0.2742	0.2188	0.2281	0.2188	Ave		0.2293				11.0		15.0			
Chlorobenzene	1.0629 0.9757	0.9262	0.9829	0.9539	0.9653	Ave		0.9778			0.3000	4.7		15.0			
1,1,1,2-Tetrachloroethane	0.4073 0.3360	0.3069	0.3181	0.3118	0.3300	Ave		0.3350				11.0		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.: 240-14133-1 Analy Batch No.: 51898

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 18:21 Calibration End Date: 07/24/2012 20:24 Calibration ID: 10284

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								
Ethylbenzene	0.5295 0.5026	0.4433	0.4885	0.4695	0.4972	Ave		0.4885				6.0		15.0			
m-Xylene & p-Xylene	0.6590 0.6401	0.5535	0.5980	0.5814	0.6075	Ave		0.6066				6.3		15.0			
o-Xylene	0.7088 0.6261	0.5674	0.5752	0.5778	0.6005	Ave		0.6093				8.7		15.0			
Styrene	1.1388 1.1643	0.9819	1.0291	1.0378	1.1049	Ave		1.0761				6.6		15.0			
Bromoform	0.2739 0.2079	0.1758	0.1840	0.1867	0.2034	Lin1	0.0060	0.2021			0.1000				0.9980		0.9900
Isopropylbenzene	1.4931 1.4893	1.2331	1.3528	1.3386	1.4182	Ave		1.3875				7.2		15.0			
1,1,2,2-Tetrachloroethane	1.3489 0.7192	0.8308	0.7785	0.7391	0.7618	Lin1	0.2507	0.7299			0.3000				0.9990		0.9900
Bromobenzene	0.9078 0.7774	0.8065	0.8007	0.7719	0.7928	Ave		0.8095				6.2		15.0			
1,2,3-Trichloropropane	0.4581 0.2483	0.3346	0.2648	0.2733	0.2643	Lin1	0.0998	0.2542							0.9990		0.9900
n-Propylbenzene	1.0263 0.7238	0.7174	0.7195	0.6947	0.7057	Lin1	0.0991	0.7119							0.9990		0.9900
2-Chlorotoluene	0.8341 0.6856	0.6890	0.6991	0.6649	0.6739	Ave		0.7078				8.9		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1498	0.1707	0.1644	0.1621	0.1533	Ave		0.1601				5.3		15.0			
1,3,5-Trimethylbenzene	2.6069 2.3219	2.2291	2.2355	2.1806	2.2946	Ave		2.3114				6.6		15.0			
4-Chlorotoluene	0.8065 0.7580	0.8053	0.7605	0.7363	0.7447	Ave		0.7685				3.9		15.0			
tert-Butylbenzene	1.9168 1.9404	1.9609	1.9659	1.8437	2.1228	Ave		1.9584				4.7		15.0			
1,2,4-Trimethylbenzene	2.8131 2.4048	2.2656	2.3792	2.2641	2.3684	Ave		2.4158				8.4		15.0			
sec-Butylbenzene	2.8228 2.7138	2.3379	2.6052	2.5000	2.6442	Ave		2.6040				6.5		15.0			
1,3-Dichlorobenzene	1.8495 1.4051	1.4250	1.4369	1.3670	1.4214	Ave		1.4841				12.0		15.0			
p-Isopropyltoluene	2.1935 2.3629	2.0916	2.2048	2.1725	2.2701	Ave		2.2159				4.2		15.0			
1,4-Dichlorobenzene	1.7773 1.4819	1.6809	1.5614	1.4772	1.4950	Ave		1.5789				7.9		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.: 240-14133-1 Analy Batch No.: 51898

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 18:21 Calibration End Date: 07/24/2012 20:24 Calibration ID: 10284

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								
n-Butylbenzene	2.1174 1.9889	1.7744	1.9494	1.9014	1.9945	Ave		1.9543				5.8		15.0			
1,2-Dichlorobenzene	1.5805 1.3963	1.5029	1.4335	1.3712	1.3972	Ave		1.4470				5.5		15.0			
1,3,5-Trichlorobenzene	1.0699 0.8574	0.9897	0.8886	0.8708	0.8897	Ave		0.9277				9.0		15.0			
1,2,4-Trichlorobenzene	1.1887 0.7594	0.9660	0.8469	0.7996	0.8116	Lin1	0.2203	0.7783							0.9990		0.9900
Hexachlorobutadiene	0.4126 0.3188	0.3431	0.3664	0.3517	0.3256	Ave		0.3530				9.6		15.0			
Naphthalene	3.3241 2.1043	2.3901	2.3612	2.3184	2.3037	Lin1	0.5265	2.1872							0.9980		0.9900
1,2,3-Trichlorobenzene	1.1111 0.6243	0.7717	0.7769	0.7341	0.7077	Lin1	0.2322	0.6643							0.9940		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2771	0.3131	0.2924	0.3116	0.2814	Ave		0.2951				5.7		15.0			
Dibromofluoromethane (Surr)	0.3038 0.2414	0.2459	0.2396	0.2467	0.2358	Ave		0.2522				10.0		15.0			
Toluene-d8 (Surr)	1.6800 1.3113	1.3890	1.2846	1.3197	1.2426	Ave		1.3712				12.0		15.0			
4-Bromofluorobenzene (Surr)	0.7643 0.4879	0.5783	0.4791	0.4767	0.4801	Lin1	0.1202	0.4805							1.0000		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.: 240-14133-1 | Analy Batch No.: 51898

SDG No.:

Instrument ID: A3UX9 | GC Column: DB-624 | ID: 0.18(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 21:16 | Calibration End Date: 07/24/2012 23:26 | Calibration ID: 10287

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-51898/8	UX932943.D
Level 2	STDA9 240-51898/9	UX932944.D
Level 3	STDA9 240-51898/10	UX932945.D
Level 4	STDA9 240-51898/11	UX932946.D
Level 5	STDA9 240-51898/12	UX932947.D
Level 6	STDA9 240-51898/13	UX932948.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	0.5167 0.5452	0.5469	0.5334	0.5212	0.5170	Ave		0.5301				2.6		15.0			
3-Chloro-1-propene	+++++ 0.1392	0.2906	0.1547	0.1502	0.1404	Lin1	0.1567	0.1378							1.0000		0.9900
Ethyl ether	0.2360 0.2095	0.2097	0.1997	0.1901	0.1870	Ave		0.2053				8.6		15.0			
Diisopropyl ether	0.2375 0.2551	0.2321	0.2328	0.2386	0.2410	Ave		0.2395				3.5		15.0			
2-Chloro-1,3-butadiene	0.3973 0.3807	0.3456	0.3645	0.3693	0.3624	Ave		0.3699				4.7		15.0			
Ethyl-t-butyl ether (ETBE)	0.6946 0.7817	0.7108	0.7021	0.7190	0.7130	Ave		0.7202				4.3		15.0			
Ethyl acetate	0.3172 0.2409	0.2281	0.1790	0.1711	0.1737	Qua	0.4943	0.1136	0.0008						0.9990		0.9900
Propionitrile	0.0458 0.0380	0.0339	0.0271	0.0275	0.0265	Qua	0.0821	0.0168	0.0001						0.9980		0.9900
Methacrylonitrile	0.1694 0.1498	0.1279	0.1131	0.1158	0.1108	Qua	0.1355	0.0792	0.0009						0.9990		0.9900
Isobutyl alcohol	0.0133 0.0106	0.0098	0.0081	0.0081	0.0080	Qua	0.1819	0.0058	0						0.9990		0.9900
Tert-amyl-methyl ether (TAME)	0.7313 0.7891	0.7114	0.7015	0.7014	0.7000	Ave		0.7224				4.8		15.0			
n-Heptane	1.3913 0.1139	0.7129	0.1595	0.1417	0.1262	Lin1	0.6283	0.1071							0.9980		0.9900
n-Butanol	0.0109 0.0112	0.0084	0.0077	0.0075	0.0076	Qua	0.2151	0.0045	0						0.9990		0.9900
Methyl methacrylate	0.3042 0.2304	0.2118	0.1869	0.1748	0.1722	Qua	0.2389	0.1222	0.0013						0.9990		0.9900
2-Nitropropane	0.0709 0.0624	0.0506	0.0453	0.0445	0.0422	Qua	0.1482	0.0257	0.0002						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.: 240-14133-1 Analy Batch No.: 51898

SDG No.:

Instrument ID: A3UX9 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 21:16 Calibration End Date: 07/24/2012 23:26 Calibration ID: 10287

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	0.0407 0.0374	0.0336	0.0266	0.0267	0.0264	Qua	0.3733	0.0169	0						0.9990		0.9900
1,2,3-Trimethylbenzene	2.4966 2.8234	2.5869	2.4914	2.5528	2.7148	Ave		2.6110				5.1		15.0			
2-Methylnaphthalene	1.2497 1.5199	0.9987	1.0476	1.1479	1.2329	Ave		1.1994				15.0		15.0			
n-Butyl acetate	0.5117 0.5130	0.3960	0.3872	0.3804	0.3863	Ave		0.4291				15.0		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 no samples

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: ICV 240-51898/14 Calibration Date: 07/24/2012 23:50

Instrument ID: A3UX9 Calib Start Date: 07/24/2012 18:21

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 20:24

Lab File ID: UX932949.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	0.3295	0.3250		19.7	20.0	-1.3	50.0
Chloromethane	Lin1		0.3186	0.1000	21.4	20.0	7.0	50.0
Vinyl chloride	Ave	0.3079	0.3231		21.0	20.0	4.9	20.0
Bromomethane	Ave	0.2344	0.2097		17.9	20.0	-10.5	50.0
Chloroethane	Ave	0.2297	0.2239		19.5	20.0	-2.5	50.0
Trichlorofluoromethane	Qua		0.4438		20.1	20.0	0.5	50.0
Acrolein	Ave	0.0223	0.0302		81.4	60.0	35.6	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.2768		23.1	20.0	15.5	50.0
1,1-Dichloroethene	Ave	0.4205	0.4852		23.1	20.0	15.4	20.0
Acetone	Ave	0.0592	0.0711		48.1	40.0	20.1	50.0
Iodomethane	Ave	0.3945	0.4610		23.4	20.0	16.8	50.0
Carbon disulfide	Ave	0.8263	0.9192		22.2	20.0	11.2	50.0
Acetonitrile	Lin1		0.0268		81.9	60.0	36.5	50.0
Methyl acetate	Lin1		0.2257		26.9	20.0	34.5	50.0
Methylene Chloride	Lin1		0.3600		20.8	20.0	4.0	50.0
tert-Butyl alcohol	Ave	0.0199	0.0274		551	400	37.7	50.0
Acrylonitrile	Lin1		0.0977		75.0	60.0	25.0	50.0
Methyl tert-butyl ether	Ave	0.7663	0.8186		21.4	20.0	6.8	50.0
trans-1,2-Dichloroethene	Ave	0.3134	0.3646		23.3	20.0	16.3	50.0
Hexane	Lin1		0.2250		21.8	20.0	9.0	20.0
1,1-Dichloroethane	Ave	0.3969	0.4412	0.1000	22.2	20.0	11.2	50.0
Vinyl acetate	Ave	0.0452	0.0611		27.0	20.0	35.1	50.0
2,2-Dichloropropane	Lin1		0.1888		21.2	20.0	6.0	50.0
2-Butanone	Ave	0.0297	0.0347		46.7	40.0	16.9	50.0
cis-1,2-Dichloroethene	Ave	0.3462	0.3599		20.8	20.0	4.0	50.0
Bromochloromethane	Ave	0.1958	0.1983		20.3	20.0	1.3	50.0
Tetrahydrofuran	Lin1		0.0724		25.7	20.0	28.5	50.0
Chloroform	Ave	0.4533	0.4498		19.8	20.0	-0.8	20.0
1,1,1-Trichloroethane	Ave	0.3105	0.3296		21.2	20.0	6.1	50.0
Cyclohexane	Ave	0.3292	0.3185		19.3	20.0	-3.3	50.0
1,1-Dichloropropene	Ave	0.3338	0.3467		20.8	20.0	3.9	50.0
Carbon tetrachloride	Ave	0.2401	0.2649		22.1	20.0	10.3	50.0
1,2-Dichloroethane	Ave	0.3560	0.3815		21.4	20.0	7.2	50.0
Benzene	Ave	1.009	1.068		21.2	20.0	5.9	50.0
Trichloroethene	Ave	0.2761	0.2904		21.0	20.0	5.2	50.0
Methylcyclohexane	Lin1		0.2002		19.0	20.0	-5.0	50.0
1,2-Dichloropropane	Ave	0.2333	0.2474		21.2	20.0	6.1	20.0
Dibromomethane	Ave	0.1667	0.1867		22.4	20.0	12.0	50.0
Bromodichloromethane	Ave	0.3327	0.3377		20.3	20.0	1.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1634	0.1735		21.2	20.0	6.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: ICV 240-51898/14 Calibration Date: 07/24/2012 23:50

Instrument ID: A3UX9 Calib Start Date: 07/24/2012 18:21

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 20:24

Lab File ID: UX932949.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	0.4202	0.4132		19.7	20.0	-1.7	50.0
4-Methyl-2-pentanone	Lin1		0.2405		48.6	40.0	21.5	50.0
Toluene	Ave	1.460	1.505		20.6	20.0	3.1	20.0
trans-1,3-Dichloropropene	Ave	0.4867	0.5164		21.2	20.0	6.1	50.0
1,1,2-Trichloroethane	Lin1		0.3257		23.1	20.0	15.5	50.0
Tetrachloroethene	Ave	0.3151	0.3129		19.9	20.0	-0.7	50.0
1,3-Dichloropropane	Ave	0.5498	0.5839		21.2	20.0	6.2	50.0
2-Hexanone	Lin1		0.2235		49.6	40.0	24.0	50.0
Dibromochloromethane	Ave	0.3134	0.3137		20.0	20.0	0.1	50.0
1,2-Dibromoethane	Ave	0.3076	0.3336		21.7	20.0	8.5	50.0
Chlorobenzene	Ave	0.9778	0.997	0.3000	20.4	20.0	2.0	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3350	0.3247		19.4	20.0	-3.1	50.0
Ethylbenzene	Ave	0.4885	0.5037		20.6	20.0	3.1	20.0
m-Xylene & p-Xylene	Ave	0.6066	0.6323		41.7	40.0	4.2	50.0
o-Xylene	Ave	0.6093	0.6224		20.4	20.0	2.2	50.0
Styrene	Ave	1.076	1.127		20.9	20.0	4.7	50.0
Bromoform	Lin1		0.2072	0.1000	20.5	20.0	2.5	50.0
Isopropylbenzene	Ave	1.388	1.424		20.5	20.0	2.6	50.0
1,1,2,2-Tetrachloroethane	Lin1		0.8615	0.3000	23.3	20.0	16.5	50.0
Bromobenzene	Ave	0.8095	0.8114		20.0	20.0	0.2	50.0
1,2,3-Trichloropropane	Lin1		0.3187		24.7	20.0	23.5	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2293	0.2440		42.6	40.0	6.4	50.0
n-Propylbenzene	Lin1		0.7567		21.1	20.0	5.5	50.0
2-Chlorotoluene	Ave	0.7078	0.7051		19.9	20.0	-0.4	50.0
1,3,5-Trimethylbenzene	Ave	2.311	2.320		20.1	20.0	0.4	50.0
4-Chlorotoluene	Ave	0.7685	0.7739		20.1	20.0	0.7	50.0
tert-Butylbenzene	Ave	1.958	1.974		20.2	20.0	0.8	50.0
1,2,4-Trimethylbenzene	Ave	2.416	2.437		20.2	20.0	0.9	50.0
sec-Butylbenzene	Ave	2.604	2.685		20.6	20.0	3.1	50.0
1,3-Dichlorobenzene	Ave	1.484	1.468		19.8	20.0	-1.1	50.0
p-Isopropyltoluene	Ave	2.216	2.385		21.5	20.0	7.6	50.0
1,4-Dichlorobenzene	Ave	1.579	1.530		19.4	20.0	-3.1	50.0
n-Butylbenzene	Ave	1.954	2.014		20.6	20.0	3.0	50.0
1,2-Dichlorobenzene	Ave	1.447	1.463		20.2	20.0	1.1	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1601	0.2058		25.7	20.0	28.6	50.0
1,2,4-Trichlorobenzene	Lin1		0.8470		21.5	20.0	7.5	50.0
Hexachlorobutadiene	Ave	0.3530	0.3343		18.9	20.0	-5.3	50.0
Naphthalene	Lin1		2.738		24.8	20.0	24.0	50.0
1,2,3-Trichlorobenzene	Lin1		0.7906		23.5	20.0	17.5	50.0
Dibromofluoromethane (Surr)	Ave	0.2522	0.2424		19.2	20.0	-3.9	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2951	0.3171		21.5	20.0	7.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: ICV 240-51898/14 Calibration Date: 07/24/2012 23:50

Instrument ID: A3UX9 Calib Start Date: 07/24/2012 18:21

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 20:24

Lab File ID: UX932949.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	1.371	1.282		18.7	20.0	-6.5	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.4973		20.4	20.0	2.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: ICV 240-51898/14 Calibration Date: 07/24/2012 23:50

Instrument ID: A3UX9 Calib Start Date: 07/24/2012 21:16

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 23:26

Lab File ID: UX932949.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	0.2053	0.2161		21.0	20.0	5.2	50.0
Diisopropyl ether	Ave	0.2395	0.2583		21.6	20.0	7.8	50.0
Isobutyl alcohol	Qua		0.0101		1110	1000	10.6	50.0
Cyclohexanone	Qua		0.0371		495	400	23.7	50.0
1,2,3-Trimethylbenzene	Ave	2.611	2.669		20.4	20.0	2.2	50.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab File ID: BFB2101.D BFB Injection Date: 08/15/2012

Instrument ID: A3UX9 BFB Injection Time: 16:28

Analysis Batch No.: 54545

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.0	
75	30.0 - 60.0 % of mass 95	48.3	
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	0.7	(0.8)1
174	50.0 - 120.00 % of mass 95	92.8	
175	5.0 - 9.0 % of mass 174	7.5	(8.1)1
176	95.0 - 101.0 % of mass 174	91.9	(99.0)1
177	5.0 - 9.0 % of mass 176	5.5	(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
	CCVIS 240-54545/2	UX933284.D	08/15/2012	17:02
	LCS 240-54545/5	UX933285.D	08/15/2012	17:27
	CCV 240-54545/3	UX933286.D	08/15/2012	17:52
	MB 240-54545/4	UX933287.D	08/15/2012	18:17
MSA-SW37A-081312	240-14133-1	UX933288.D	08/15/2012	18:43
MSA-SW37B-081312	240-14133-2	UX933289.D	08/15/2012	19:08
MSA-SW37C-081312	240-14133-3	UX933290.D	08/15/2012	19:33
MSA-SW37D-081312	240-14133-4	UX933291.D	08/15/2012	19:59
MSA-SW38A-081312	240-14133-5	UX933292.D	08/15/2012	20:23
MSA-SW38B-081312	240-14133-6	UX933293.D	08/15/2012	20:48
MSA-SW38C-081312	240-14133-7	UX933294.D	08/15/2012	21:11
MSA-SW38D-081312	240-14133-8	UX933295.D	08/15/2012	21:36
MSA-SW39A-081312	240-14133-9	UX933296.D	08/15/2012	22:01
MSA-SW39B-081312	240-14133-10	UX933297.D	08/15/2012	22:25
MSA-SW39C-081312	240-14133-11	UX933298.D	08/15/2012	22:50
MSA-SW39D-081312	240-14133-12	UX933299.D	08/15/2012	23:15
MSA-SW40A-081312	240-14133-13	UX933300.D	08/15/2012	23:40
MSA-SW40B-081312	240-14133-14	UX933301.D	08/16/2012	00:05
MSA-SW40C-081312	240-14133-15	UX933302.D	08/16/2012	00:30
MSA-SW40D-081312	240-14133-16	UX933303.D	08/16/2012	00:55
MSA-SW41A-081312	240-14133-17	UX933304.D	08/16/2012	01:21
MSA-SW41B-081312	240-14133-18	UX933305.D	08/16/2012	01:46
MSA-SW41C-081312	240-14133-19	UX933306.D	08/16/2012	02:11
MSA-SW41D-081312	240-14133-20	UX933307.D	08/16/2012	02:36

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54545/2 Calibration Date: 08/15/2012 17:02

Instrument ID: A3UX9 Calib Start Date: 07/24/2012 18:21

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 20:24

Lab File ID: UX933284.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	0.3295	0.3441		20.9	20.0	4.4	50.0
Chloromethane	Lin1		0.3204	0.1000	21.5	20.0	7.5	50.0
Vinyl chloride	Ave	0.3079	0.3409		22.1	20.0	10.7	20.0
Bromomethane	Ave	0.2344	0.2369		20.2	20.0	1.1	50.0
Chloroethane	Ave	0.2297	0.2276		19.8	20.0	-0.9	50.0
Trichlorofluoromethane	Qua		0.4663		21.2	20.0	6.2	50.0
Acrolein	Ave	0.0223	0.0319		286	200	43.2	50.0
1,1-Dichloroethene	Ave	0.4205	0.4881		23.2	20.0	16.1	20.0
Acetone	Ave	0.0592	0.0871		58.9	40.0	47.2	50.0
1,1,2-Trichloro-1,2,2-trichfluoroethane	Lin1		0.2903		24.2	20.0	20.9	50.0
Iodomethane	Ave	0.3945	0.4746		24.1	20.0	20.3	50.0
Carbon disulfide	Ave	0.8263	0.9664		23.4	20.0	17.0	50.0
Acetonitrile	Lin1		0.0258		286	200	43.2	50.0
Methyl acetate	Lin1		0.2317		57.4	40.0	43.6	50.0
Methylene Chloride	Lin1		0.3806		22.1	20.0	10.3	50.0
tert-Butyl alcohol	Ave	0.0199	0.0316		637	400	59.3*	50.0
Acrylonitrile	Lin1		0.1155		58.8	40.0	47.1	50.0
Methyl tert-butyl ether	Ave	0.7663	0.8354		21.8	20.0	9.0	50.0
trans-1,2-Dichloroethene	Ave	0.3134	0.3382		21.6	20.0	7.9	50.0
Hexane	Lin1		0.2076		20.1	20.0	0.3	20.0
1,1-Dichloroethane	Ave	0.3969	0.3721	0.1000	18.7	20.0	-6.3	50.0
Vinyl acetate	Ave	0.0452	0.0402		17.8	20.0	-11.2	50.0
2,2-Dichloropropane	Lin1		0.1604		18.0	20.0	-9.9	50.0
2-Butanone	Ave	0.0297	0.0377		50.8	40.0	26.9	50.0
cis-1,2-Dichloroethene	Ave	0.3462	0.3179		18.4	20.0	-8.2	50.0
Bromochloromethane	Ave	0.1958	0.1793		18.3	20.0	-8.4	50.0
Tetrahydrofuran	Lin1		0.0717		25.4	20.0	27.2	50.0
Chloroform	Ave	0.4533	0.4231		18.7	20.0	-6.7	20.0
1,1,1-Trichloroethane	Ave	0.3105	0.2726		17.6	20.0	-12.2	50.0
Cyclohexane	Ave	0.3292	0.3117		18.9	20.0	-5.3	50.0
1,1-Dichloropropene	Ave	0.3338	0.3133		18.8	20.0	-6.1	50.0
Carbon tetrachloride	Ave	0.2401	0.2003		16.7	20.0	-16.6	50.0
1,2-Dichloroethane	Ave	0.3560	0.3303		18.6	20.0	-7.2	50.0
Benzene	Ave	1.009	0.9766		19.4	20.0	-3.2	50.0
Trichloroethene	Ave	0.2761	0.2790		20.2	20.0	1.1	50.0
Methylcyclohexane	Lin1		0.1704		16.1	20.0	-19.4	50.0
1,2-Dichloropropane	Ave	0.2333	0.2216		19.0	20.0	-5.0	20.0
1,4-Dioxane	Lin1		0.0033		1190	1000	19.0	50.0
Dibromomethane	Ave	0.1667	0.1886		22.6	20.0	13.2	50.0
Bromodichloromethane	Ave	0.3327	0.2924		17.6	20.0	-12.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54545/2 Calibration Date: 08/15/2012 17:02

Instrument ID: A3UX9 Calib Start Date: 07/24/2012 18:21

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 20:24

Lab File ID: UX933284.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	0.1634	0.1779		43.5	40.0	8.9	50.0
cis-1,3-Dichloropropene	Ave	0.4202	0.3765		17.9	20.0	-10.4	50.0
4-Methyl-2-pentanone	Lin1		0.2471		49.9	40.0	24.8	50.0
Toluene	Ave	1.460	1.432		19.6	20.0	-1.9	20.0
trans-1,3-Dichloropropene	Ave	0.4867	0.4649		19.1	20.0	-4.5	50.0
Ethyl methacrylate	Ave	0.4367	0.4013		18.4	20.0	-8.1	50.0
1,1,2-Trichloroethane	Lin1		0.3108		22.0	20.0	10.2	50.0
Tetrachloroethene	Ave	0.3151	0.3401		21.6	20.0	7.9	50.0
1,3-Dichloropropane	Ave	0.5498	0.5407		19.7	20.0	-1.7	50.0
2-Hexanone	Lin1		0.2341		52.0	40.0	30.0	50.0
Dibromochloromethane	Ave	0.3134	0.2454		15.7	20.0	-21.7	50.0
1,2-Dibromoethane	Ave	0.3076	0.3246		21.1	20.0	5.5	50.0
Chlorobenzene	Ave	0.9778	0.9547	0.3000	19.5	20.0	-2.4	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3350	0.2654		15.8	20.0	-20.8	50.0
Ethylbenzene	Ave	0.4885	0.4776		19.6	20.0	-2.2	20.0
m-Xylene & p-Xylene	Ave	0.6066	0.5983		39.5	40.0	-1.4	50.0
o-Xylene	Ave	0.6093	0.5860		19.2	20.0	-3.8	50.0
Styrene	Ave	1.076	1.074		20.0	20.0	-0.2	50.0
Bromoform	Lin1		0.1497	0.1000	14.8	20.0	-26.1	50.0
Isopropylbenzene	Ave	1.388	1.348		19.4	20.0	-2.8	50.0
1,1,2,2-Tetrachloroethane	Lin1		0.8759	0.3000	23.7	20.0	18.3	50.0
Bromobenzene	Ave	0.8095	0.8018		19.8	20.0	-1.0	50.0
1,2,3-Trichloropropane	Lin1		0.3270		25.3	20.0	26.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2293	0.2150		18.7	20.0	-6.3	50.0
n-Propylbenzene	Lin1		0.6749		18.8	20.0	-5.9	50.0
2-Chlorotoluene	Ave	0.7078	0.6530		18.5	20.0	-7.7	50.0
1,3,5-Trimethylbenzene	Ave	2.311	2.092		18.1	20.0	-9.5	50.0
4-Chlorotoluene	Ave	0.7685	0.7044		18.3	20.0	-8.3	50.0
tert-Butylbenzene	Ave	1.958	1.819		18.6	20.0	-7.1	50.0
1,2,4-Trimethylbenzene	Ave	2.416	2.170		18.0	20.0	-10.2	50.0
sec-Butylbenzene	Ave	2.604	2.459		18.9	20.0	-5.6	50.0
1,3-Dichlorobenzene	Ave	1.484	1.373		18.5	20.0	-7.5	50.0
p-Isopropyltoluene	Ave	2.216	2.118		19.1	20.0	-4.4	50.0
1,4-Dichlorobenzene	Ave	1.579	1.465		18.6	20.0	-7.2	50.0
n-Butylbenzene	Ave	1.954	1.735		17.8	20.0	-11.2	50.0
1,2-Dichlorobenzene	Ave	1.447	1.393		19.3	20.0	-3.7	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1601	0.1652		20.6	20.0	3.2	50.0
1,3,5-Trichlorobenzene	Ave	0.9277	0.8119		17.5	20.0	-12.5	50.0
1,2,4-Trichlorobenzene	Lin1		0.7523		19.0	20.0	-4.8	50.0
Hexachlorobutadiene	Ave	0.3530	0.3204		18.2	20.0	-9.2	50.0
Naphthalene	Lin1		2.513		22.7	20.0	13.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCVIS 240-54545/2 Calibration Date: 08/15/2012 17:02

Instrument ID: A3UX9 Calib Start Date: 07/24/2012 18:21

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 20:24

Lab File ID: UX933284.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	Lin1		0.6953		20.6	20.0	2.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2522	0.2456		19.5	20.0	-2.6	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2951	0.3068		20.8	20.0	4.0	50.0
Toluene-d8 (Surr)	Ave	1.371	1.311		19.1	20.0	-4.4	50.0
4-Bromofluorobenzene (Surr)	Lin1		0.4628		19.0	20.0	-4.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab Sample ID: CCV 240-54545/3 Calibration Date: 08/15/2012 17:52

Instrument ID: A3UX9 Calib Start Date: 07/24/2012 21:16

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 07/24/2012 23:26

Lab File ID: UX933286.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	0.5301	0.5503		20.8	20.0	3.8	50.0
Ethyl ether	Ave	0.2053	0.1979		19.3	20.0	-3.6	50.0
3-Chloro-1-propene	Lin1		0.1015		13.6	20.0	-32.0	50.0
Diisopropyl ether	Ave	0.2395	0.2379		99.3	100	-0.7	50.0
2-Chloro-1,3-butadiene	Ave	0.3699	0.3442		18.6	20.0	-7.0	50.0
Ethyl-t-butyl ether (ETBE)	Ave	0.7202	0.6881		19.1	20.0	-4.5	50.0
Ethyl acetate	Qua		0.2135		52.3	40.0	30.6	50.0
Propionitrile	Qua		0.0361		56.6	40.0	41.5	50.0
Methacrylonitrile	Qua		0.1398		26.2	20.0	31.0	50.0
Isobutyl alcohol	Qua		0.0065		354	400	-11.5	50.0
Tert-amyl-methyl ether (TAME)	Ave	0.7224	0.7162		19.8	20.0	-0.9	50.0
n-Heptane	Lin1		0.1252		17.5	20.0	-12.4	50.0
n-Butanol	Qua		0.0047		291	400	-27.1	50.0
Methyl methacrylate	Qua		0.1979		24.2	20.0	20.9	50.0
2-Nitropropane	Qua		0.0279		29.9	40.0	-25.1	50.0
Cyclohexanone	Qua		0.0345		275	200	37.4	50.0
1,2,3-Trimethylbenzene	Ave	2.611	2.324		17.8	20.0	-11.0	50.0
2-Methylnaphthalene	Ave	1.199	1.193		39.8	40.0	-0.5	50.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Lab File ID: UX933287.D Lab Sample ID: MB 240-54545/4

Matrix: Water Heated Purge: (Y/N) N

Instrument ID: A3UX9 Date Analyzed: 08/15/2012 18:17

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 240-54545/5	UX933285.D	08/15/2012 17:27
MSA-SW37A-081312	240-14133-1	UX933288.D	08/15/2012 18:43
MSA-SW37B-081312	240-14133-2	UX933289.D	08/15/2012 19:08
MSA-SW37C-081312	240-14133-3	UX933290.D	08/15/2012 19:33
MSA-SW37D-081312	240-14133-4	UX933291.D	08/15/2012 19:59
MSA-SW38A-081312	240-14133-5	UX933292.D	08/15/2012 20:23
MSA-SW38B-081312	240-14133-6	UX933293.D	08/15/2012 20:48
MSA-SW38C-081312	240-14133-7	UX933294.D	08/15/2012 21:11
MSA-SW38D-081312	240-14133-8	UX933295.D	08/15/2012 21:36
MSA-SW39A-081312	240-14133-9	UX933296.D	08/15/2012 22:01
MSA-SW39B-081312	240-14133-10	UX933297.D	08/15/2012 22:25
MSA-SW39C-081312	240-14133-11	UX933298.D	08/15/2012 22:50
MSA-SW39D-081312	240-14133-12	UX933299.D	08/15/2012 23:15
MSA-SW40A-081312	240-14133-13	UX933300.D	08/15/2012 23:40
MSA-SW40B-081312	240-14133-14	UX933301.D	08/16/2012 00:05
MSA-SW40C-081312	240-14133-15	UX933302.D	08/16/2012 00:30
MSA-SW40D-081312	240-14133-16	UX933303.D	08/16/2012 00:55
MSA-SW41A-081312	240-14133-17	UX933304.D	08/16/2012 01:21
MSA-SW41B-081312	240-14133-18	UX933305.D	08/16/2012 01:46
MSA-SW41C-081312	240-14133-19	UX933306.D	08/16/2012 02:11
MSA-SW41D-081312	240-14133-20	UX933307.D	08/16/2012 02:36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-54545/4

Matrix: Water | Lab File ID: UX933287.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 18:17

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.: 54545 | 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	5.35		5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-54545/4

Matrix: Water Lab File ID: UX933287.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 18:17

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
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
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U	20	3.9
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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-54545/4

Matrix: Water Lab File ID: UX933287.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 18:17

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.: 54545 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)	99		63-129
460-00-4	4-Bromofluorobenzene (Surr)	91		66-117
1868-53-7	Dibromofluoromethane (Surr)	94		75-121
2037-26-5	Toluene-d8 (Surr)	93		74-115

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX933285.D

Lab ID: LCS 240-54545/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	16.7	83	72-116	
1,1,1-Trichloroethane	20.0	17.7	88	74-118	
1,1,2,2-Tetrachloroethane	20.0	22.3	112	68-118	
1,1,2-Trichloro-1,2,2-trichfluoroethane	20.0	21.3	106	74-151	
1,1-Dichloroethane	20.0	19.7	99	82-115	
1,1-Dichloroethene	20.0	23.3	116	78-131	
1,1-Dichloropropene	20.0	19.3	96	83-114	
1,2,3-Trichlorobenzene	20.0	22.4	112	54-126	
1,2,3-Trichloropropane	20.0	23.9	119	73-129	
1,2,3-Trimethylbenzene	20.0	17.6	88	70-130	
1,2,4-Trichlorobenzene	20.0	20.3	102	48-135	
1,2,4-Trimethylbenzene	20.0	18.3	92	76-120	
1,2-Dibromo-3-Chloropropane	20.0	21.8	109	42-136	
1,2-Dibromoethane	20.0	20.7	104	79-113	
1,2-Dichlorobenzene	20.0	19.5	97	81-110	
1,2-Dichloroethane	20.0	18.9	94	71-127	
1,2-Dichloropropane	20.0	19.4	97	81-115	
1,3-Dichlorobenzene	20.0	19.0	95	80-110	
1,3-Dichloropropane	20.0	19.5	98	79-116	
1,4-Dichlorobenzene	20.0	18.8	94	82-110	
2,2-Dichloropropane	20.0	18.0	90	50-129	
2-Butanone	40.0	48.3	121	60-126	
2-Chloroethyl vinyl ether	20.0	21.2	106	52-131	
2-Chlorotoluene	20.0	18.4	92	76-116	
2-Hexanone	40.0	47.9	120	55-133	
4-Chlorotoluene	20.0	18.8	94	77-115	
4-Methyl-2-pentanone	40.0	48.9	122	63-128	
Acetone	40.0	50.6	126	43-136	
Benzene	20.0	19.8	99	83-112	
Bromobenzene	20.0	19.6	98	76-115	
Bromochloromethane	20.0	18.5	92	77-120	
Bromodichloromethane	20.0	18.3	92	72-121	
Bromoform	20.0	15.6	78	40-131	
Bromomethane	20.0	19.2	96	11-185	
Carbon disulfide	20.0	22.5	113	62-142	
Carbon tetrachloride	20.0	18.5	92	66-128	
Chlorobenzene	20.0	19.6	98	85-110	
Chloroethane	20.0	18.7	93	25-153	
Chloroform	20.0	18.3	92	79-117	
Chloromethane	20.0	19.9	99	44-126	
cis-1,2-Dichloroethene	20.0	18.8	94	80-113	

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.: 240-14133-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UX933285.D

Lab ID: LCS 240-54545/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	20.0	17.4	87	61-115	
Dibromochloromethane	20.0	15.9	80	64-119	
Dibromomethane	20.0	23.6	118	81-120	
Dichlorodifluoromethane	20.0	16.7	84	19-129	
Diisopropyl ether	20.0	19.9	100	77-118	
Ethylbenzene	20.0	19.9	99	83-112	
Hexachlorobutadiene	20.0	18.9	95	36-134	
Isopropylbenzene	20.0	19.1	96	75-114	
Methyl tert-butyl ether	20.0	21.4	107	52-144	
Methylene Chloride	20.0	22.2	111	66-131	
m-Xylene & p-Xylene	40.0	38.8	97	83-113	
Naphthalene	20.0	23.2	116	32-141	
n-Butylbenzene	20.0	18.3	92	66-125	
n-Propylbenzene	20.0	19.8	99	74-121	
o-Xylene	20.0	19.1	96	83-113	
p-Isopropyltoluene	20.0	20.1	101	74-120	
sec-Butylbenzene	20.0	18.8	94	70-117	
Styrene	20.0	19.5	97	79-114	
tert-Butyl alcohol	400	632	158	70-130	*
tert-Butylbenzene	20.0	18.8	94	71-115	
Tetrachloroethene	20.0	20.5	102	79-114	
Toluene	20.0	19.5	97	84-111	
trans-1,2-Dichloroethene	20.0	22.0	110	83-117	
trans-1,3-Dichloropropene	20.0	19.2	96	58-117	
Trichloroethene	20.0	20.4	102	76-117	
Trichlorofluoromethane	20.0	21.5	107	49-157	
Vinyl acetate	20.0	22.5	113	46-161	
Vinyl chloride	20.0	20.5	103	53-127	
Xylenes, Total	60.0	57.9	97	83-112	

Column to be used to flag recovery and RPD values

FORM III 8260B

HOLDTIME

SDG 240-14133-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HGF	UG/L	MSA-SW44A-081312	240-14133-29	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW41D-081312	240-14133-20	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW42A-081312	240-14133-21	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW42B-081312	240-14133-22	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW42C-081312	240-14133-23	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW42D-081312	240-14133-24	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW43A-081312	240-14133-25	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW41C-081312	240-14133-19	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW43C-081312	240-14133-27	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW43D-081312	240-14133-28	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW37A-081312	240-14133-1	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW44C-081312	240-14133-31	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW44D-081312	240-14133-32	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW45A-081312	240-14133-33	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW45B-081312	240-14133-34	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HGF	UG/L	MSA-SW45C-081312	240-14133-35	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW45D-081312	240-14133-36	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW43B-081312	240-14133-26	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW38B-081312	240-14133-6	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW44B-081312	240-14133-30	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW41B-081312	240-14133-18	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW37B-081312	240-14133-2	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW37C-081312	240-14133-3	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW38A-081312	240-14133-5	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW38C-081312	240-14133-7	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW38D-081312	240-14133-8	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW39A-081312	240-14133-9	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW40C-081312	240-14133-15	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW41A-081312	240-14133-17	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW37D-081312	240-14133-4	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW40D-081312	240-14133-16	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW40B-081312	240-14133-14	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW40A-081312	240-14133-13	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HGF	UG/L	MSA-SW39D-081312	240-14133-12	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW39C-081312	240-14133-11	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW39B-081312	240-14133-10	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW39C-081312	240-14133-11	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW37A-081312	240-14133-1	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW41C-081312	240-14133-19	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW41A-081312	240-14133-17	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW40D-081312	240-14133-16	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW40C-081312	240-14133-15	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW40B-081312	240-14133-14	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW40A-081312	240-14133-13	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW39D-081312	240-14133-12	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW41B-081312	240-14133-18	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW39B-081312	240-14133-10	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW39A-081312	240-14133-9	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW38D-081312	240-14133-8	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW38C-081312	240-14133-7	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW38B-081312	240-14133-6	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
MF	UG/L	MSA-SW38A-081312	240-14133-5	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW37D-081312	240-14133-4	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW37B-081312	240-14133-2	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW42B-081312	240-14133-22	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW37C-081312	240-14133-3	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW44D-081312	240-14133-32	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW42A-081312	240-14133-21	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW41D-081312	240-14133-20	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW45D-081312	240-14133-36	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW45C-081312	240-14133-35	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW45A-081312	240-14133-33	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW44C-081312	240-14133-31	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW44B-081312	240-14133-30	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW42D-081312	240-14133-24	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW43D-081312	240-14133-28	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW43C-081312	240-14133-27	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW43B-081312	240-14133-26	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW43A-081312	240-14133-25	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
MF	UG/L	MSA-SW44A-081312	240-14133-29	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW45B-081312	240-14133-34	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW42C-081312	240-14133-23	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
OV	UG/L	MSA-SW43A-081312	240-14133-25	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW41C-081312	240-14133-19	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW42D-081312	240-14133-24	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW42C-081312	240-14133-23	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW42B-081312	240-14133-22	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW41D-081312	240-14133-20	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW43B-081312	240-14133-26	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW45B-081312	240-14133-34	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW42A-081312	240-14133-21	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW43C-081312	240-14133-27	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW43D-081312	240-14133-28	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW44A-081312	240-14133-29	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW44B-081312	240-14133-30	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW44C-081312	240-14133-31	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW41B-081312	240-14133-18	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MSA-SW45A-081312	240-14133-33	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW38D-081312	240-14133-8	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW45C-081312	240-14133-35	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW45D-081312	240-14133-36	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW44D-081312	240-14133-32	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW38B-081312	240-14133-6	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	TB-081213	240-14133-41	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	EL-SW01A-081312	240-14133-37	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	EL-SW01B-081312	240-14133-38	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	EL-SW01C-081312	240-14133-39	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	EL-SW01D-081312	240-14133-40	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW37A-081312	240-14133-1	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW37B-081312	240-14133-2	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW37C-081312	240-14133-3	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW39B-081312	240-14133-10	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW38A-081312	240-14133-5	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW41A-081312	240-14133-17	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW38C-081312	240-14133-7	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	MSA-SW39A-081312	240-14133-9	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW39C-081312	240-14133-11	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW39D-081312	240-14133-12	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW40A-081312	240-14133-13	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW40B-081312	240-14133-14	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW40C-081312	240-14133-15	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW40D-081312	240-14133-16	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW37D-081312	240-14133-4	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38D-081312 Lab Sample ID: 240-14133-8

Matrix: Water Lab File ID: UX933295.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:02

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 21:36

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	2.5	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38D-081312 Lab Sample ID: 240-14133-8

Matrix: Water Lab File ID: UX933295.D

Analysis Method: 8260B Date Collected: 08/13/2012 13:02

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 21:36

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.: 54545 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
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
74-87-3	Chloromethane	1.0	U	1.0	0.30
156-59-2	cis-1,2-Dichloroethene	0.41	J	1.0	0.17
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.14
124-48-1	Dibromochloromethane	1.0	U	1.0	0.18
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	5.0	U	5.0	1.5
100-41-4	Ethylbenzene	1.0	U	1.0	0.17
637-92-3	Ethyl-t-butyl ether (ETBE)	5.0	U	5.0	0.11
87-68-3	Hexachlorobutadiene	1.0	U	1.0	0.30
98-82-8	Isopropylbenzene	1.0	U	1.0	0.13
1634-04-4	Methyl tert-butyl ether	5.0	U	5.0	0.17
75-09-2	Methylene Chloride	1.0	U	1.0	0.33
179601-23-1	m-Xylene & p-Xylene	2.0	U	2.0	0.24
91-20-3	Naphthalene	1.0	U	1.0	0.24
104-51-8	n-Butylbenzene	1.0	U	1.0	0.12
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
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
75-65-0	tert-Butyl alcohol	20	U *	20	3.9
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	0.69	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	0.50	U	0.50	0.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW38D-081312 | Lab Sample ID: 240-14133-8

Matrix: Water | Lab File ID: UX933295.D

Analysis Method: 8260B | Date Collected: 08/13/2012 13:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/15/2012 21:36

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.: 54545 | 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)	102		63-129
460-00-4	4-Bromofluorobenzene (Surr)	88		66-117
1868-53-7	Dibromofluoromethane (Surr)	97		75-121
2037-26-5	Toluene-d8 (Surr)	92		74-115

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Client Sample ID: MSA-SW39A-081312 Lab Sample ID: 240-14133-9

Matrix: Water Lab File ID: UX933296.D

Analysis Method: 8260B Date Collected: 08/13/2012 14:36

Sample wt/vol: 5(mL) Date Analyzed: 08/15/2012 22:01

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.: 54545 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	5.0	U	5.0	0.67
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.24
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
78-93-3	2-Butanone	5.0	U	5.0	0.57
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	5.0	U	5.0	0.41
106-43-4	4-Chlorotoluene	1.0	U	1.0	0.18
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	0.32
67-64-1	Acetone	1.8	J B	5.0	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
75-27-4	Bromodichloromethane	1.0	U	1.0	0.15
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

Tetra Tech **INTERNAL CORRESPONDENCE**

TO: **A. APANAVAGE** **DATE:** **AUGUST 29, 2012**

FROM: **TERRI SOLOMON** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION- DISSOLVED METALS**
MARTIN STATE AIRPORT – SURFACE WATER
SDG 240-14133-1

SAMPLES: 36/Aqueous

MSA-SW37A-081312	MSA-SW37B-081312	MSA-SW37C-081312
MSA-SW37D-081312	MSA-SW38A-081312	MSA-SW38B-081312
MSA-SW38C-081312	MSA-SW38D-081312	MSA-SW39A-081312
MSA-SW39B-081312	MSA-SW39C-081312	MSA-SW39D-081312
MSA-SW40A-081312	MSA-SW40B-081312	MSA-SW40C-081312
MSA-SW40D-081312	MSA-SW41A-081312	MSA-SW41B-081312
MSA-SW41C-081312	MSA-SW41D-081312	MSA-SW42A-081312
MSA-SW42B-081312	MSA-SW42C-081312	MSA-SW42D-081312
MSA-SW43A-081312	MSA-SW43B-081312	MSA-SW43C-081312
MSA-SW43D-081312	MSA-SW44A-081312	MSA-SW44B-081312
MSA-SW44C-081312	MSA-SW44D-081312	MSA-SW45A-081312
MSA-SW45B-081312	MSA-SW45C-081312	MSA-SW45D-081312

Overview

The sample set for Martin State Airport – Surface Water, SDG 240-14133-1, consists of thirty-six (36) aqueous environmental samples. No field duplicate samples were included in this SDG.

All samples were analyzed for select 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 August 13, 2012 and analyzed by Test America. Metals analyses were conducted in accordance with SW-846 method 6020. Mercury analyses were conducted in accordance with SW-846 method 7470A.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, initial/continuing calibrations, laboratory method / preparation blank results, laboratory control sample recoveries, matrix spike recoveries, laboratory duplicate results, ICP interference results, ICP serial dilution results, internal standard recoveries, analyte quantitation, and detection limits. Areas of concern are listed below.

Major – None.

Minor

- The contract required detection limit (CRDL) percent recoveries for copper and zinc were > 110% quality control limit. The positive results < 2X CRDL reported for copper were qualified as biased high, "K". The positive results < 2X CRDL reported for zinc were qualified as estimated, "J", as a result of conflicting noncompliances.

- The internal standard recoveries for Lithium-6 were < 60% quality control limit for all samples. The nondetected results reported for beryllium were qualified as biased low. "UL".

- Positive results less than the reporting limit (RL) but greater than the method detection limit (MDL) were qualified as estimated, "J".

Notes

Nondetected results are reported to the method detection limit (MDL).

The following contaminant was detected in the laboratory method blanks at the following maximum concentration:

Analyte	Maximum Concentration	Action Level
Molybdenum	0.159 ug/L	0.795 ug/L

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. No validation actions were warranted as all sample results were greater than the action level.

The matrix spike percent recovery for chromium was greater than the laboratory control limits affecting samples MSA-SW42A-081312, MSA-SW42B-081312, MSA-SW42C-081312, MSA-SW42D-081312, MSA-SW43A-081312, MSA-SW43B-081312, MSA-SW43C-081312, MSA-SW43D-081312, MSA-SW44A-081312, MSA-SW44B-081312, MSA-SW44C-081312, MSA-SW44D-081312, MSA-SW45A-081312, MSA-SW45B-081312, MSA-SW45C-081312 and MSA-SW45D-081312. No validation actions were warranted as all sample results were nondetects.

Executive Summary

Laboratory Performance: The CRDL percent recoveries for copper and zinc were > 110% quality control limit.

Other Factors Affecting Data Quality: Positive results less than the RL but greater than the MDL were qualified as estimated. The internal standard recoveries for Lithium-6 were < 60% quality control limit for all samples.

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.

The text of this report has been formulated to address only those problem areas affecting data quality.

Tetra Tech
Terri L. Solomon
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 deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	MSA-SW37A-081312			MSA-SW37B-081312			MSA-SW37C-081312			MSA-SW37D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-1			240-14133-2			240-14133-3			240-14133-4		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.39	J	P	0.39	J	P	0.31	J	P	0.3	J	P
ARSENIC		2.6	J	P	2.6	J	P	2.4	J	P	2.5	J	P
BARIUM		74			74			75			74		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.15	J	P	0.058	U		0.082	J	P	0.076	J	P
COPPER		3.3	K	C	3	K	C	3.2	K	C	3.5	K	C
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		2.7	J	P	2.7	J	P	2.3	J	P	2.2	J	P
NICKEL		1.3	J	P	1.2	J	P	1.3	J	P	1.5	J	P
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		0.41	J	P	0.38	J	P	0.14	U		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		1.1	J	P	1.2	J	P	1.1	J	P	1.1	J	P
ZINC		3.5	J	CP	2.3	U		2.3	U		3.5	J	CP

PROJ_NO: 04021	NSAMPLE	MSA-SW38A-081312			MSA-SW38B-081312			MSA-SW38C-081312			MSA-SW38D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-5			240-14133-6			240-14133-7			240-14133-8		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.3	J	P	0.29	J	P	0.3	J	P	0.29	J	P
ARSENIC		2.5	J	P	2.3	J	P	2.3	J	P	2.6	J	P
BARIUM		76			74			76			77		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.17	J	P	0.058	U		0.058	U		0.22	J	P
COPPER		3.8	K	C	3.2	K	C	3	K	C	5		
LEAD		0.32	J	P	0.18	U		0.18	U		0.63	J	P
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		2.3	J	P	2.4	J	P	2.3	J	P	2.3	J	P
NICKEL		1.3	J	P	1.2	J	P	1.2	J	P	1.5	J	P
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		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		1.4	J	P	0.92	J	P	1.1	J	P	1.5	J	P
ZINC		2.6	J	CP	2.3	J	CP	3.2	J	CP	3.4	J	CP

PROJ_NO: 04021	NSAMPLE	MSA-SW39A-081312			MSA-SW39B-081312			MSA-SW39C-081312			MSA-SW39D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-9			240-14133-10			240-14133-11			240-14133-12		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.28	J	P	0.26	J	P	0.25	J	P	0.23	J	P
ARSENIC		2.3	J	P	2.4	J	P	2.5	J	P	2.5	J	P
BARIUM		75			77			78			77		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.11	J	P	0.058	U		0.058	U		0.058	U	
COPPER		3	K	C	2.8	K	C	2.6	K	C	2.7	K	C
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		2.3	J	P	2.4	J	P	2.4	J	P	2.4	J	P
NICKEL		1.3	J	P	1.1	J	P	1.2	J	P	1.3	J	P
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		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		1.3	J	P	1.2	J	P	1.4	J	P	1.3	J	P
ZINC		2.3	U		2.3	U		2.3	U		5.3	J	CP

PROJ_NO: 04021	NSAMPLE	MSA-SW40A-081312			MSA-SW40B-081312			MSA-SW40C-081312			MSA-SW40D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-13			240-14133-14			240-14133-15			240-14133-16		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.28	J	P	0.3	J	P	0.29	J	P	0.27	J	P
ARSENIC		2.5	J	P	2.4	J	P	2.4	J	P	2.1	J	P
BARIUM		76			76			76			71		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.12	J	P	0.058	U		0.058	U		0.058	U	
COPPER		2.9	K	C	3.4	K	C	3.5	K	C	3	K	C
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		2.2	J	P	2.2	J	P	2.3	J	P	2.2	J	P
NICKEL		1.2	J	P	1.5	J	P	1.3	J	P	1.1	J	P
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		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		1.4	J	P	0.94	J	P	1.1	J	P	1.2	J	P
ZINC		2.3	U		2.3	U		2.6	J	CP	2.3	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW41A-081312			MSA-SW41B-081312			MSA-SW41C-081312			MSA-SW41D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-17			240-14133-18			240-14133-19			240-14133-20		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.26	J	P	0.27	J	P	0.31	J	P	0.24	J	P
ARSENIC		2.3	J	P	2.2	J	P	2.3	J	P	2.2	J	P
BARIUM		76			73			74			73		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.2	J	P	0.12	J	P	0.058	U		0.058	U	
COPPER		3.8	K	C	3.6	K	C	4			3.3	K	C
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		2.3	J	P	2.2	J	P	2.2	J	P	2.1	J	P
NICKEL		2.6			2.4			1.3	J	P	1.2	J	P
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		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		1.2	J	P	1.1	J	P	0.99	J	P	1	J	P
ZINC		4.5	J	CP	4	J	CP	2.3	U		2.3	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW42A-081312			MSA-SW42B-081312			MSA-SW42C-081312			MSA-SW42D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-21			240-14133-22			240-14133-23			240-14133-24		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.38	J	P	0.39	J	P	0.31	J	P	0.27	J	P
ARSENIC		2.7	J	P	2.6	J	P	2.4	J	P	2.5	J	P
BARIUM		74			76			75			73		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.15	J	P	0.15	J	P	0.081	J	P	0.062	J	P
COPPER		3.4	K	C	5.4			3.2	K	C	3.1	K	C
LEAD		0.4	J	P	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	J	P	2.7	J	P	2.3	J	P	2.2	J	P
NICKEL		1.3	J	P	1.2	J	P	1.2	J	P	1.2	J	P
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		0.17	J	P	0.14	U		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		1.5	J	P	1.2	J	P	1.1	J	P	1.1	J	P
ZINC		2.5	J	CP	4.4	J	CP	2.3	U		2.3	U	

PROJ_NO: 04021	NSAMPLE	MSA-SW43A-081312			MSA-SW43B-081312			MSA-SW43C-081312			MSA-SW43D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-25			240-14133-26			240-14133-27			240-14133-28		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.24	J	P	0.27	J	P	0.25	J	P	0.25	J	P
ARSENIC		2.1	J	P	2.3	J	P	2.4	J	P	2.5	J	P
BARIUM		70			75			75			77		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.11	J	P	0.073	J	P	0.058	U		0.058	U	
COPPER		2.8	K	C	3.2	K	C	3.3	K	C	3.2	K	C
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	J	P	2.2	J	P	2.2	J	P	2.3	J	P
NICKEL		1.3	J	P	1.3	J	P	1.2	J	P	1.3	J	P
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		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		0.9	J	P	1.1	J	P	1.2	J	P	1	J	P
ZINC		2.3	U		2.3	U		2.3	U		2.6	J	CP

PROJ_NO: 04021	NSAMPLE	MSA-SW44A-081312			MSA-SW44B-081312			MSA-SW44C-081312			MSA-SW44D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-29			240-14133-30			240-14133-31			240-14133-32		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.27	J	P	0.25	J	P	0.25	J	P	0.26	J	P
ARSENIC		2.4	J	P	2.6	J	P	2.5	J	P	2.6	J	P
BARIUM		74			80			76			77		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.065	J	P	0.18	J	P	0.058	U		0.11	J	P
COPPER		3.1	K	C	4.4			2.9	K	C	3.3	K	C
LEAD		0.18	U		0.45	J	P	0.18	U		0.28	J	P
MERCURY		0.12	U		0.12	U		0.12	U		0.12	U	
MOLYBDENUM		2.1	J	P	2.3	J	P	2.3	J	P	2.3	J	P
NICKEL		1.2	J	P	1.4	J	P	1.4	J	P	1.3	J	P
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		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		1.1	J	P	1.5	J	P	1.1	J	P	1.6	J	P
ZINC		2.3	U		2.6	J	CP	2.3	J	CP	2.5	J	CP

PROJ_NO: 04021	NSAMPLE	MSA-SW45A-081312			MSA-SW45B-081312			MSA-SW45C-081312			MSA-SW45D-081312		
SDG: 240-14133-1	LAB_ID	240-14133-33			240-14133-34			240-14133-35			240-14133-36		
FRACTION: MF	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
ANTIMONY		0.23	J	P	0.22	J	P	0.18	J	P	0.21	J	P
ARSENIC		2.4	J	P	2.5	J	P	2.4	J	P	2.5	J	P
BARIUM		76			77			72			76		
BERYLLIUM		0.2	UL	N	0.2	UL	N	0.2	UL	N	0.2	UL	N
CADMIUM		0.13	U		0.13	U		0.13	U		0.13	U	
CHROMIUM		0.71	U		0.71	U		0.71	U		0.71	U	
COBALT		0.058	U		0.058	U		0.058	U		0.058	U	
COPPER		2.9	K	C	2.9	K	C	2.7	K	C	3	K	C
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		2.3	J	P	2.2	J	P	2.2	J	P	2.2	J	P
NICKEL		1.2	J	P	1.3	J	P	1.2	J	P	1.2	J	P
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		0.14	U	
TUNGSTEN		0.37	U		0.37	U		0.37	U		0.37	U	
VANADIUM		1.2	J	P	1.2	J	P	1.2	J	P	1.1	J	P
ZINC		2.9	J	CP	2.3	U		2.3	U		2.3	U	

Appendix B

Results as Reported by the Laboratory

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MSA-SW37A-081312 Lab Sample ID: 240-14133-1

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 11:34

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.39	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.6	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	74	5.0	0.19	ug/L			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	0.15	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.3	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.3	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	0.41	2.0	0.14	ug/L	J		1	6020
7440-62-2	Vanadium	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	3.5	20	2.3	ug/L	J		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: MSA-SW37B-081312 Lab Sample ID: 240-14133-2

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 11:42

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.39	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.6	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	74	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.0	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.2	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	0.38	2.0	0.14	ug/L	J		1	6020
7440-62-2	Vanadium	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW37C-081312 Lab Sample ID: 240-14133-3

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 11:47

Reporting Basis: WET Date Received: 08/14/2012 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	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	75	5.0	0.19	ug/L			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	0.082	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.2	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW37D-081312 Lab Sample ID: 240-14133-4

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 11:52

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.30	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	74	5.0	0.19	ug/L			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	0.076	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.5	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.5	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	3.5	20	2.3	ug/L	J		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: MSA-SW38A-081312 Lab Sample ID: 240-14133-5

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:48

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.30	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	0.17	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.8	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	0.32	1.0	0.18	ug/L	J		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	1.4	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.6	20	2.3	ug/L	J		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: MSA-SW38B-081312 Lab Sample ID: 240-14133-6

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:53

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.29	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.3	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	74	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.2	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.4	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.2	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	0.92	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.3	20	2.3	ug/L	J		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: MSA-SW38C-081312 Lab Sample ID: 240-14133-7

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:58

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.30	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.3	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.0	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.2	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	3.2	20	2.3	ug/L	J		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: MSA-SW38D-081312 Lab Sample ID: 240-14133-8

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:02

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.29	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.6	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	77	5.0	0.19	ug/L			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	0.22	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	5.0	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	0.63	1.0	0.18	ug/L	J		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.5	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	1.5	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	3.4	20	2.3	ug/L	J		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: MSA-SW39A-081312 Lab Sample ID: 240-14133-9

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:36

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.28	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.3	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	75	5.0	0.19	ug/L			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	0.11	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.0	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	1.3	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW39B-081312 Lab Sample ID: 240-14133-10

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:41

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.26	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	77	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	2.8	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.4	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.1	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	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW39C-081312 Lab Sample ID: 240-14133-11

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:45

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.25	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	78	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	2.6	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.4	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.2	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	1.4	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW39D-081312 Lab Sample ID: 240-14133-12

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:52

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.23	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	77	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	2.7	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.4	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	1.3	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	5.3	20	2.3	ug/L	J		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: MSA-SW40A-081312 Lab Sample ID: 240-14133-13

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:25

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.28	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	0.12	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	2.9	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.2	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	1.4	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW40B-081312 Lab Sample ID: 240-14133-14

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:32

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.30	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.4	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.5	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	0.94	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW40C-081312 Lab Sample ID: 240-14133-15

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:37

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.29	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.5	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.6	20	2.3	ug/L	J		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: MSA-SW40D-081312 Lab Sample ID: 240-14133-16

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:42

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.27	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	71	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.0	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.1	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	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW41A-081312 Lab Sample ID: 240-14133-17

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:08

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.26	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.3	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	0.20	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.8	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	2.6	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	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	4.5	20	2.3	ug/L	J		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: MSA-SW41B-081312 Lab Sample ID: 240-14133-18

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:12

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.27	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.2	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	73	5.0	0.19	ug/L			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	0.12	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.6	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	2.4	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	4.0	20	2.3	ug/L	J		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: MSA-SW41C-081312 Lab Sample ID: 240-14133-19

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:18

Reporting Basis: WET Date Received: 08/14/2012 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	6020
7440-38-2	Arsenic	2.3	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	74	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	4.0	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.3	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	0.99	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW41D-081312 Lab Sample ID: 240-14133-20

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:22

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.24	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.2	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	73	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.3	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.1	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.2	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	1.0	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW42A-081312 Lab Sample ID: 240-14133-21

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:00

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.38	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.7	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	74	5.0	0.19	ug/L			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	0.15	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.4	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	0.40	1.0	0.18	ug/L	J		1	6020
7439-98-7	Molybdenum	2.5	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	1.5	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.5	20	2.3	ug/L	J		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: MSA-SW42B-081312 Lab Sample ID: 240-14133-22

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:05

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.39	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.6	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	0.15	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	5.4	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.2	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	0.17	2.0	0.14	ug/L	J		1	6020
7440-62-2	Vanadium	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	4.4	20	2.3	ug/L	J		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: MSA-SW42C-081312 Lab Sample ID: 240-14133-23

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:12

Reporting Basis: WET Date Received: 08/14/2012 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	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	75	5.0	0.19	ug/L			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	0.081	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.2	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.2	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW42D-081312 Lab Sample ID: 240-14133-24

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 12:18

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.27	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	73	5.0	0.19	ug/L			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	0.062	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.1	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.2	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW43A-081312 Lab Sample ID: 240-14133-25

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:25

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.24	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	70	5.0	0.19	ug/L			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	0.11	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	2.8	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.0	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	0.90	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW43B-081312 Lab Sample ID: 240-14133-26

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:34

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.27	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.3	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	75	5.0	0.19	ug/L			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	0.073	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.2	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.3	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW43C-081312 Lab Sample ID: 240-14133-27

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:37

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.25	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	75	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.3	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.2	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	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW43D-081312 Lab Sample ID: 240-14133-28

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:45

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.25	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	77	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.2	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	1.0	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.6	20	2.3	ug/L	J		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: MSA-SW44A-081312 Lab Sample ID: 240-14133-29

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:51

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.27	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	74	5.0	0.19	ug/L			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	0.065	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.1	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.1	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.2	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW44B-081312 Lab Sample ID: 240-14133-30

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 13:56

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.25	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.6	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	80	5.0	0.19	ug/L			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	0.18	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	4.4	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	0.45	1.0	0.18	ug/L	J		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.4	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	1.5	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.6	20	2.3	ug/L	J		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: MSA-SW44C-081312 Lab Sample ID: 240-14133-31

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:00

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.25	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	2.9	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.4	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.3	20	2.3	ug/L	J		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: MSA-SW44D-081312 Lab Sample ID: 240-14133-32

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:07

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.26	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.6	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	77	5.0	0.19	ug/L			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	0.11	1.0	0.058	ug/L	J		1	6020
7440-50-8	Copper	3.3	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	0.28	1.0	0.18	ug/L	J		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.3	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	1.6	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.5	20	2.3	ug/L	J		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: MSA-SW45A-081312 Lab Sample ID: 240-14133-33

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:14

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.23	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	2.9	2.0	0.29	ug/L			1	6020
7439-92-1	Lead	1.0	1.0	0.18	ug/L	U		1	6020
7439-98-7	Molybdenum	2.3	10	0.093	ug/L	J		1	6020
7440-02-0	Nickel	1.2	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	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	2.9	20	2.3	ug/L	J		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: MSA-SW45B-081312 Lab Sample ID: 240-14133-34

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:20

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.22	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	77	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	2.9	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.3	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	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW45C-081312 Lab Sample ID: 240-14133-35

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:26

Reporting Basis: WET Date Received: 08/14/2012 09:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-36-0	Antimony	0.18	2.0	0.13	ug/L	J		1	6020
7440-38-2	Arsenic	2.4	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	72	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	2.7	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.2	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	1.2	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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: MSA-SW45D-081312 Lab Sample ID: 240-14133-36

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG ID.:

Matrix: Water Date Sampled: 08/13/2012 14:30

Reporting Basis: WET Date Received: 08/14/2012 09:10

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	2.5	5.0	0.40	ug/L	J		1	6020
7440-39-3	Barium	76	5.0	0.19	ug/L			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	1.0	1.0	0.058	ug/L	U		1	6020
7440-50-8	Copper	3.0	2.0	0.29	ug/L			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		1	6020
7440-02-0	Nickel	1.2	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	1.1	20	0.44	ug/L	J		1	6020
7440-66-6	Zinc	20	20	2.3	ug/L	U		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

CASE NARRATIVE

Client: Tetra Tech, Inc

Project: MSA Surface Water

Report Number: 240-14133-1

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 08/14/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.2 and 0.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MSA-SW37A-081312 (240-14133-1), MSA-SW37B-081312 (240-14133-2), MSA-SW37C-081312 (240-14133-3), MSA-SW37D-081312 (240-14133-4), MSA-SW38A-081312 (240-14133-5), MSA-SW38B-081312 (240-14133-6), MSA-SW38C-081312 (240-14133-7), MSA-SW38D-081312 (240-14133-8), MSA-SW39A-081312 (240-14133-9), MSA-SW39B-081312 (240-14133-10), MSA-SW39C-081312 (240-14133-11), MSA-SW39D-081312 (240-14133-12), MSA-SW40A-081312 (240-14133-13), MSA-SW40B-081312 (240-14133-14), MSA-SW40C-081312 (240-14133-15), MSA-SW40D-081312 (240-14133-16), MSA-SW41A-081312 (240-14133-17), MSA-SW41B-081312 (240-14133-18), MSA-SW41C-081312 (240-14133-19), MSA-SW41D-081312 (240-14133-20), MSA-SW42A-081312 (240-14133-21), MSA-SW42B-081312 (240-14133-22), MSA-SW42C-081312 (240-14133-23), MSA-SW42D-081312 (240-14133-24), MSA-SW43A-081312 (240-14133-25), MSA-SW43B-081312 (240-14133-26), MSA-SW43C-081312 (240-14133-27), MSA-SW43D-081312 (240-14133-28), MSA-SW44A-081312 (240-14133-29), MSA-SW44B-081312 (240-14133-30), MSA-SW44C-081312 (240-14133-31), MSA-SW44D-081312 (240-14133-32), MSA-SW45A-081312 (240-14133-33), MSA-SW45B-081312 (240-14133-34), MSA-SW45C-081312 (240-14133-35), MSA-SW45D-081312 (240-14133-36), EL-SW01A-081312 (240-14133-37), EL-SW01B-081312 (240-14133-38), EL-SW01C-081312 (240-14133-39), EL-SW01D-081312 (240-14133-40) and TB-081213 (240-14133-41) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/15/2012 and 08/16/2012.

Acetone was detected in method blank MB 240-54545/4 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.

Hexachlorobutadiene was detected in method blank MB 240-54557/4 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.

1,2,3-Trichlorobenzene, Methylene Chloride and n-Butylbenzene were detected in method blank MB 240-54557/4 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.

Hexachlorobutadiene and Methylene Chloride were detected in method blank MB 240-54716/4 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.

Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for 240-13970-C-2 MSD.

The laboratory control sample (LCS) for batch 54545 exceeded control limits for the following analyte: tert-Butyl alcohol. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The results have been reported and qualified.

The laboratory control sample (LCS) for batch 54557 exceeded control limits for the following analyte: carbon tetrachloride and hexachlorobutadiene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

2-Chloroethyl vinyl ether failed the recovery criteria low for the MS/MSD of sample 240-13970-2 in batch 240-54716.

No other difficulties were encountered during the VOCs analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED METALS (ICPMS)

Samples MSA-SW37A-081312 (240-14133-1), MSA-SW37B-081312 (240-14133-2), MSA-SW37C-081312 (240-14133-3), MSA-SW37D-081312 (240-14133-4), MSA-SW38A-081312 (240-14133-5), MSA-SW38B-081312 (240-14133-6), MSA-SW38C-081312 (240-14133-7), MSA-SW38D-081312 (240-14133-8), MSA-SW39A-081312 (240-14133-9), MSA-SW39B-081312 (240-14133-10), MSA-SW39C-081312 (240-14133-11), MSA-SW39D-081312 (240-14133-12), MSA-SW40A-081312 (240-14133-13), MSA-SW40B-081312 (240-14133-14), MSA-SW40C-081312 (240-14133-15), MSA-SW40D-081312 (240-14133-16), MSA-SW41A-081312 (240-14133-17), MSA-SW41B-081312 (240-14133-18), MSA-SW41C-081312 (240-14133-19), MSA-SW41D-081312 (240-14133-20), MSA-SW42A-081312 (240-14133-21), MSA-SW42B-081312 (240-14133-22), MSA-SW42C-081312 (240-14133-23), MSA-SW42D-081312 (240-14133-24), MSA-SW43A-081312 (240-14133-25), MSA-SW43B-081312 (240-14133-26), MSA-SW43C-081312 (240-14133-27), MSA-SW43D-081312 (240-14133-28), MSA-SW44A-081312 (240-14133-29), MSA-SW44B-081312 (240-14133-30), MSA-SW44C-081312 (240-14133-31), MSA-SW44D-081312 (240-14133-32), MSA-SW45A-081312 (240-14133-33), MSA-SW45B-081312 (240-14133-34), MSA-SW45C-081312 (240-14133-35) and MSA-SW45D-081312 (240-14133-36) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 08/14/2012 and analyzed on 08/15/2012.

Chromium failed the recovery criteria high for the MS of sample MSA-SW42A-081312MS (240-14133-21) in batch 240-54676.

No other difficulties were encountered during the metals analyses. All other quality control parameters were within the acceptance limits.

DISSOLVED MERCURY (CVAA)

Samples MSA-SW37A-081312 (240-14133-1), MSA-SW37B-081312 (240-14133-2), MSA-SW37C-081312 (240-14133-3), MSA-SW37D-081312 (240-14133-4), MSA-SW38A-081312 (240-14133-5), MSA-SW38B-081312 (240-14133-6), MSA-SW38C-081312 (240-14133-7), MSA-SW38D-081312 (240-14133-8), MSA-SW39A-081312 (240-14133-9), MSA-SW39B-081312 (240-14133-10), MSA-SW39C-081312 (240-14133-11), MSA-SW39D-081312 (240-14133-12), MSA-SW40A-081312 (240-14133-13), MSA-SW40B-081312 (240-14133-14), MSA-SW40C-081312 (240-14133-15), MSA-SW40D-081312 (240-14133-16), MSA-SW41A-081312 (240-14133-17), MSA-SW41B-081312 (240-14133-18), MSA-SW41C-081312 (240-14133-19), MSA-SW41D-081312 (240-14133-20), MSA-SW42A-081312 (240-14133-21), MSA-SW42B-081312 (240-14133-22), MSA-SW42C-081312 (240-14133-23), MSA-SW42D-081312 (240-14133-24), MSA-SW43A-081312 (240-14133-25), MSA-SW43B-081312 (240-14133-26), MSA-SW43C-081312 (240-14133-27), MSA-SW43D-081312 (240-14133-28), MSA-SW44A-081312 (240-14133-29), MSA-SW44B-081312 (240-14133-30), MSA-SW44C-081312 (240-14133-31), MSA-SW44D-081312 (240-14133-32), MSA-SW45A-081312 (240-14133-33), MSA-SW45B-081312 (240-14133-34), MSA-SW45C-081312 (240-14133-35) and MSA-SW45D-081312 (240-14133-36) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/14/2012 and analyzed on 08/15/2012.

No difficulties were encountered during the mercury analyses. All quality control parameters were within the acceptance limits.

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs	Dissolved Metals
MSA-SW37A-081312	8/13/2012	1134	SW	Water	4	x	x	x
MSA-SW37B-081312	8/13/2012	1142	SW	Water	4	x	x	x
MSA-SW37C-081312	8/13/2012	1147	SW	Water	4	x	x	x
MSA-SW37D-081312	8/13/2012	1152	SW	Water	4	x	x	x
MSA-SW38A-081312	8/13/2012	1248	SW	Water	4	x	x	x
MSA-SW38B-081312	8/13/2012	1253	SW	Water	4	x	x	x
MSA-SW38C-081312	8/13/2012	1258	SW	Water	4	x	x	x
MSA-SW38D-081312	8/13/2012	1302	SW	Water	4	x	x	x
MSA-SW39A-081312	8/13/2012	1436	SW	Water	4	x	x	x
MSA-SW39B-081312	8/13/2012	1441	SW	Water	4	x	x	x
MSA-SW39C-081312	8/13/2012	1445	SW	Water	4	x	x	x
MSA-SW39D-081312	8/13/2012	1452	SW	Water	4	x	x	x

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	8/13/12 1800		TMANTCN	14 AUG 2012 0910
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

Page 1224 of 1232

08/21/2012

Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

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: Tony Apanavage	Date: 8/15/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	2 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filter Sample	VOCs	Dissolved Metals
MSA-SW40A-081312	8/13/2012	1225	SW	Water	4	x	x	x
MSA-SW40B-081312	8/13/2012	1232	SW	Water	4	x	x	x
MSA-SW40C-081312	8/13/2012	1237	SW	Water	4	x	x	x
MSA-SW40D-081312	8/13/2012	1242	SW	Water	4	x	x	x
MSA-SW41A-081312	8/13/2012	1368	SW	Water	4	x	x	x
MSA-SW41B-081312	8/13/2012	1312	SW	Water	4	x	x	x
MSA-SW41C-081312	8/13/2012	1318	SW	Water	4	x	x	x
MSA-SW41D-081312	8/13/2012	1322	SW	Water	4	x	x	x
MSA-SW42A-081312	8/13/2012	1200	SW	Water	4	x	x	x
MSA-SW42B-081312	8/13/2012	1205	SW	Water	4	x	x	x
MSA-SW42C-081312	8/13/2012	1212	SW	Water	4	x	x	x
MSA-SW42D-081312	8/13/2012	1218	SW	Water	4	x	x	x

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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	8/15/12 1500		TAL	8/16/12 0915
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

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	3 of 4 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			
(301) 528-3000 FAX	☐ 2 weeks			SDG No.
Project Name: MSA Surface Water Sampling	☐ 1 week			
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont	Filtered Sample	VOCs	Dissolved Metals	Sample Specific Notes:
MSA-SW43A-081312	8/13/2012	1325	SW	Water	4	x	x	x	
MSA-SW43B-081312	8/13/2012	1334	SW	Water	4	x	x	x	
MSA-SW43C-081312	8/13/2012	1337	SW	Water	4	x	x	x	
MSA-SW43D-081312	8/13/2012	1345	SW	Water	4	x	x	x	
MSA-SW44A-081312	8/13/2012	1351	SW	Water	4	x	x	x	
MSA-SW44B-081312	8/13/2012	1356	SW	Water	4	x	x	x	
MSA-SW44C-081312	8/13/2012	1400	SW	Water	4	x	x	x	
MSA-SW44D-081312	8/13/2012	1407	SW	Water	4	x	x	x	
MSA-SW45A-081312	8/13/2012	1414	SW	Water	4	x	x	x	
MSA-SW45B-081312	8/13/2012	1420	SW	Water	4	x	x	x	
MSA-SW45C-081312	8/13/2012	1426	SW	Water	4	x	x	x	
MSA-SW45D-081312	8/13/2012	1430	SW	Water	4	x	x	x	

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	8/13/12 1880	[signature]	TRCANTON	14AUG 2012 0910
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

HOLDTIME

SDG 240-14133-1

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HGF	UG/L	MSA-SW44A-081312	240-14133-29	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW41D-081312	240-14133-20	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW42A-081312	240-14133-21	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW42B-081312	240-14133-22	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW42C-081312	240-14133-23	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW42D-081312	240-14133-24	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW43A-081312	240-14133-25	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW41C-081312	240-14133-19	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW43C-081312	240-14133-27	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW43D-081312	240-14133-28	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW37A-081312	240-14133-1	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW44C-081312	240-14133-31	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW44D-081312	240-14133-32	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW45A-081312	240-14133-33	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW45B-081312	240-14133-34	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HGF	UG/L	MSA-SW45C-081312	240-14133-35	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW45D-081312	240-14133-36	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW43B-081312	240-14133-26	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW38B-081312	240-14133-6	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW44B-081312	240-14133-30	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW41B-081312	240-14133-18	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW37B-081312	240-14133-2	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW37C-081312	240-14133-3	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW38A-081312	240-14133-5	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW38C-081312	240-14133-7	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW38D-081312	240-14133-8	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW39A-081312	240-14133-9	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW40C-081312	240-14133-15	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW41A-081312	240-14133-17	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW37D-081312	240-14133-4	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW40D-081312	240-14133-16	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW40B-081312	240-14133-14	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW40A-081312	240-14133-13	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HGF	UG/L	MSA-SW39D-081312	240-14133-12	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW39C-081312	240-14133-11	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
HGF	UG/L	MSA-SW39B-081312	240-14133-10	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW39C-081312	240-14133-11	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW37A-081312	240-14133-1	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW41C-081312	240-14133-19	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW41A-081312	240-14133-17	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW40D-081312	240-14133-16	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW40C-081312	240-14133-15	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW40B-081312	240-14133-14	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW40A-081312	240-14133-13	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW39D-081312	240-14133-12	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW41B-081312	240-14133-18	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW39B-081312	240-14133-10	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW39A-081312	240-14133-9	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW38D-081312	240-14133-8	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW38C-081312	240-14133-7	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW38B-081312	240-14133-6	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
MF	UG/L	MSA-SW38A-081312	240-14133-5	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW37D-081312	240-14133-4	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW37B-081312	240-14133-2	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW42B-081312	240-14133-22	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW37C-081312	240-14133-3	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW44D-081312	240-14133-32	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW42A-081312	240-14133-21	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW41D-081312	240-14133-20	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW45D-081312	240-14133-36	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW45C-081312	240-14133-35	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW45A-081312	240-14133-33	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW44C-081312	240-14133-31	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW44B-081312	240-14133-30	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW42D-081312	240-14133-24	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW43D-081312	240-14133-28	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW43C-081312	240-14133-27	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW43B-081312	240-14133-26	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW43A-081312	240-14133-25	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
MF	UG/L	MSA-SW44A-081312	240-14133-29	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW45B-081312	240-14133-34	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
MF	UG/L	MSA-SW42C-081312	240-14133-23	NM	8/13/2012	8/14/2012	8/15/2012	1	1	2
OV	UG/L	MSA-SW43A-081312	240-14133-25	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW41C-081312	240-14133-19	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW42D-081312	240-14133-24	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW42C-081312	240-14133-23	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW42B-081312	240-14133-22	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW41D-081312	240-14133-20	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW43B-081312	240-14133-26	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW45B-081312	240-14133-34	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW42A-081312	240-14133-21	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
OV	UG/L	MSA-SW43C-081312	240-14133-27	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW43D-081312	240-14133-28	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW44A-081312	240-14133-29	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW44B-081312	240-14133-30	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW44C-081312	240-14133-31	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3
OV	UG/L	MSA-SW41B-081312	240-14133-18	NM	8/13/2012	8/16/2012	8/16/2012	3	0	3

METHOD SUMMARY

Client: Tetra Tech, Inc

Job Number: 240-14133-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Priority Pollutants	TAL NC	SW846 8260B	
Purge and Trap	TAL NC		SW846 5030B
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
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.

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-14133-1

SDG No.:

Project: MSA Surface Water

Client Sample ID	Lab Sample ID
MSA-SW37A-081312	240-14133-1
MSA-SW37B-081312	240-14133-2
MSA-SW37C-081312	240-14133-3
MSA-SW37D-081312	240-14133-4
MSA-SW38A-081312	240-14133-5
MSA-SW38B-081312	240-14133-6
MSA-SW38C-081312	240-14133-7
MSA-SW38D-081312	240-14133-8
MSA-SW39A-081312	240-14133-9
MSA-SW39B-081312	240-14133-10
MSA-SW39C-081312	240-14133-11
MSA-SW39D-081312	240-14133-12
MSA-SW40A-081312	240-14133-13
MSA-SW40B-081312	240-14133-14
MSA-SW40C-081312	240-14133-15
MSA-SW40D-081312	240-14133-16
MSA-SW41A-081312	240-14133-17
MSA-SW41B-081312	240-14133-18
MSA-SW41C-081312	240-14133-19
MSA-SW41D-081312	240-14133-20
MSA-SW42A-081312	240-14133-21
MSA-SW42B-081312	240-14133-22
MSA-SW42C-081312	240-14133-23
MSA-SW42D-081312	240-14133-24
MSA-SW43A-081312	240-14133-25
MSA-SW43B-081312	240-14133-26
MSA-SW43C-081312	240-14133-27
MSA-SW43D-081312	240-14133-28
MSA-SW44A-081312	240-14133-29
MSA-SW44B-081312	240-14133-30
MSA-SW44C-081312	240-14133-31
MSA-SW44D-081312	240-14133-32
MSA-SW45A-081312	240-14133-33
MSA-SW45B-081312	240-14133-34
MSA-SW45C-081312	240-14133-35
MSA-SW45D-081312	240-14133-36

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

ICV Source: MTMSICVW_00016 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00046

Analyte	ICV 240-54676/5 08/15/2012 14:29				CCV 240-54676/19 08/15/2012 16:11				CCV 240-54676/31 08/15/2012 17:37			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	81.3		80.0	102	101		100	101	103		100	103
Arsenic	79.9		80.0	100	99.3		100	99	99.6		100	100
Barium	80.6		80.0	101	100		100	100	102		100	102
Beryllium	80.4		80.0	100	99.0		100	99	100		100	100
Cadmium	81.6		80.0	102	102		100	102	102		100	102
Chromium	81.3		80.0	102	101		100	101	99.3		100	99
Cobalt	81.6		80.0	102	101		100	101	98.7		100	99
Copper	83.6		80.0	104	102		100	102	99.9		100	100
Lead	82.3		80.0	103	101		100	101	104		100	104
Molybdenum	80.3		80.0	100	103		100	103	101		100	101
Nickel	82.6		80.0	103	101		100	101	100		100	100
Selenium	80.4		80.0	100	99.8		100	100	101		100	101
Silver	83.6		80.0	105	103		100	103	101		100	101
Thallium	80.9		80.0	101	102		100	102	104		100	104
Tungsten	80.2		80.0	100	99.8		100	100	98.1		100	98
Vanadium	80.4		80.0	101	100		100	100	99.4		100	99
Zinc	83.0		80.0	104	102		100	102	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.: 240-14133-1

SDG No.:

ICV Source: MTMSICVW_00016 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00046

Analyte	CCV 240-54676/43 08/15/2012 18:54				CCV 240-54676/55 08/15/2012 20:13				CCV 240-54676/67 08/15/2012 21:34			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	104		100	104	103		100	103	105		100	105
Arsenic	99.5		100	99	100		100	100	99.9		100	100
Barium	101		100	101	102		100	102	103		100	103
Beryllium	106		100	106	102		100	102	108		100	108
Cadmium	102		100	102	102		100	102	102		100	102
Chromium	97.9		100	98	99.7		100	100	99.7		100	100
Cobalt	97.3		100	97	99.9		100	100	98.7		100	99
Copper	98.5		100	99	100		100	100	99.5		100	100
Lead	104		100	104	105		100	105	105		100	105
Molybdenum	100		100	100	101		100	101	101		100	101
Nickel	98.4		100	98	101		100	101	99.1		100	99
Selenium	100		100	100	102		100	102	103		100	103
Silver	101		100	101	101		100	101	101		100	101
Thallium	104		100	104	109		100	109	106		100	106
Tungsten	97.8		100	98	99.6		100	100	98.3		100	98
Vanadium	99.1		100	99	101		100	101	100		100	100
Zinc	100		100	100	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.: 240-14133-1

SDG No.:

ICV Source: MTMSICVW_00016 Concentration Units: ug/L

CCV Source: MTMSCAL2CCVW_00046

Analyte	CCV 240-54676/75 08/15/2012 22:24											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	104		100	104								
Arsenic	99.0		100	99								
Barium	103		100	103								
Beryllium	108		100	108								
Cadmium	103		100	103								
Chromium	98.6		100	99								
Cobalt	97.8		100	98								
Copper	97.5		100	97								
Lead	105		100	105								
Molybdenum	99.8		100	100								
Nickel	97.9		100	98								
Selenium	101		100	101								
Silver	101		100	101								
Thallium	107		100	107								
Tungsten	98.5		100	99								
Vanadium	99.8		100	100								
Zinc	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.: 240-14133-1

SDG No.:

ICV Source: MTHGICVW_00362 Concentration Units: ug/L

CCV Source: MTHGCALW_00234

Analyte	ICV 240-54590/7-A 08/15/2012 13:21				CCVL 240-54590/10-A 08/15/2012 13:29				CCV 240-54590/12-A 08/15/2012 14:38			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.40		2.50	96	5.04		5.00	101	5.05		5.00	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.: 240-14133-1

SDG No.:

ICV Source: MTHGICVW_00362 Concentration Units: ug/L

CCV Source: MTHGCALW_00234

Analyte	CCV 240-54590/12-A 08/15/2012 15:04				CCV 240-54590/12-A 08/15/2012 15:29				CCV 240-54590/12-A 08/15/2012 15:52			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.02		5.00	100	5.08		5.00	102	5.09		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.: 240-14133-1

SDG No.:

ICV Source: MTHGICVW_00362 Concentration Units: ug/L

CCV Source: MTHGCALW_00234

Analyte	CCV 240-54590/12-A 08/15/2012 16:15				CCV 240-54590/12-A 08/15/2012 16:39				CCV 240-54590/12-A 08/15/2012 17:00			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.02		5.00	100	5.07		5.00	101	5.06		5.00	101

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.: 240-14133-1

SDG No.:

Method: 6020 Instrument ID: I8

Lab Sample ID: CRI 240-54676/7 Concentration Units: ug/L

CRQL Check Standard Source: MTMSCRIW_00021

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.03		101	50-150
Arsenic	2.00	2.05	J	102	50-150
Barium	1.00	1.06	J	106	50-150
Beryllium	1.00	1.03		103	50-150
Cadmium	0.500	0.505	J	101	50-150
Chromium	2.00	1.91	J	95	50-150
Cobalt	1.00	1.04		104	50-150
Copper	2.00	2.31		116	50-150
Lead	1.00	1.09		109	50-150
Molybdenum	10.0	9.99	J	100	50-150
Nickel	2.00	2.04		102	50-150
Selenium	2.00	1.92	J	96	50-150
Silver	0.500	0.508	J	102	50-150
Thallium	1.00	0.895	J	90	50-150
Vanadium	5.00	5.16	J	103	50-150
Zinc	10.0	11.2	J	112	50-150
Tungsten	10.0	9.85	J	99	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.: 240-14133-1

SDG No.:

Method: 7470A Instrument ID: H4

Lab Sample ID: CRA 240-54590/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00234

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.237		119	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.: 240-14133-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-54676/6 08/15/2012 14:37		CCB 240-54676/20 08/15/2012 16:18		CCB 240-54676/32 08/15/2012 17:44		CCB 240-54676/44 08/15/2012 19:01	
		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	0.221	J	0.159	J	0.106	J	10	U
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	0.619	J	2.0	U	2.0	U	2.0	U
Tungsten	10	10	U	10	U	10	U	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.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-54676/56 08/15/2012 20:21		CCB 240-54676/68 08/15/2012 21:41		CCB 240-54676/76 08/15/2012 22:31			
		Found	C	Found	C	Found	C	Found	C
Antimony	2.0	2.0	U	2.0	U	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	1.0	U	1.0	U		
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	10	U	10	U	0.103	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	2.0	U	2.0	U	2.0	U		
Tungsten	10	10	U	10	U	10	U		
Vanadium	20	20	U	20	U	20	U		
Zinc	20	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.: 240-14133-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-54590/8-A 08/15/2012 13:23		CCB 240-54590/11-A 08/15/2012 14:40		CCB 240-54590/11-A 08/15/2012 15:05		CCB 240-54590/11-A 08/15/2012 15:31	
		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.: 240-14133-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-54590/11-A 08/15/2012 15:54		CCB 240-54590/11-A 08/15/2012 16:17		CCB 240-54590/11-A 08/15/2012 16:41		CCB 240-54590/11-A 08/15/2012 17:02	
		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.: 240-14133-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-54404/1-A

Instrument Code: I8 Batch No.: 54676

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	5.0	U		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	2.0	U		6020
7439-92-1	Lead	1.0	U		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
7440-66-6	Zinc	20	U		6020
7440-33-7	Tungsten	10	U		6020

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-54407/1-A

Instrument Code: I8 Batch No.: 54676

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	5.0	U		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	2.0	U		6020
7439-92-1	Lead	1.0	U		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
7440-66-6	Zinc	20	U		6020
7440-33-7	Tungsten	10	U		6020

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-54405/1-A

Instrument Code: H4 Batch No.: 54553

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.: 240-14133-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-54408/1-A

Instrument Code: H4 Batch No.: 54553

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.: 240-14133-1

SDG No.:

Lab Sample ID: ICSA 240-54676/8 Instrument ID: I8

Lab File ID: I8081512B.csv ICS Source: MTMSICSAW_00016

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Found Percent Recovery
Antimony		**0.0930**	
Arsenic		**0.352**	
Barium		**0.0300**	
Beryllium		**-0.0710**	
Cadmium		**-0.250**	
Chromium		**0.386**	
Cobalt		**0.0100**	
Copper		**0.158**	
Lead		**0.0260**	
Molybdenum	**1000**	**1097**	**110**
Nickel		**0.250**	
Selenium		**-0.0690**	
Silver		**-0.0750**	
Thallium		**-0.453**	
Tungsten		**0.0170**	
Vanadium		**-0.0630**	
Zinc		**0.766**	
Aluminum	*50000*	*54990*	*110*
Boron		*-0.104*	
Calcium	*50000*	*53830*	*108*
Iron	*50000*	*54130*	*108*
Magnesium	*50000*	*55040*	*110*
Manganese		*-0.193*	
Potassium	*50000*	*54710*	*109*
Sodium	*50000*	*54720*	*109*
Strontium		*-0.0760*	
Tin		*0.0670*	
Titanium	*1000*	*1104*	*110*

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.: 240-14133-1

SDG No.:

Lab Sample ID: ICSAB 240-54676/9 Instrument ID: I8

Lab File ID: I8081512B.csv ICS Source: MTMSICSABW_00016

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**100**	**101**	**101**
Arsenic	**100**	**100**	**100**
Barium	**100**	**104**	**104**
Beryllium	**100**	**103**	**103**
Cadmium	**100**	**103**	**103**
Chromium	**100**	**104**	**104**
Cobalt	**100**	**102**	**102**
Copper	**100**	**102**	**102**
Lead	**100**	**105**	**105**
Molybdenum	**1100**	**1158**	**105**
Nickel	**100**	**103**	**103**
Selenium	**100**	**100**	**100**
Silver	**100**	**104**	**104**
Thallium	**100**	**106**	**106**
Tungsten	**100**	**103**	**103**
Vanadium	**100**	**102**	**102**
Zinc	**100**	**104**	**104**
Aluminum	*50000*	*52660*	*105*
Boron	*100*	*99.6*	*100*
Calcium	*50000*	*52350*	*105*
Iron	*50000*	*52450*	*105*
Magnesium	*50000*	*52880*	*106*
Manganese	*100*	*103*	*103*
Potassium	*50000*	*53730*	*107*
Sodium	*50000*	*52610*	*105*
Strontium	*100*	*99.1*	*99*
Tin	*100*	*102*	*102*
Titanium	*1100*	*1175*	*107*

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: MSA-SW37A-081312 MS
Lab ID: 240-14133-1 MS
Lab Name: TestAmerica Canton
Job No.: 240-14133-1
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	95.6		0.39	J	100	95	44-153		6020
Arsenic	961		2.6	J	1000	96	82-123		6020
Barium	1090		74		1000	102	45-144		6020
Beryllium	933		1.0	U	1000	93	77-124		6020
Cadmium	905		1.0	U	1000	91	78-117		6020
Chromium	1030		2.0	U	1000	103	72-110		6020
Cobalt	996		0.15	J	1000	100	67-114		6020
Copper	905		3.3		1000	90	60-123		6020
Lead	940		1.0	U	1000	94	73-115		6020
Molybdenum	103		2.7	J	100	100	80-110		6020
Nickel	906		1.3	J	1000	90	72-111		6020
Selenium	936		5.0	U	1000	94	72-148		6020
Silver	83.9		1.0	U	100	84	10-139		6020
Thallium	244		0.41	J	250	98	69-117		6020
Vanadium	1030		1.1	J	1000	102	70-112		6020
Zinc	891		3.5	J	1000	89	49-156		6020
Tungsten	94.2		10	U	100	94	43-133		6020
Mercury	0.825		0.20	U	1.00	82	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: MSA-SW42A-081312 MS Lab ID: 240-14133-21 MS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

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	106		0.38	J	100	106	44-153		6020
Arsenic	1040		2.7	J	1000	104	82-123		6020
Barium	1180		74		1000	111	45-144		6020
Beryllium	976		1.0	U	1000	98	77-124		6020
Cadmium	989		1.0	U	1000	99	78-117		6020
Chromium	1120		2.0	U	1000	112	72-110	F	6020
Cobalt	1080		0.15	J	1000	107	67-114		6020
Copper	961		3.4		1000	96	60-123		6020
Lead	1030		0.40	J	1000	102	73-115		6020
Molybdenum	111		2.5	J	100	109	80-110		6020
Nickel	964		1.3	J	1000	96	72-111		6020
Selenium	1000		5.0	U	1000	100	72-148		6020
Silver	90.7		1.0	U	100	91	10-139		6020
Thallium	268		2.0	U	250	107	69-117		6020
Vanadium	1110		1.5	J	1000	111	70-112		6020
Zinc	951		2.5	J	1000	95	49-156		6020
Tungsten	102		10	U	100	102	43-133		6020
Mercury	0.827		0.20	U	1.00	83	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 - DISSOLVED

Client ID: MSA-SW37A-081312 DU | Lab ID: 240-14133-1 DU

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

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	0.39	J	0.301	J	26		6020
Arsenic	5.0	2.6	J	2.30	J	12		6020
Barium	5.0	74		73.5		0.1		6020
Beryllium	1.0	1.0	U	1.0	U	NC		6020
Cadmium	1.0	1.0	U	1.0	U	NC		6020
Chromium	2.0	2.0	U	2.0	U	NC		6020
Cobalt	1.0	0.15	J	1.0	U	NC		6020
Copper	2.0	3.3		3.38		2		6020
Lead	1.0	1.0	U	1.0	U	NC		6020
Molybdenum	10	2.7	J	2.30	J	17		6020
Nickel	2.0	1.3	J	1.14	J	13		6020
Selenium	5.0	5.0	U	5.0	U	NC		6020
Silver	1.0	1.0	U	1.0	U	NC		6020
Thallium	2.0	0.41	J	2.0	U	NC		6020
Vanadium	20	1.1	J	1.29	J	12		6020
Zinc	20	3.5	J	20	U	NC		6020
Tungsten	10	10	U	10	U	NC		6020
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

Client ID: MSA-SW42A-081312 DU | Lab ID: 240-14133-21 DU

Lab Name: TestAmerica Canton | Job No.: 240-14133-1

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	0.38	J	0.289	J	26	OL	6020
Arsenic	5.0	2.7	J	2.51	J	7		6020
Barium	5.0	74		73.1		0.5		6020
Beryllium	1.0	1.0	U	1.0	U	NC		6020
Cadmium	1.0	1.0	U	1.0	U	NC		6020
Chromium	2.0	2.0	U	1.34	J	NC		6020
Cobalt	1.0	0.15	J	0.181	J	17		6020
Copper	2.0	3.4		3.47		2		6020
Lead	1.0	0.40	J	0.423	J	5		6020
Molybdenum	10	2.5	J	2.20	J	14		6020
Nickel	2.0	1.3	J	2.39		60	OL	6020
Selenium	5.0	5.0	U	5.0	U	NC		6020
Silver	1.0	1.0	U	1.0	U	NC		6020
Thallium	2.0	2.0	U	2.0	U	NC		6020
Vanadium	20	1.5	J	1.31	J	14		6020
Zinc	20	2.5	J	4.77	J	64	OL	6020
Tungsten	10	10	U	10	U	NC		6020
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

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-54404/2-A

Lab Name: TestAmerica Canton Job No.: 240-14133-1

Sample Matrix: Water LCS Source: MTICPMSB_00009

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	105		105	80	120		6020
Arsenic	1000	1050		105	80	120		6020
Barium	1000	1080		108	80	120		6020
Beryllium	1000	1090		109	80	120		6020
Cadmium	1000	1130		113	80	120		6020
Chromium	1000	1160		116	80	120		6020
Cobalt	1000	1150		115	80	120		6020
Copper	1000	1140		114	80	120		6020
Lead	1000	1140		114	80	120		6020
Molybdenum	100	103		103	80	120		6020
Nickel	1000	1120		112	80	120		6020
Selenium	1000	1070		107	80	120		6020
Silver	100	110		110	80	120		6020
Thallium	250	289		116	80	120		6020
Vanadium	1000	1160		116	80	120		6020
Zinc	1000	1150		115	80	120		6020
Tungsten	100	102		102	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 240-54407/2-A

Lab Name: TestAmerica Canton Job No.: 240-14133-1

Sample Matrix: Water LCS Source: MTICPMSB_00009

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Antimony	100	108		108	80	120		6020
Arsenic	1000	1060		106	80	120		6020
Barium	1000	1100		110	80	120		6020
Beryllium	1000	1090		109	80	120		6020
Cadmium	1000	1110		111	80	120		6020
Chromium	1000	1160		116	80	120		6020
Cobalt	1000	1140		114	80	120		6020
Copper	1000	1120		112	80	120		6020
Lead	1000	1170		117	80	120		6020
Molybdenum	100	99.7		100	80	120		6020
Nickel	1000	1100		110	80	120		6020
Selenium	1000	1080		108	80	120		6020
Silver	100	106		106	80	120		6020
Thallium	250	298		119	80	120		6020
Vanadium	1000	1090		109	80	120		6020
Zinc	1000	1150		115	80	120		6020
Tungsten	100	101		101	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 240-54405/2-A

Lab Name: TestAmerica Canton Job No.: 240-14133-1

Sample Matrix: Water LCS Source: MTHGICVW_00361

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.17		83	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 240-54408/2-A

Lab Name: TestAmerica Canton Job No.: 240-14133-1

Sample Matrix: Water LCS Source: MTHGICVW_00361

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	4.14		83	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 - DISSOLVED

Lab ID: 240-14133-1

SDG No:

Lab Name: TestAmerica Canton Job No: 240-14133-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.39	J	10	U	NC		6020
Arsenic	2.6	J	4.51	J	NC		6020
Barium	74		76.2		2.97 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	0.15	J	0.465	J	NC		6020
Copper	3.3		3.79	J	NC		6020
Lead	1.0	U	5.0	U	NC		6020
Molybdenum	2.7	J	2.02	J	NC		6020
Nickel	1.3	J	1.64	J	NC		6020
Selenium	5.0	U	25	U	NC		6020
Silver	1.0	U	5.0	U	NC		6020
Thallium	0.41	J	10	U	NC		6020
Vanadium	1.1	J	100	U	NC		6020
Zinc	3.5	J	100	U	NC		6020
Tungsten	10	U	50	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 - DISSOLVED

Lab ID: 240-14133-21

SDG No:

Lab Name: TestAmerica Canton Job No: 240-14133-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.38	J	10	U	NC		6020
Arsenic	2.7	J	4.75	J	NC		6020
Barium	74		73.3		0.946 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	0.15	J	5.0	U	NC		6020
Copper	3.4		3.59	J	NC		6020
Lead	0.40	J	5.0	U	NC		6020
Molybdenum	2.5	J	1.34	J	NC		6020
Nickel	1.3	J	1.01	J	NC		6020
Selenium	5.0	U	25	U	NC		6020
Silver	1.0	U	5.0	U	NC		6020
Thallium	2.0	U	10	U	NC		6020
Vanadium	1.5	J	100	U	NC		6020
Zinc	2.5	J	100	U	NC		6020
Tungsten	10	U	50	U	NC		6020

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Canton Job Number: 240-14133-1

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: 240-14133-1

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.: 240-14133-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-54404/1-A	08/14/2012 13:57	54404		50	50
LCS 240-54404/2-A	08/14/2012 13:57	54404		50	50
240-14133-1	08/14/2012 13:57	54404		50	50
240-14133-1 DU	08/14/2012 13:57	54404		50	50
240-14133-1 MS	08/14/2012 13:57	54404		50	50
240-14133-2	08/14/2012 13:57	54404		50	50
240-14133-3	08/14/2012 13:57	54404		50	50
240-14133-4	08/14/2012 13:57	54404		50	50
240-14133-5	08/14/2012 13:57	54404		50	50
240-14133-6	08/14/2012 13:57	54404		50	50
240-14133-7	08/14/2012 13:57	54404		50	50
240-14133-8	08/14/2012 13:57	54404		50	50
240-14133-9	08/14/2012 13:57	54404		50	50
240-14133-10	08/14/2012 13:57	54404		50	50
240-14133-11	08/14/2012 13:57	54404		50	50
240-14133-12	08/14/2012 13:57	54404		50	50
240-14133-13	08/14/2012 13:57	54404		50	50
240-14133-14	08/14/2012 13:57	54404		50	50
240-14133-15	08/14/2012 13:57	54404		50	50
240-14133-16	08/14/2012 13:57	54404		50	50
240-14133-17	08/14/2012 13:57	54404		50	50
240-14133-18	08/14/2012 13:57	54404		50	50
240-14133-19	08/14/2012 13:57	54404		50	50
240-14133-20	08/14/2012 13:57	54404		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-54407/1-A	08/14/2012 14:08	54407		50	50
LCS 240-54407/2-A	08/14/2012 14:08	54407		50	50
240-14133-21	08/14/2012 14:08	54407		50	50
240-14133-21 DU	08/14/2012 14:08	54407		50	50
240-14133-21 MS	08/14/2012 14:08	54407		50	50
240-14133-22	08/14/2012 14:08	54407		50	50
240-14133-23	08/14/2012 14:08	54407		50	50
240-14133-24	08/14/2012 14:08	54407		50	50
240-14133-25	08/14/2012 14:08	54407		50	50
240-14133-26	08/14/2012 14:08	54407		50	50
240-14133-27	08/14/2012 14:08	54407		50	50
240-14133-28	08/14/2012 14:08	54407		50	50
240-14133-29	08/14/2012 14:08	54407		50	50
240-14133-30	08/14/2012 14:08	54407		50	50
240-14133-31	08/14/2012 14:08	54407		50	50
240-14133-32	08/14/2012 14:08	54407		50	50
240-14133-33	08/14/2012 14:08	54407		50	50
240-14133-34	08/14/2012 14:08	54407		50	50
240-14133-35	08/14/2012 14:08	54407		50	50
240-14133-36	08/14/2012 14:08	54407		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-54405/1-A	08/14/2012 20:30	54405		100	100
LCS 240-54405/2-A	08/14/2012 20:30	54405		100	100
240-14133-1	08/14/2012 20:30	54405		100	100
240-14133-1 DU	08/14/2012 20:30	54405		100	100
240-14133-1 MS	08/14/2012 20:30	54405		100	100
240-14133-2	08/14/2012 20:30	54405		100	100
240-14133-3	08/14/2012 20:30	54405		100	100
240-14133-4	08/14/2012 20:30	54405		100	100
240-14133-5	08/14/2012 20:30	54405		100	100
240-14133-6	08/14/2012 20:30	54405		100	100
240-14133-7	08/14/2012 20:30	54405		100	100
240-14133-8	08/14/2012 20:30	54405		100	100
240-14133-9	08/14/2012 20:30	54405		100	100
240-14133-10	08/14/2012 20:30	54405		100	100
240-14133-11	08/14/2012 20:30	54405		100	100
240-14133-12	08/14/2012 20:30	54405		100	100
240-14133-13	08/14/2012 20:30	54405		100	100
240-14133-14	08/14/2012 20:30	54405		100	100
240-14133-15	08/14/2012 20:30	54405		100	100
240-14133-16	08/14/2012 20:30	54405		100	100
240-14133-17	08/14/2012 20:30	54405		100	100
240-14133-18	08/14/2012 20:30	54405		100	100
240-14133-19	08/14/2012 20:30	54405		100	100
240-14133-20	08/14/2012 20:30	54405		100	100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-54408/1-A	08/14/2012 20:30	54408		100	100
LCS 240-54408/2-A	08/14/2012 20:30	54408		100	100
240-14133-21	08/14/2012 20:30	54408		100	100
240-14133-21 DU	08/14/2012 20:30	54408		100	100
240-14133-21 MS	08/14/2012 20:30	54408		100	100
240-14133-22	08/14/2012 20:30	54408		100	100
240-14133-23	08/14/2012 20:30	54408		100	100
240-14133-24	08/14/2012 20:30	54408		100	100
240-14133-25	08/14/2012 20:30	54408		100	100
240-14133-26	08/14/2012 20:30	54408		100	100
240-14133-27	08/14/2012 20:30	54408		100	100
240-14133-28	08/14/2012 20:30	54408		100	100
240-14133-29	08/14/2012 20:30	54408		100	100
240-14133-30	08/14/2012 20:30	54408		100	100
240-14133-31	08/14/2012 20:30	54408		100	100
240-14133-32	08/14/2012 20:30	54408		100	100
240-14133-33	08/14/2012 20:30	54408		100	100
240-14133-34	08/14/2012 20:30	54408		100	100
240-14133-35	08/14/2012 20:30	54408		100	100
240-14133-36	08/14/2012 20:30	54408		100	100

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 08/15/2012 End Date: 08/15/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
STD2 240-54676/2 IC	14:08	88		96		96		95		95	
STD3 240-54676/3 IC	14:15	77		95		94		91		93	
STD4 240-54676/4 IC	14:22	95		99		99		102		100	
ICV 240-54676/5	14:29	91		100		99		97		98	
ICB 240-54676/6	14:37	101		105		102		103		103	
CRI 240-54676/7	14:44	104		109		105		103		104	
ICSA 240-54676/8	14:51	83		93		95		93		95	
ICSAB 240-54676/9	14:58	82		92		94		94		94	
CCV 240-54676/19	16:11	85		88		90		89		91	
CCB 240-54676/20	16:18	94		94		94		95		95	
MB 240-54404/1-A	16:25	98		97		95		96		96	
LCS 240-54404/2-A	16:32	94		91		90		90		93	
240-14133-1	16:39	53		94		93		80		83	
240-14133-1 SD	16:47	80		101		99		93		93	
240-14133-1 DU	16:54	52		100		95		81		83	
240-14133-1 MS	17:01	46		88		85		74		78	
240-14133-2	17:08	47		98		94		80		83	
240-14133-3	17:16	47		101		96		83		84	
240-14133-4	17:23	47		100		95		82		83	
240-14133-5	17:30	46		99		95		82		83	
CCV 240-54676/31	17:37	64		73		75		75		78	
CCB 240-54676/32	17:44	81		79		77		80		82	
240-14133-6	17:52	50		92		89		78		79	
240-14133-7	17:59	45		97		94		81		82	
240-14133-8	18:06	44		98		94		81		82	
240-14133-9	18:13	44		99		94		81		81	
240-14133-10	18:20	43		100		97		82		83	
240-14133-11	18:26	38		100		98		83		83	
240-14133-12	18:32	36		99		97		83		84	
240-14133-13	18:37	37		97		97		83		83	
240-14133-14	18:43	37		97		94		82		81	
240-14133-15	18:49	36		97		97		84		83	
CCV 240-54676/43	18:54	50		68		74		74		76	
CCB 240-54676/44	19:01	72		72		74		77		78	
240-14133-16	19:08	48		90		91		80		80	
240-14133-17	19:16	43		98		97		83		83	
240-14133-18	19:22	42		101		100		86		86	
240-14133-19	19:28	39		102		101		87		86	
240-14133-20	19:33	38		104		105		89		87	
MB 240-54407/1-A	19:39	68		84		86		88		86	
LCS 240-54407/2-A	19:44	67		67		73		74		78	
240-14133-21	19:52	47		94		96		83		83	

FORM XV - IN

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 08/15/2012 End Date: 08/15/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Li	Q	Element Sc	Q	Element Sc	Q	Element Ge	Q	Element In	Q
240-14133-21 SD	19:59	72		93		95		91		88	
240-14133-21 DU	20:06	47		97		97		83		83	
CCV 240-54676/55	20:13	62		71		76		76		79	
CCB 240-54676/56	20:21	77		76		77		80		81	
240-14133-21 MS	20:28	44		81		84		73		75	
240-14133-22	20:35	43		98		99		85		84	
240-14133-23	20:42	43		103		100		86		84	
240-14133-24	20:49	43		102		100		85		86	
240-14133-25	20:57	45		104		103		87		87	
240-14133-26	21:04	42		103		101		87		85	
240-14133-27	21:11	42		104		102		86		86	
240-14133-28	21:17	38		102		101		85		85	
240-14133-29	21:23	37		100		101		85		85	
240-14133-30	21:28	35		100		99		84		83	
CCV 240-54676/67	21:34	51		69		75		75		77	
CCB 240-54676/68	21:41	74		72		74		77		78	
240-14133-31	21:48	45		86		89		76		78	
240-14133-32	21:55	42		94		94		80		81	
240-14133-33	22:01	37		96		97		83		83	
240-14133-34	22:07	36		98		100		84		84	
240-14133-35	22:12	36		100		101		85		85	
240-14133-36	22:18	36		100		100		85		84	
CCV 240-54676/75	22:24	51		69		75		75		76	
CCB 240-54676/76	22:31	74		71		73		75		78	

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 08/15/2012 End Date: 08/15/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
STD2 240-54676/2 IC	14:08			97							
STD3 240-54676/3 IC	14:15			94							
STD4 240-54676/4 IC	14:22			100							
ICV 240-54676/5	14:29			100							
ICB 240-54676/6	14:37			103							
CRI 240-54676/7	14:44			103							
ICSA 240-54676/8	14:51			95							
ICSAB 240-54676/9	14:58			96							
CCV 240-54676/19	16:11			95							
CCB 240-54676/20	16:18			98							
MB 240-54404/1-A	16:25			98							
LCS 240-54404/2-A	16:32			97							
240-14133-1	16:39			86							
240-14133-1 SD	16:47			97							
240-14133-1 DU	16:54			86							
240-14133-1 MS	17:01			84							
240-14133-2	17:08			86							
240-14133-3	17:16			87							
240-14133-4	17:23			85							
240-14133-5	17:30			85							
CCV 240-54676/31	17:37			83							
CCB 240-54676/32	17:44			85							
240-14133-6	17:52			82							
240-14133-7	17:59			85							
240-14133-8	18:06			83							
240-14133-9	18:13			83							
240-14133-10	18:20			85							
240-14133-11	18:26			85							
240-14133-12	18:32			84							
240-14133-13	18:37			85							
240-14133-14	18:43			83							
240-14133-15	18:49			85							
CCV 240-54676/43	18:54			82							
CCB 240-54676/44	19:01			83							
240-14133-16	19:08			83							
240-14133-17	19:16			84							
240-14133-18	19:22			87							
240-14133-19	19:28			87							
240-14133-20	19:33			89							
MB 240-54407/1-A	19:39			88							
LCS 240-54407/2-A	19:44			81							
240-14133-21	19:52			85							

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

ICP-MS Instrument ID: I8 Start Date: 08/15/2012 End Date: 08/15/2012

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Tb	Q	Element Ho	Q	Element Bi	Q	Element	Q	Element	Q
240-14133-21 SD	19:59			91							
240-14133-21 DU	20:06			85							
CCV 240-54676/55	20:13			82							
CCB 240-54676/56	20:21			84							
240-14133-21 MS	20:28			80							
240-14133-22	20:35			86							
240-14133-23	20:42			86							
240-14133-24	20:49			85							
240-14133-25	20:57			88							
240-14133-26	21:04			86							
240-14133-27	21:11			87							
240-14133-28	21:17			85							
240-14133-29	21:23			86							
240-14133-30	21:28			85							
CCV 240-54676/67	21:34			82							
CCB 240-54676/68	21:41			81							
240-14133-31	21:48			78							
240-14133-32	21:55			82							
240-14133-33	22:01			84							
240-14133-34	22:07			85							
240-14133-35	22:12			86							
240-14133-36	22:18			84							
CCV 240-54676/75	22:24			81							
CCB 240-54676/76	22:31			79							

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 08/15/2012 14:01 End Date: 08/16/2012 13:10

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 240-54676/1			14:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD2 240-54676/2 IC	1		14:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD3 240-54676/3 IC	1		14:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
STD4 240-54676/4 IC	1		14:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICV 240-54676/5	1		14:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB 240-54676/6	1		14:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CRI 240-54676/7	1		14:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA 240-54676/8	1		14:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB 240-54676/9	1		14:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-54676/10			15:06																				
CCB 240-54676/11			15:13																				
ZZZZZZ			15:20																				
ZZZZZZ			15:27																				
ZZZZZZ			15:34																				
ZZZZZZ			15:42																				
ZZZZZZ			15:49																				
ZZZZZZ			15:56																				
ZZZZZZ			16:03																				
CCV 240-54676/19	1		16:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-54676/20	1		16:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
MB 240-54404/1-A	1	R	16:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LCS 240-54404/2-A	1	R	16:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-1	1	D	16:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-1 SD	5	D	16:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-1 DU	1	D	16:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-1 MS	1	D	17:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-2	1	D	17:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-3	1	D	17:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-4	1	D	17:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-5	1	D	17:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-54676/31	1		17:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-54676/32	1		17:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-6	1	D	17:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-7	1	D	17:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-8	1	D	18:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-9	1	D	18:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-10	1	D	18:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-11	1	D	18:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-12	1	D	18:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-13	1	D	18:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-14	1	D	18:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-15	1	D	18:49	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.: 240-14133-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 08/15/2012 14:01 End Date: 08/16/2012 13:10

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			
CCV 240-54676/43	1		18:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-54676/44	1		19:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-16	1	D	19:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-17	1	D	19:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-18	1	D	19:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-19	1	D	19:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-20	1	D	19:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
MB 240-54407/1-A	1	R	19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LCS 240-54407/2-A	1	R	19:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-21	1	D	19:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-21 SD	5	D	19:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-21 DU	1	D	20:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-54676/55	1		20:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-54676/56	1		20:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-21 MS	1	D	20:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-22	1	D	20:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-23	1	D	20:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-24	1	D	20:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-25	1	D	20:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-26	1	D	21:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-27	1	D	21:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-28	1	D	21:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-29	1	D	21:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-30	1	D	21:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-54676/67	1		21:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-54676/68	1		21:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-31	1	D	21:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-32	1	D	21:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-33	1	D	22:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-34	1	D	22:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-35	1	D	22:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
240-14133-36	1	D	22:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV 240-54676/75	1		22:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB 240-54676/76	1		22:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ			22:38																				
ZZZZZZ			22:43																				
ZZZZZZ			22:51																				
ZZZZZZ			22:58																				
ZZZZZZ			23:05																				
ZZZZZZ			23:12																				
ZZZZZZ			23:19																				
ZZZZZZ			23:27																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 08/15/2012 14:01 End Date: 08/16/2012 13:10

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			23:34																					
ZZZZZZ			23:41																					
CCV 240-54676/87			23:48																					
CCB 240-54676/88			23:56																					
ZZZZZZ			00:03																					
ZZZZZZ			00:10																					
ZZZZZZ			00:17																					
ZZZZZZ			00:25																					
ZZZZZZ			00:32																					
ZZZZZZ			00:39																					
ZZZZZZ			00:45																					
ZZZZZZ			00:51																					
ZZZZZZ			00:56																					
ZZZZZZ			01:02																					
CCV 240-54676/99			01:07																					
CCB 240-54676/100			01:14																					
ZZZZZZ			01:21																					
ZZZZZZ			01:29																					
ZZZZZZ			01:36																					
ZZZZZZ			01:41																					
ZZZZZZ			01:47																					
ZZZZZZ			01:52																					
ZZZZZZ			01:58																					
ZZZZZZ			02:04																					
ZZZZZZ			02:09																					
ZZZZZZ			02:15																					
CCV 240-54676/111			02:22																					
CCB 240-54676/112			02:29																					
ICSA 240-54676/113			02:36																					
ICSAB 240-54676/114			02:43																					
CCV 240-54676/115			02:51																					
CCB 240-54676/116			02:58																					
ZZZZZZ			03:05																					
ZZZZZZ			03:12																					
ZZZZZZ			03:20																					
ZZZZZZ			03:27																					
ZZZZZZ			03:34																					
ZZZZZZ			03:41																					
ZZZZZZ			03:49																					
ZZZZZZ			03:56																					
ZZZZZZ			04:03																					
ZZZZZZ			04:10																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 08/15/2012 14:01 End Date: 08/16/2012 13:10

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			
CCV 240-54676/127			04:18																				
CCB 240-54676/128			04:25																				
ZZZZZZ			04:32																				
ZZZZZZ			04:39																				
ZZZZZZ			04:46																				
ZZZZZZ			04:52																				
ZZZZZZ			04:57																				
ZZZZZZ			05:03																				
ZZZZZZ			05:09																				
ZZZZZZ			05:14																				
ZZZZZZ			05:20																				
ZZZZZZ			05:25																				
CCV 240-54676/139			05:31																				
CCB 240-54676/140			05:38																				
ZZZZZZ			05:45																				
ZZZZZZ			05:52																				
ZZZZZZ			05:59																				
ZZZZZZ			06:06																				
ZZZZZZ			06:13																				
ZZZZZZ			06:21																				
ZZZZZZ			06:28																				
ZZZZZZ			06:35																				
ZZZZZZ			06:42																				
ZZZZZZ			06:49																				
CCV 240-54676/151			06:57																				
CCB 240-54676/152			07:04																				
ZZZZZZ			07:11																				
ZZZZZZ			07:19																				
ZZZZZZ			07:26																				
ZZZZZZ			07:33																				
ZZZZZZ			07:39																				
ZZZZZZ			07:44																				
ZZZZZZ			07:50																				
ZZZZZZ			07:55																				
ZZZZZZ			08:01																				
ZZZZZZ			08:06																				
CCV 240-54676/163			08:12																				
CCB 240-54676/164			08:19																				
ZZZZZZ			08:26																				
ZZZZZZ			08:32																				
ZZZZZZ			08:38																				
ZZZZZZ			08:43																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 08/15/2012 14:01 End Date: 08/16/2012 13:10

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			08:49																					
ZZZZZZ			08:54																					
ZZZZZZ			09:00																					
ZZZZZZ			09:05																					
ZZZZZZ			09:11																					
ZZZZZZ			09:16																					
CCV 240-54676/175			09:22																					
CCB 240-54676/176			09:29																					
ZZZZZZ			09:37																					
ZZZZZZ			09:44																					
ZZZZZZ			09:50																					
ZZZZZZ			09:57																					
ZZZZZZ			10:04																					
ZZZZZZ			10:12																					
ZZZZZZ			10:19																					
ZZZZZZ			10:26																					
ZZZZZZ			10:32																					
CCV 240-54676/186			10:37																					
CCB 240-54676/187			10:45																					
ZZZZZZ			10:52																					
ZZZZZZ			10:59																					
ZZZZZZ			11:06																					
ZZZZZZ			11:12																					
ZZZZZZ			11:18																					
ZZZZZZ			11:23																					
ZZZZZZ			11:29																					
ZZZZZZ			11:34																					
CCV 240-54676/196			11:40																					
CCB 240-54676/197			11:47																					
ZZZZZZ			11:55																					
ZZZZZZ			12:02																					
ZZZZZZ			12:09																					
ZZZZZZ			12:17																					
ZZZZZZ			12:24																					
ZZZZZZ			12:31																					
ZZZZZZ			12:38																					
ZZZZZZ			12:46																					
ZZZZZZ			12:51																					
ZZZZZZ			12:57																					
CCV 240-54676/208			13:02																					
CCB 240-54676/209			13:10																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Instrument ID: I8 Method: 6020

Start Date: 08/15/2012 14:01 End Date: 08/16/2012 13:10

Prep Types
D = Dissolved
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 08/15/2012 13:08 End Date: 08/15/2012 17:13

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
IC 240-54590/1-A			13:08	X																				
IC 240-54590/2-A			13:10	X																				
IC 240-54590/3-A			13:12	X																				
IC 240-54590/4-A			13:14	X																				
IC 240-54590/5-A			13:16	X																				
IC 240-54590/6-A			13:18	X																				
ICV 240-54590/7-A	1		13:21	X																				
ICB 240-54590/8-A	1		13:23	X																				
CRA 240-54590/9-A	1		13:25	X																				
CCVL 240-54590/10-A	1		13:29	X																				
CCB 240-54590/11-A			13:31																					
ZZZZZZ			13:34																					
ZZZZZZ			13:35																					
ZZZZZZ			13:37																					
ZZZZZZ			13:39																					
ZZZZZZ			13:41																					
ZZZZZZ			13:43																					
ZZZZZZ			13:45																					
ZZZZZZ			13:47																					
ZZZZZZ			13:49																					
ZZZZZZ			13:51																					
CCV 240-54590/12-A			13:53																					
CCB 240-54590/11-A			13:55																					
ZZZZZZ			13:57																					
ZZZZZZ			13:59																					
ZZZZZZ			14:01																					
ZZZZZZ			14:03																					
ZZZZZZ			14:05																					
ZZZZZZ			14:07																					
ZZZZZZ			14:08																					
ZZZZZZ			14:10																					
ZZZZZZ			14:12																					
ZZZZZZ			14:14																					
CCV 240-54590/12-A			14:16																					
CCB 240-54590/11-A			14:18																					
ZZZZZZ			14:20																					
ZZZZZZ			14:22																					
ZZZZZZ			14:24																					
ZZZZZZ			14:25																					
ZZZZZZ			14:27																					
ZZZZZZ			14:29																					
ZZZZZZ			14:31																					

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 08/15/2012 13:08 End Date: 08/15/2012 17:13

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
ZZZZZZ			14:33																					
ZZZZZZ			14:35																					
ZZZZZZ			14:37																					
CCV 240-54590/12-A	1		14:38	X																				
CCB 240-54590/11-A	1		14:40	X																				
ZZZZZZ			14:42																					
ZZZZZZ			14:44																					
ZZZZZZ			14:46																					
ZZZZZZ			14:48																					
ZZZZZZ			14:50																					
ZZZZZZ			14:51																					
ZZZZZZ			14:53																					
MB 240-54405/1-A	1	T	14:56	X																				
LCS 240-54405/2-A	1	T	14:59	X																				
240-14133-1	1	D	15:01	X																				
CCV 240-54590/12-A	1		15:04	X																				
CCB 240-54590/11-A	1		15:05	X																				
240-14133-1 DU	1	D	15:07	X																				
240-14133-1 MS	1	D	15:09	X																				
240-14133-2	1	D	15:11	X																				
240-14133-3	1	D	15:13	X																				
240-14133-4	1	D	15:16	X																				
240-14133-5	1	D	15:18	X																				
240-14133-6	1	D	15:20	X																				
240-14133-7	1	D	15:22	X																				
240-14133-8	1	D	15:24	X																				
240-14133-9	1	D	15:27	X																				
CCV 240-54590/12-A	1		15:29	X																				
CCB 240-54590/11-A	1		15:31	X																				
240-14133-10	1	D	15:32	X																				
240-14133-11	1	D	15:34	X																				
240-14133-12	1	D	15:37	X																				
240-14133-13	1	D	15:39	X																				
240-14133-14	1	D	15:41	X																				
240-14133-15	1	D	15:43	X																				
240-14133-16	1	D	15:45	X																				
240-14133-17	1	D	15:46	X																				
240-14133-18	1	D	15:48	X																				
240-14133-19	1	D	15:50	X																				
CCV 240-54590/12-A	1		15:52	X																				
CCB 240-54590/11-A	1		15:54	X																				
240-14133-20	1	D	15:56	X																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-14133-1

SDG No.:

Instrument ID: H4 Method: 7470A

Start Date: 08/15/2012 13:08 End Date: 08/15/2012 17:13

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
MB 240-54408/1-A	1	T	15:58	X																				
LCS 240-54408/2-A	1	T	16:00	X																				
240-14133-21	1	D	16:02	X																				
240-14133-21 DU	1	D	16:04	X																				
240-14133-21 MS	1	D	16:06	X																				
240-14133-22	1	D	16:07	X																				
240-14133-23	1	D	16:09	X																				
240-14133-24	1	D	16:11	X																				
240-14133-25	1	D	16:13	X																				
CCV 240-54590/12-A	1		16:15	X																				
CCB 240-54590/11-A	1		16:17	X																				
240-14133-26	1	D	16:19	X																				
240-14133-27	1	D	16:21	X																				
240-14133-28	1	D	16:23	X																				
240-14133-29	1	D	16:25	X																				
240-14133-30	1	D	16:27	X																				
240-14133-31	1	D	16:29	X																				
240-14133-32	1	D	16:31	X																				
240-14133-33	1	D	16:33	X																				
240-14133-34	1	D	16:35	X																				
240-14133-35	1	D	16:37	X																				
CCV 240-54590/12-A	1		16:39	X																				
CCB 240-54590/11-A	1		16:41	X																				
240-14133-36	1	D	16:43	X																				
ZZZZZZ			16:45																					
ZZZZZZ			16:47																					
ZZZZZZ			16:50																					
ZZZZZZ			16:52																					
ZZZZZZ			16:54																					
ZZZZZZ			16:56																					
ZZZZZZ			16:58																					
CCV 240-54590/12-A	1		17:00	X																				
CCB 240-54590/11-A	1		17:02	X																				
CCV 240-54590/12-A			17:05																					
CCB 240-54590/11-A			17:08																					
ZZZZZZ			17:10																					
CCV 240-54590/12-A			17:11																					
CCB 240-54590/11-A			17:13																					

Prep Types
D = Dissolved
T = Total/NA

Sample MSA-SW40C-081312

arsenic rep. result 2.4 ug/L

240-14133-d-15-a, 8/15/2012 18:49:04 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B
		ppb	ppb	ppb
x		36.393%	-0.091	M 610.900
%RSD		9.603	7.894	M 2.417
Run	**Time**	**23Na**	**25Mg**	**27Al**
		ppb	ppb	ppb
x		TM 1527000.000	M 188500.000	6.736
%RSD		TM 0.297	M 0.404	6.619
Run	**Time**	**35Cl**	**39K**	**43Ca**
		ppb	ppb	ppb
x		T 0.000	T 54840.000	73950.000
%RSD		T 0.000	T 0.224	0.201
Run	**Time**	**45Sc**	**45Sc**	**47Ti**
		ppb	ppb	ppb
x		T 97.148%	96.574%	-0.115
%RSD		T 2.793	1.337	36.960
Run	**Time**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb
x		1.081	-0.222	8.480
%RSD		7.527	5.064	6.051
Run	**Time**	**55Mn**	**56Fe**	**59Co**
		ppb	ppb	ppb
x		5.964	-25.730	0.047
%RSD		0.362	0.723	5.235
Run	**Time**	**60Ni**	**65Cu**	**66Zn**
		ppb	ppb	ppb
x		1.296	3.454	2.562
%RSD		6.607	5.646	3.243
Run	**Time**	**72Ge**	**75As**	**77Ar Cl**
		ppb	ppb	ppb
x		83.530%	2.370	-0.770
%RSD		1.365	2.696	2.018
Run	**Time**	**78Se**	**88Sr**	**95Mo**
		ppb	ppb	ppb
x		0.077	TM 1363.000	2.282
%RSD		11.120	TM 0.099	0.825
Run	**Time**	**105Pd**	**107Ag**	**108Mo O**
		ppb	ppb	ppb
x		0.000	-0.146	0.441
%RSD		0.000	2.649	111.600
Run	**Time**	**111Cd**	**115In**	**118Sn**
		ppb	ppb	ppb
x		-0.042	82.901%	0.015
%RSD		25.860	1.714	50.670
Run	**Time**	**121Sb**	**137Ba**	**159Tb**
		ppb	ppb	ppb
x		0.285	76.350	0.000
%RSD		3.177	0.035	0.000
Run	**Time**	**165Ho**	**182W**	**205Tl**
		ppb	ppb	ppb
x		84.613%	0.168	-1.087
%RSD		1.506	6.833	0.244
Run	**Time**	**208Pb**	**209Bi**	
		ppb	ppb	
x		-0.031	0.000	
%RSD		4.199	0.000	

Tetra Tech, Inc. **INTERNAL CORRESPONDENCE**

TO: **T. APANAVAGE** **DATE:** **SEPTEMBER 7, 2012**

FROM: **MICHELLE L. ALLEN** **COPIES:** **DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION – HEXAVALENT CHROMIUM**
LOCKHEED MARTIN CORPORATION (LMC) – MARTIN STATE AIRPORT (MSA)
SDG R1205280

SAMPLES: 36/Aqueous/Hexavalent Chromium

MSA-SW37A-081312	MSA-SW37B-081312	MSA-SW37C-081312
MSA-SW37D-081312	MSA-SW38A-081312	MSA-SW38B-081312
MSA-SW38C-081312	MSA-SW38D-081312	MSA-SW39A-081312
MSA-SW39B-081312	MSA-SW39C-081312	MSA-SW39D-081312
MSA-SW40A-081312	MSA-SW40B-081312	MSA-SW40C-081312
MSA-SW40D-081312	MSA-SW41A-081312	MSA-SW41B-081312
MSA-SW41C-081312	MSA-SW41D-081312	MSA-SW42A-081312
MSA-SW42B-081312	MSA-SW42C-081312	MSA-SW42D-081312
MSA-SW43A-081312	MSA-SW43B-081312	MSA-SW43C-081312
MSA-SW43D-081312	MSA-SW44A-081312	MSA-SW44B-081312
MSA-SW44C-081312	MSA-SW44D-081312	MSA-SW45A-081312
MSA-SW45B-081312	MSA-SW45C-081312	MSA-SW45D-081312

Overview

The sample set for LMC – MSA, SDG R1205280 consisted of thirty-six (36) aqueous environmental samples. All thirty-six (36) aqueous samples were analyzed for hexavalent chromium. No field duplicate pair was included in the sample delivery group (SDG).

The samples were collected by Tetra Tech, Inc. on August 13, 2012 and analyzed by Columbia Analytical Services, Inc. All analyses were conducted in accordance with EPA Method 218.6 analytical and reporting protocols.

The data contained in these SDGs were validated with regard to the following parameters: data completeness, holding times, initial/continuing calibrations, laboratory method blank results, blank spike results, laboratory duplicate results, matrix spike/matrix spike duplicate recoveries, chromatographic resolution, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

No major issues were noted.

Minor

- The laboratory analyzed all the environmental samples outside the 24 hour holding time. Positive results reported for hexavalent chromium below the Method Reporting Limit (MRL) limit but above the Method Detection Limit (MDL) were qualified as estimated, (J), due to conflicting directional bias. The non-detected results reported for hexavalent chromium in the affected samples were qualified biased low, (UL).

- Positive results reported below the MRL but above the MDL were qualified as estimated, (J).

Notes

The sample Chain of Custodies (COCs) for this SDG had incorrect sampling dates. As indicated on the COCs, the samples were shipped to the laboratory on 08/13/12 and the laboratory received the samples on 08/14/12. The samples were analyzed on 08/14-15/12. The data reviewer manually corrected the incorrect sampling dates on the COCs contained in this data validation report.

The Matrix Spike Duplicate (MSD) Percent Recovery (%R) for hexavalent chromium performed on sample MSA-SW37A-081312 was above the upper quality control limit. No validation action was taken because the Matrix Spike (MS) %R was within the quality control limits and the Relative Percent Difference (RPD) between the MS and MSD %Rs was acceptable.

All samples were properly preserved to a pH of 9 -9.5.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: All samples were analyzed outside the 24 hour holding time.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to Region III modifications to U.S. EPA National Functional Guidelines for Inorganic Data Validation (April 1993) and EPA Method 218.6. The text of this report has been formulated to address only those problem areas affecting data quality.

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 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed

PROJ_NO: 04021	NSAMPLE	MSA-SW37A-081312			MSA-SW37B-081312			MSA-SW37C-081312			MSA-SW37D-081312		
SDG: R1205280	LAB_ID	R1205280-001			R1205280-002			R1205280-003			R1205280-004		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.04	UL	H	0.04	UL	H	0.04	UL	H	0.04	UL	H

PROJ_NO: 04021	NSAMPLE	MSA-SW38A-081312			MSA-SW38B-081312			MSA-SW38C-081312			MSA-SW38D-081312		
SDG: R1205280	LAB_ID	R1205280-005			R1205280-006			R1205280-007			R1205280-008		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.04	UL	H	0.02	J	HP	0.04	UL	H	0.025	J	HP

PROJ_NO: 04021	NSAMPLE	MSA-SW39A-081312			MSA-SW39B-081312			MSA-SW39C-081312			MSA-SW39D-081312		
SDG: R1205280	LAB_ID	R1205280-009			R1205280-010			R1205280-011			R1205280-012		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.04	UL	H	0.04	UL	H	0.04	UL	H	0.04	UL	H

PROJ_NO: 04021	NSAMPLE	MSA-SW40A-081312			MSA-SW40B-081312			MSA-SW40C-081312			MSA-SW40D-081312		
SDG: R1205280	LAB_ID	R1205280-013			R1205280-014			R1205280-015			R1205280-016		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.034	J	HP	0.025	J	HP	0.04	UL	H	0.04	UL	H

PROJ_NO: 04021	NSAMPLE	MSA-SW41A-081312			MSA-SW41B-081312			MSA-SW41C-081312			MSA-SW41D-081312		
SDG: R1205280	LAB_ID	R1205280-017			R1205280-018			R1205280-019			R1205280-020		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.04	UL	H	0.04	UL	H	0.026	J	HP	0.04	UL	H

PROJ_NO: 04021	NSAMPLE	MSA-SW42A-081312			MSA-SW42B-081312			MSA-SW42C-081312			MSA-SW42D-081312		
SDG: R1205280	LAB_ID	R1205280-021			R1205280-022			R1205280-023			R1205280-024		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.04	UL	H	0.04	UL	H	0.04	UL	H	0.026	J	HP

PROJ_NO: 04021	NSAMPLE	MSA-SW43A-081312			MSA-SW43B-081312			MSA-SW43C-081312			MSA-SW43D-081312		
SDG: R1205280	LAB_ID	R1205280-025			R1205280-026			R1205280-027			R1205280-028		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.024	J	HP	0.022	J	HP	0.021	J	HP	0.04	UL	H

PROJ_NO: 04021	NSAMPLE	MSA-SW44A-081312			MSA-SW44B-081312			MSA-SW44C-081312			MSA-SW44D-081312		
SDG: R1205280	LAB_ID	R1205280-029			R1205280-030			R1205280-031			R1205280-032		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.04	UL	H	0.021	J	HP	0.021	J	HP	0.04	UL	H

PROJ_NO: 04021	NSAMPLE	MSA-SW45A-081312			MSA-SW45B-081312			MSA-SW45C-081312			MSA-SW45D-081312		
SDG: R1205280	LAB_ID	R1205280-033			R1205280-034			R1205280-035			R1205280-036		
FRACTION: MISC	SAMP_DATE	8/13/2012			8/13/2012			8/13/2012			8/13/2012		
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
HEXAVALENT CHROMIUM		0.04	UL	H	0.022	J	HP	0.04	UL	H	0.04	UL	H

Appendix B

Results as Reported by the Laboratory

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1134
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW37A-081312		
Lab Code:	R1205280-001	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 20:38	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1142
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW37B-081312		
Lab Code:	R1205280-002	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 21:02	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1147
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW37C-081312		
Lab Code:	R1205280-003	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 21:10	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1152
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW37D-081312		
Lab Code:	R1205280-004	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 21:19	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1248
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW38A-081312		
Lab Code:	R1205280-005	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 21:27	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1253
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW38B-081312		
Lab Code:	R1205280-006	**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	J	µg/L	0.040	0.020	2	NA	8/14/12 21:35	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Sample Name: MSA-SW38C-081312
Lab Code: R1205280-007

Service Request: R1205280
Date Collected: 8/13/12 1258
Date Received: 8/14/12

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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 21:43	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1320
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW38D-081312		
Lab Code:	R1205280-008	**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	**0.025**	J	µg/L	0.040	0.020	2	NA	8/15/12 11:54	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1436
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW39A-081312		
Lab Code:	R1205280-009	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 22:16	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1441
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW39B-081312		
Lab Code:	R1205280-010	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 22:24	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1455
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW39C-081312		
Lab Code:	R1205280-011	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 22:32	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1452
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW39D-081312		
Lab Code:	R1205280-012	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 22:56	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1225
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW40A-081312		
Lab Code:	R1205280-013	**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	0.034	J	µg/L	0.040	0.020	2	NA	8/14/12 23:04	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1232
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW40B-081312		
Lab Code:	R1205280-014	**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	0.025	J	µg/L	0.040	0.020	2	NA	8/14/12 23:12	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Collected: 8/13/12 1237
Date Received: 8/14/12

Sample Name: MSA-SW40C-081312
Lab Code: R1205280-015

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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 23:21	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1242
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW40D-081312		
Lab Code:	R1205280-016	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 23:45	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1308
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW41A-081312		
Lab Code:	R1205280-017	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/14/12 23:53	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Collected: 8/13/12 1312
Date Received: 8/14/12

Sample Name: MSA-SW41B-081312
Lab Code: R1205280-018

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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 00:01	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1318
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW41C-081312		
Lab Code:	R1205280-019	**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	0.026	J	µg/L	0.040	0.020	2	NA	8/15/12 00:09	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1322
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW41D-081312		
Lab Code:	R1205280-020	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 00:18	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1200
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW42A-081312		
Lab Code:	R1205280-021	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 00:34	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Collected: 8/13/12 1205
Date Received: 8/14/12

Sample Name: MSA-SW42B-081312
Lab Code: R1205280-022

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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 00:58	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1212
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW42C-081312		
Lab Code:	R1205280-023	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 01:23	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1218
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW42D-081312		
Lab Code:	R1205280-024	**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	**0.026**	J	µg/L	0.040	0.020	2	NA	8/15/12 01:31	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1325
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW43A-081312		
Lab Code:	R1205280-025	**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	**0.024**	J	µg/L	0.040	0.020	2	NA	8/15/12 01:39	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1334
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW43B-081312		
Lab Code:	R1205280-026	**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	0.022	J	µg/L	0.040	0.020	2	NA	8/15/12 01:47	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1337
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW43C-081312		
Lab Code:	R1205280-027	**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	0.021	J	µg/L	0.040	0.020	2	NA	8/15/12 01:55	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1345
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW43D-081312		
Lab Code:	R1205280-028	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 02:03	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1351
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW44A-081312		
Lab Code:	R1205280-029	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 02:11	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1356
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW44B-081312		
Lab Code:	R1205280-030	**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	0.021	J	µg/L	0.040	0.020	2	NA	8/15/12 02:19	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Sample Name: MSA-SW44C-081312
Lab Code: R1205280-031

Service Request: R1205280
Date Collected: 8/13/12 1400
Date Received: 8/14/12

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	**0.021**	J	µg/L	0.040	0.020	2	NA	8/15/12 02:28	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1407
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW44D-081312		
Lab Code:	R1205280-032	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 10:38	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1414
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW45A-081312		
Lab Code:	R1205280-033	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 10:47	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1420
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW45B-081312		
Lab Code:	R1205280-034	**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	0.022	J	µg/L	0.040	0.020	2	NA	8/15/12 10:55	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1426
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW45C-081312		
Lab Code:	R1205280-035	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 11:03	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	8/13/12 1430
Sample Matrix:	Water	**Date Received:**	8/14/12
Sample Name:	MSA-SW45D-081312		
Lab Code:	R1205280-036	**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	0.040	U	µg/L	0.040	0.020	2	NA	8/15/12 11:11	

Appendix C

Support Documentation

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	1 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sample Specific Notes:

Sample Identification (MLK 9/7/12)	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium
MSA-SW37A-081312	8/13/2012	1134	SW	Water	1	x	x
MSA-SW37B-081312	8/13/2012	1142	SW	Water	1	x	x
MSA-SW37C-081312	8/13/2012	1147	SW	Water	1	x	x
MSA-SW37D-081312	8/13/2012	1152	SW	Water	1	x	x
MSA-SW38A-081312	8/13/2012	1248	SW	Water	1	x	x
MSA-SW38B-081312	8/13/2012	1253	SW	Water	1	x	x
MSA-SW38C-081312	8/13/2012	1258	SW	Water	1	x	x
MSA-SW38D-081312	8/13/2012	1320	SW	Water	1	x	x
MSA-SW39A-081312	8/13/2012	1426	SW	Water	1	x	x
MSA-SW39B-081312	8/13/2012	1441	SW	Water	1	x	x
MSA-SW39C-081312	8/13/2012	1455	SW	Water	1	x	x
MSA-SW39D-081312	8/13/2012	1452	SW	Water	1	x	x

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: **Samples must be analyzed within 24 hours of sample time.**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	TetraTech	8/13/12 1800	[signature]	ALS	8-14-12 07:55
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

R1205280 5
Tetra Tech NUS,Inc.
MSA Surface Water Sampling

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	2 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			

Sample Identification (MWA 9/7/12)	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium	Sample Specific Notes:
MSA-SW40A-081312	8/13/2012	1225	SW	Water	1	x	x	
MSA-SW40B-081312	8/13/2012	1232	SW	Water	1	x	x	
MSA-SW40C-081312	8/13/2012	1237	SW	Water	1	x	x	
MSA-SW40D-081312	8/13/2012	1242	SW	Water	1	x	x	
MSA-SW41A-081312	8/13/2012	1308	SW	Water	1	x	x	
MSA-SW41B-081312	8/13/2012	1312	SW	Water	1	x	x	
MSA-SW41C-081312	8/13/2012	1318	SW	Water	1	x	x	
MSA-SW41D-081312	8/13/2012	1322	SW	Water	1	x	x	
MSA-SW42A-081312	8/13/2012	1200	SW	Water	1	x	x	
MSA-SW42B-081312	8/13/2012	1205	SW	Water	1	x	x	
MSA-SW42C-081312	8/13/2012	1212	SW	Water	1	x	x	
MSA-SW42D-081312	8/13/2012	1218	SW	Water	1	x	x	

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: **Samples must be analyzed within 24 hours of sample time.**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tera Tech	8/13/12	[signature]	ALS	8/14/12 @ 07:55
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

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Form No. CA-C-WI-002, Rev. 2, dated 03/06/2012

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: Tony Apanavage	Date: 8/13/12	COC No:
Tera Tech	Tel/Fax: 301-233-8230 (cell)	Lab Contact: Pat Omeara	Carrier: Fedex	3 of 3 COCs
20251 Century Blvd, Suite 200	Analysis Turnaround Time			Job No.
Germantown, MD 20874	Calendar (C) or Work Days (W) _____			
(301) 528-3021 Phone	TAT if different from Below _____			SDG No.
(301) 528-3000 FAX	☐ 2 weeks			
Project Name: MSA Surface Water Sampling	☐ 1 week			Sampler:
Site: MSA Frog Mortar Creek	☐ 2 days			
P O #	☐ 1 day			Sample Specific Notes:

Sample Identification (MA 8/17/12)	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	Dissolved Hexavalent Chromium
MSA-SW43A-081312	8/13/2012	1325	SW	Water	1	x	x
MSA-SW43B-081312	8/13/2012	1334	SW	Water	1	x	x
MSA-SW43C-081312	8/13/2012	1337	SW	Water	1	x	x
MSA-SW43D-081312	8/13/2012	1345	SW	Water	1	x	x
MSA-SW44A-081312	8/13/2012	1351	SW	Water	1	x	x
MSA-SW44B-081312	8/13/2012	1356	SW	Water	1	x	x
MSA-SW44C-081312	8/13/2012	1400	SW	Water	1	x	x
MSA-SW44D-081312	8/13/2012	1407	SW	Water	1	x	x
MSA-SW45A-081312	8/13/2012	1414	SW	Water	1	x	x
MSA-SW45B-081312	8/13/2012	1420	SW	Water	1	x	x
MSA-SW45C-081312	8/13/2012	1426	SW	Water	1	x	x
MSA-SW45D-081312	8/13/2012	1430	SW	Water	1	x	x

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 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: **Samples must be analyzed within 24 hours of sample time.**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	8/13/12 1800	[signature]	ALS	8-14-12 @ 07.55
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

COC

Cooler Receipt and Preservation Check Form

Project/Client Tetra Tech Folder Number R12-5280

Cooler received on 8-14-12 by: KE COURIER: ALS UPS (FEDEX) VELOCITY CLIENT

1.	Were custody seals on outside of cooler?	YES	(NO)			
2.	Were custody papers properly filled out (ink, signed, etc.)?	(YES)	NO			
3.	Did all bottles arrive in good condition (unbroken)?	(YES)	NO			
4.	Did VOA vials, Alkalinity, or Sulfide have significant* air bubbles?	YES	NO	(N/A)		
5.	Were Ice or Ice packs present?	(YES)	NO			
6.	Where did the bottles originate?	(ALS/ROC)	CLIENT			
7.	Temperature of cooler(s) upon receipt:	2.7°				
	Is the temperature within 0° - 6° C?:	(Yes)	Yes	Yes	Yes	Yes
	If No, Explain Below	No	No	No	No	No

Date/Time Temperatures Taken: 8-14-12 @ 08:02

Thermometer ID: IR GUN#3 (IR GUN#4) Reading From: (Temp Blank) / Sample Bottle

If out of Temperature, note packing/ice condition & Client Approval to Run Samples:

All Samples held in storage location R-002 by KE on 8-14-12 at 8105

5035 samples placed in storage location _____ by _____ on _____ at _____

PC Secondary Review: MEP 8/14/12

Cooler Breakdown: Date: 8/14/12 Time: 1055 by: AWL

1.	Were all bottle labels complete (*i.e.* analysis, preservation, etc.)?	(YES)	NO
2.	Did all bottle labels and tags agree with custody papers?	(YES)	NO
3.	Were correct containers used for the tests indicated?	(YES)	NO
4.	Air Samples: Cassettes / Tubes Intact Canisters Pressurized Tedlar® Bags Inflated		(N/A)

Explain any discrepancies: _____

pH	Reagent	YES	NO	Lot Received *	Exp	Sample ID	Vol. Added	Lot Added	Final pH
≥12	NaOH								
≤2	HNO_3								
≤2	H_2SO_4								
<4	$NaHSO_4$								
Residual Chlorine (-)	For TCN Phenol and 522			If present, contact PM to add ascorbic acid Or sodium sulfite (522)					
	$Na_2S_2O_3$	-	-						
	Zn Aceta	-	-						
	HCl	*	*						

*Not to be tested before analysis – pH tested and recorded by VOAs or GenChem on a separate worksheet

Yes = All samples OK

No = Samples were preserved at lab as listed

PM OK to Adjust: _____

Bottle lot numbers: _____

Other Comments:

PC Secondary Review: MEP 8/21/12

H:\SMODOCS\Cooler Receipt 3.doc

*significant air bubbles: VOA > 5-6 mm ; WC ~1 in. diameter

Client:	Tetra Tech NUS, Inc.	**Service Request No.:**	R1205280
Project:	MSA Surface Water	**Project Number:**	112IC04021-07
Sample Matrix:	Water	**Date Received:**	8/14/12

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 8/13/12 and received at CAS in good condition at a cooler temperature of 2.7 °C as noted on the cooler receipt and preservation check form. The samples were immediately preserved to a pH of 9.3 – 9.7 and 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. All samples were filtered in the field.

Hexavalent Chromium Analysis – 218.6

Thirty-six water samples were analyzed for Dissolved CR+6 by EPA method 218.6, low level. Values detected between the MDL and PQL have been flagged with a "J" as estimated. Samples were analyzed at a ½ dilution due to matrix interference which caused a negative deflection on the IC.

Note: Not all samples were analyzed within 24 hours of sampling. However, as mentioned, all samples were pH adjusted and all samples were analyzed within 48 hours of collection.

All the initial and continuing calibration criteria of 95 – 105 % were met.

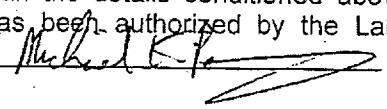
The Blank Spike (LCS) recovery was within QC limits.

A Matrix Spike/Matrix Spike duplicate was analyzed on samples MSA-SW37A-081312, MSA-SW39C-081312, MSA-SW42A-081312, and MSA-SW44C-081312. The recoveries and RPD's were all within QC limits except the MSD (112 %) for MSA-SW37A-081312.

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.



CAS ASP/CLP Batching Form/Login Sheet

Client Proj #: 112IC04021 - 07
Submission: R1205280
Client: Tetra Tech NUS, Inc.
Client Rep: MPERRY
Project: MSA Surface Water Sampling

Batch Complete: Yes
Diskette Requested: No
Date: 8/15/12
Custody Seal: Present/Absent:
Chain of Custody: Present/Absent:

Date Revised:
Date Due: 8/15/12
Protocol: MCAWW
Shipping No.:
SDG #:

CAS Job #	Client/EPA ID	Matrix	Requested Parameters	Date Sampled	Date Received	pH (Solids)	% Solids	Remarks Sample Condition
R1205280-001	MSA-SW37A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-002	MSA-SW37B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-003	MSA-SW37C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-004	MSA-SW37D-081312	Water	218.6	8/13/12	8/14/12			
R1205280-005	MSA-SW38A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-006	MSA-SW38B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-007	MSA-SW38C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-008	MSA-SW38D-081312	Water	218.6	8/13/12	8/14/12			
R1205280-009	MSA-SW39A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-010	MSA-SW39B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-011	MSA-SW39C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-012	MSA-SW39D-081312	Water	218.6	8/13/12	8/14/12			
R1205280-013	MSA-SW40A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-014	MSA-SW40B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-015	MSA-SW40C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-016	MSA-SW40D-081312	Water	218.6	8/13/12	8/14/12			
R1205280-017	MSA-SW41A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-018	MSA-SW41B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-019	MSA-SW41C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-020	MSA-SW41D-081312	Water	218.6	8/13/12	8/14/12			
R1205280-021	MSA-SW42A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-022	MSA-SW42B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-023	MSA-SW42C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-024	MSA-SW42D-081312	Water	218.6	8/13/12	8/14/12			
R1205280-025	MSA-SW43A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-026	MSA-SW43B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-027	MSA-SW43C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-028	MSA-SW43D-081312	Water	218.6	8/13/12	8/14/12			
R1205280-029	MSA-SW44A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-030	MSA-SW44B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-031	MSA-SW44C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-032	MSA-SW44D-081312	Water	218.6	8/13/12	8/14/12			
R1205280-033	MSA-SW45A-081312	Water	218.6	8/13/12	8/14/12			
R1205280-034	MSA-SW45B-081312	Water	218.6	8/13/12	8/14/12			
R1205280-035	MSA-SW45C-081312	Water	218.6	8/13/12	8/14/12			
R1205280-036	MSA-SW45D-081312	Water	218.6	8/13/12	8/14/12			

Folder Comments:

Columbia Analytical Services

Now part of the ALS Group

REPORT QUALIFIERS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the "Notes" column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an "immediate" hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% (25% for CLP) difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (≥100% Difference between two GC columns).
X	See Case Narrative for discussion.

ACCREDITED IN ACCORDANCE WITH nelac

CAS/Rochester Lab ID # for State Certifications[1]

NELAP Accredited	Nevada ID # NY-00032
Connecticut ID # PH0556	New Jersey ID # NY004
Delaware Accredited	New York ID # 10145
DoD ELAP #65817	New Hampshire ID # 294100 A/B
Florida ID # E87674	North Carolina #676
Illinois ID #200047	Pennsylvania ID# 68-786
Maine ID #NY0032	Rhode Island ID # 158
Nebraska Accredited	Virginia #460167

[1] Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable, except as noted in the laboratory case narrative provided. For a specific list of accredited analytes, refer to the certifications section at www.caslab.com.

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Sample Name: Method Blank
Lab Code: R1205280-MB1

Service Request: R1205280
Date Collected: NA
Date Received: NA

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	0.010	1	NA	8/14/12 19:52	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1205280-MB2	**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	0.010	1	NA	8/14/12 23:37	

Client:	Tetra Tech NUS, Inc.	**Service Request:**	R1205280
Project:	MSA Surface Water Sampling/112IC04021 - 07	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank		
Lab Code:	R1205280-MB3	**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	0.010	1	NA	8/15/12 10:00	

Client: Tetra Tech NUS, Inc.
Project: MSA Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Collected: 8/13/12
Date Received: 8/14/12
Date Analyzed: 8/14/12

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-SW37A-081312
Lab Code: R1205280-001

Units: µg/L
Basis: NA

Analytical Method: 218.6

Analyte Name	Sample Result	MSA-SW37A-081312MS Matrix Spike R1205280-001MS1 Result	Spike Amount	% Rec	MSA-SW37A-081312DMS Duplicate Matrix Spike R1205280-001DMS1 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	ND	0.396	0.400	99	0.449	0.400	112 *	90 - 110	13	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
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 Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Collected: 8/13/12
Date Received: 8/14/12
Date Analyzed: 8/14/12

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-SW39C-081312
Lab Code: R1205280-011

Units: µg/L
Basis: NA

Analytical Method: 218.6

Analyte Name	Sample Result	MSA-SW39C-081312MS Matrix Spike R1205280-011MS2 Result	Spike Amount	% Rec	MSA-SW39C-081312DMS Duplicate Matrix Spike R1205280-011DMS2 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	ND	0.395	0.400	99	0.421	0.400	105	90 - 110	6	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
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 Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Collected: 8/13/12
Date Received: 8/14/12
Date Analyzed: 8/15/12

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-SW42A-081312
Lab Code: R1205280-021

Units: µg/L
Basis: NA

Analytical Method: 218.6

Analyte Name	Sample Result	MSA-SW42A-081312MS Matrix Spike R1205280-021MS3 Result	Spike Amount	% Rec	MSA-SW42A-081312DMS Duplicate Matrix Spike R1205280-021DMS3 Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Chromium, Hexavalent, Dissolved	ND	0.397	0.400	99	0.434	0.400	108	90 - 110	9	20

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
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 Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Collected: 8/13/12
Date Received: 8/14/12
Date Analyzed: 8/15/12

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MSA-SW44C-081312
Lab Code: R1205280-031

Units: µg/L
Basis: NA

Analytical Method: 218.6

MSA-SW44C-081312MS
Matrix Spike
R1205280-031MS4

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	0.021	0.403	0.400	95	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.
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 Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Analyzed: 8/14/12

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1205280-LCS1 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6	0.205	0.200	102	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 Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Analyzed: 8/15/12

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1205280-LCS2 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6	0.195	0.200	97	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 Surface Water Sampling/112IC04021 - 07
Sample Matrix: Water

Service Request: R1205280
Date Analyzed: 8/15/12

Lab Control Sample Summary
General Chemistry Parameters

Units: µg/L
Basis: NA

Analyte Name	Method	Lab Control Sample R1205280-LCS3 Result	Spike Amount	% Rec	% Rec Limits
Chromium, Hexavalent, Dissolved	218.6	0.186	0.200	93	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:** R1205280
Project: MSA Surface Water Sampling/112IC04021 - 07

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	305061	RQ1209448-08	8/14/12 19:44	0.500	0.498	100	95 - 105
CCV2	305061	RQ1209448-07	8/14/12 21:51	0.500	0.500	100	95 - 105
CCV3	305061	RQ1209448-06	8/14/12 23:29	0.500	0.484	97	95 - 105
CCV4	305063	RQ1209450-04	8/14/12 23:29	0.500	0.484	97	95 - 105
CCV5	305061	RQ1209448-05	8/15/12 01:06	0.500	0.479	96	95 - 105
CCV6	305063	RQ1209450-03	8/15/12 01:06	0.500	0.479	96	95 - 105
CCV7	305063	RQ1209450-02	8/15/12 02:44	0.500	0.491	98	95 - 105
CCV8	305067	RQ1209451-04	8/15/12 09:52	0.500	0.475	95	95 - 105
CCV9	305067	RQ1209451-03	8/15/12 12:31	0.500	0.499	100	95 - 105

Client: Tetra Tech NUS, Inc. **Service Request:** R1205280
Project: MSA Surface Water Sampling/112IC04021 - 07

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	305061	RQ1209448-12	8/14/12 19:52	0.010	0.020	0.020	U
CCB2	305061	RQ1209448-11	8/14/12 21:59	0.010	0.020	0.020	U
CCB3	305061	RQ1209448-10	8/14/12 23:37	0.010	0.020	0.020	U
CCB4	305063	RQ1209450-08	8/14/12 23:37	0.010	0.020	0.020	U
CCB5	305061	RQ1209448-09	8/15/12 01:14	0.010	0.020	0.020	U
CCB6	305063	RQ1209450-07	8/15/12 01:14	0.010	0.020	0.020	U
CCB7	305063	RQ1209450-06	8/15/12 02:52	0.010	0.020	0.020	U
CCB8	305067	RQ1209451-06	8/15/12 10:00	0.010	0.020	0.020	U
CCB9	305067	RQ1209451-05	8/15/12 12:43	0.010	0.020	0.020	U

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 305061 **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
RQ1209448-08	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 µg/L	10 mL	0.498 µg/L	1					8/14/12 19:44:00	N	IV
RQ1209448-12	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/14/12 19:52:00	N	IV
RQ1209448-13	Chromium, Hexavalent, Dissolved	MB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/14/12 19:52:00	N	IV
RQ1209448-14	Chromium, Hexavalent, Dissolved	LCS		Water	0.20 µg/L	10 mL	0.205 µg/L	1	0.010	0.020	102		8/14/12 20:01:00	N	IV
R1205280-001	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 20:38:00	N	IV
RQ1209448-01	Chromium, Hexavalent, Dissolved	MS	R1205280-001	Water	0.40 µg/L	10 mL	0.396 µg/L	2	0.020	0.040	99		8/14/12 20:46:00	N	IV
RQ1209448-02	Chromium, Hexavalent, Dissolved	DMS	R1205280-001	Water	0.45 µg/L	10 mL	0.449 µg/L	2	0.020	0.040	112*	13	8/14/12 20:54:00	N	IV
R1205280-002	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 21:02:00	N	IV
R1205280-003	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 21:10:00	N	IV
R1205280-004	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 21:19:00	N	IV
R1205280-005	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 21:27:00	N	IV
R1205280-006	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.020 µg/L J	2	0.020	0.040			8/14/12 21:35:00	N	IV
R1205280-007	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 21:43:00	N	IV
RQ1209448-07	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 µg/L	10 mL	0.500 µg/L	1					8/14/12 21:51:00	N	IV
RQ1209448-11	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/14/12 21:59:00	N	IV
R1205280-009	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 22:16:00	N	IV
R1205280-010	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 22:24:00	N	IV
R1205280-011	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 22:32:00	N	IV
RQ1209448-03	Chromium, Hexavalent, Dissolved	MS	R1205280-011	Water	0.40 µg/L	10 mL	0.395 µg/L	2	0.020	0.040	99		8/14/12 22:48:00	N	IV
RQ1209448-04	Chromium, Hexavalent, Dissolved	DMS	R1205280-011	Water	0.42 µg/L	10 mL	0.421 µg/L	2	0.020	0.040	105	6	8/14/12 22:48:00	N	IV
R1205280-012	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 22:56:00	N	IV
R1205280-013	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 µg/L	10 mL	0.034 µg/L J	2	0.020	0.040			8/14/12 23:04:00	N	IV
R1205280-014	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.025 µg/L J	2	0.020	0.040			8/14/12 23:12:00	N	IV
R1205280-015	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 23:21:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 305061 **Method/Testcode:** 218.6/Cr6 D

Lab Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt	Final Result	Dil	MDL	POL	% Rec	% RSD	Date Analyzed	QC?	Tier
RQ1209448-06	Chromium, Hexavalent, Dissolved	CCV		Water	0.48 µg/L	10 mL	0.484 µg/L	1					8/14/12 23:29:00	N	IV
RQ1209448-10	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/14/12 23:37:00	N	IV
R1205280-016	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 23:45:00	N	IV
R1205280-017	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/14/12 23:53:00	N	IV
R1205280-018	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 00:01:00	N	IV
R1205280-019	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 ~~0.00~~ µg/L	10 mL	0.0257 J ~~0.040 µg/L U~~	2	0.020	0.040			8/15/12 00:09:00	N	IV
R1205280-020	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 00:18:00	N	IV
RQ1209448-05	Chromium, Hexavalent, Dissolved	CCV		Water	0.48 µg/L	10 mL	0.479 µg/L	1					8/15/12 01:06:00	N	IV
RQ1209448-09	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/15/12 01:14:00	N	IV

CK 8/16/12

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 305063 **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
RQ1209450-04	Chromium, Hexavalent, Dissolved	CCV		Water	0.48 µg/L	10 mL	0.484 µg/L	1					8/14/12 23:29:00	N	IV
RQ1209450-08	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/14/12 23:37:00	N	IV
RQ1209450-09	Chromium, Hexavalent, Dissolved	MB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/14/12 23:37:00	N	IV
RQ1209450-10	Chromium, Hexavalent, Dissolved	LCS		Water	0.19 µg/L	10 mL	0.195 µg/L	1	0.010	0.020	97		8/15/12 00:26:00	N	IV
R1205280-021	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 00:34:00	N	IV
RQ1209450-11	Chromium, Hexavalent, Dissolved	MS	R1205280-021	Water	0.40 µg/L	10 mL	0.397 µg/L	2	0.020	0.040	99		8/15/12 00:42:00	N	IV
RQ1209450-12	Chromium, Hexavalent, Dissolved	DMS	R1205280-021	Water	0.43 µg/L	10 mL	0.434 µg/L	2	0.020	0.040	108	9	8/15/12 00:50:00	N	IV
R1205280-022	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 00:58:00	N	IV
RQ1209450-03	Chromium, Hexavalent, Dissolved	CCV		Water	0.48 µg/L	10 mL	0.479 µg/L	1					8/15/12 01:06:00	N	IV
RQ1209450-07	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/15/12 01:14:00	N	IV
R1205280-023	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 01:23:00	N	IV
R1205280-024	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 µg/L	10 mL	0.026 µg/L J	2	0.020	0.040			8/15/12 01:31:00	N	IV
R1205280-025	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.024 µg/L J	2	0.020	0.040			8/15/12 01:39:00	N	IV
R1205280-026	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.022 µg/L J	2	0.020	0.040			8/15/12 01:47:00	N	IV
R1205280-027	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.021 µg/L J	2	0.020	0.040			8/15/12 01:55:00	N	IV
R1205280-028	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 02:03:00	N	IV
R1205280-029	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 02:11:00	N	IV
R1205280-030	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.021 µg/L J	2	0.020	0.040			8/15/12 02:19:00	N	IV
R1205280-031	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.021 µg/L J	2	0.020	0.040			8/15/12 02:28:00	N	IV
RQ1209450-13	Chromium, Hexavalent, Dissolved	MS	R1205280-031	Water	0.40 µg/L	10 mL	0.403 µg/L	2	0.020	0.040	95		8/15/12 02:36:00	N	IV
RQ1209450-02	Chromium, Hexavalent, Dissolved	CCV		Water	0.49 µg/L	10 mL	0.491 µg/L	1					8/15/12 02:44:00	N	IV
RQ1209450-06	Chromium, Hexavalent, Dissolved	CCB		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/15/12 02:52:00	N	IV

/ indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

08-14-12 IC#8 Analyst: CWoods Pipets: Ultimate, Way, Spiderman
218.6 LL

Injection Number	Injection Name	Type	Level	Volume (µL)	Processing Method	Inject Time	Dilution
1	STANDARD 1	Calibration Standard	01	500.00	8-081412B	14/08/12 18:39	1.0000
2	STANDARD 2	Calibration Standard	02	500.00	8-081412B	14/08/12 18:47	1.0000
3	STANDARD 3	Calibration Standard	03	500.00	8-081412B	14/08/12 18:55	1.0000
4	STANDARD 4	Calibration Standard	04	500.00	8-081412B	14/08/12 19:04	1.0000
5	STANDARD 5	Calibration Standard	05	500.00	8-081412B	14/08/12 19:12	1.0000
6	STANDARD 6	Calibration Standard	06	500.00	8-081412B	14/08/12 19:20	1.0000
7	STANDARD 7	Calibration Standard	07	500.00	8-081412B	14/08/12 19:28	1.0000
8	STANDARD 8	Calibration Standard	08	500.00	8-081412B	14/08/12 19:36	1.0000
9	ICV	Unknown		500.00	8-081412B	14/08/12 19:44	1.0000
10	ICB	Unknown		500.00	8-081412B	14/08/12 19:52	1.0000
11	LCS	Unknown		500.00	8-081412B	14/08/12 20:01	1.0000
12	R1205280-001	Unknown		500.00	8-081412B	14/08/12 20:38	2.0000
13	R1205280-001 MS	Unknown		500.00	8-081412B	14/08/12 20:46	2.0000
14	R1205280-001 MSD	Unknown		500.00	8-081412B	14/08/12 20:54	2.0000
15	R1205280-002	Unknown		500.00	8-081412B	14/08/12 21:02	2.0000
16	R1205280-003	Unknown		500.00	8-081412B	14/08/12 21:10	2.0000
17	R1205280-004	Unknown		500.00	8-081412B	14/08/12 21:19	2.0000
18	R1205280-005	Unknown		500.00	8-081412B	14/08/12 21:27	2.0000
19	R1205280-006	Unknown		500.00	8-081412B	14/08/12 21:35	2.0000
20	R1205280-007	Unknown		500.00	8-081412B	14/08/12 21:43	2.0000
21	CCV	Unknown		500.00	8-081412B	14/08/12 21:51	1.0000
22	CCB	Unknown		500.00	8-081412B	14/08/12 21:59	1.0000
23	R1205280-008 – not used	Unknown		500.00	8-081412B	14/08/12 22:07	2.0000
24	R1205280-009	Unknown		500.00	8-081412B	14/08/12 22:16	2.0000
25	R1205280-010	Unknown		500.00	8-081412B	14/08/12 22:24	2.0000
26	R1205280-011	Unknown		500.00	8-081412B	14/08/12 22:32	2.0000
27	R1205280-011 MS	Unknown		500.00	8-081412B	14/08/12 22:40	2.0000
28	R1205280-011 MSD	Unknown		500.00	8-081412B	14/08/12 22:48	2.0000
29	R1205280-012	Unknown		500.00	8-081412B	14/08/12 22:56	2.0000
30	R1205280-013	Unknown		500.00	8-081412B	14/08/12 23:04	2.0000
31	R1205280-014	Unknown		500.00	8-081412B	14/08/12 23:12	2.0000
32	R1205280-015	Unknown		500.00	8-081412B	14/08/12 23:21	2.0000
33	CCV	Unknown		500.00	8-081412B	14/08/12 23:29	1.0000
34	CCB	Unknown		500.00	8-081412B	14/08/12 23:37	1.0000
35	R1205280-016	Unknown		500.00	8-081412B	14/08/12 23:45	2.0000

R5280
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Reviewed & Approved
By: CL
Date: 8/16/12

36	R1205280-017	Unknown	500.00	8-081412B	14/08/12 23:53	2.0000
37	R1205280-018	Unknown	500.00	8-081412B	15/08/12 00:01	2.0000
38	R1205280-019	Unknown	500.00	8-081412B	15/08/12 00:09	2.0000
39	R1205280-020	Unknown	500.00	8-081412B	15/08/12 00:18	2.0000
40	LCS	Unknown	500.00	8-081412B	15/08/12 00:26	1.0000
41	R1205280-021	Unknown	500.00	8-081412B	15/08/12 00:34	2.0000
42	R1205280-021 MS	Unknown	500.00	8-081412B	15/08/12 00:42	2.0000
43	R1205280-021 MSD	Unknown	500.00	8-081412B	15/08/12 00:50	2.0000
44	R1205280-022	Unknown	500.00	8-081412B	15/08/12 00:58	2.0000
45	CCV	Unknown	500.00	8-081412B	15/08/12 01:06	1.0000
46	CCB	Unknown	500.00	8-081412B	15/08/12 01:14	1.0000
47	R1205280-023	Unknown	500.00	8-081412B	15/08/12 01:23	2.0000
48	R1205280-024	Unknown	500.00	8-081412B	15/08/12 01:31	2.0000
49	R1205280-025	Unknown	500.00	8-081412B	15/08/12 01:39	2.0000
50	R1205280-026	Unknown	500.00	8-081412B	15/08/12 01:47	2.0000
51	R1205280-027	Unknown	500.00	8-081412B	15/08/12 01:55	2.0000
52	R1205280-028	Unknown	500.00	8-081412B	15/08/12 02:03	2.0000
53	R1205280-029	Unknown	500.00	8-081412B	15/08/12 02:11	2.0000
54	R1205280-030	Unknown	500.00	8-081412B	15/08/12 02:19	2.0000
55	R1205280-031	Unknown	500.00	8-081412B	15/08/12 02:28	2.0000
56	R1205280-031 MS	Unknown	500.00	8-081412B	15/08/12 02:36	2.0000
57	CCV	Unknown	500.00	8-081412B	15/08/12 02:44	1.0000
58	CCB	Unknown	500.00	8-081412B	15/08/12 02:52	1.0000
59	R1205280-031 MSD	Unknown	500.00	8-081412B	15/08/12 03:00	2.0000
60	R1205280-032	Unknown	500.00	8-081412B	15/08/12 03:08	2.0000
61	R1205280-033	Unknown	500.00	8-081412B	15/08/12 03:16	2.0000
62	R1205280-034	Unknown	500.00	8-081412B	15/08/12 03:24	2.0000
63	R1205280-035	Unknown	500.00	8-081412B	15/08/12 03:33	2.0000
64	R1205280-036	Unknown	500.00	8-081412B	15/08/12 03:41	2.0000
65	CCV	Unknown	500.00	8-081412B	15/08/12 03:49	1.0000
66	CCB	Unknown	500.00	8-081412B	15/08/12 03:57	1.0000

not used

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
8/14/12 0755	SW38A 5280-005	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	8/13/12 1248	Yes No ~~Field~~	—	—	8.35	9.54	CMW 8/14/12 0937	Buffer	WC1120222E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	SW42C 5280-023	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	8/13/12 1212	Yes No ~~Field~~	—	—	8.48	9.43	CMW 8/14/12 0938	Buffer	WC1120222E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	SW42D 5280-024	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	8/13/12 1218	Yes No ~~Field~~	—	—	8.34	9.49	CMW 8/14/12 0939	Buffer	WC1120222E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	SW40C 5280-015	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	8/13/12 1237	Yes No ~~Field~~	—	—	8.16	9.51	CMW 8/14/12 0940	Buffer	WC1120222E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	38C 5280-007	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	8/13/12 1258	Yes No ~~Field~~	—	—	8.06	9.55	CMW 8/14/12 0941	Buffer	WC1120222E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	40D 5280-016	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	8/13/12 1242	Yes No ~~Field~~	—	—	8.19	9.50	CMW 8/14/12 0944	Buffer	WC1120222E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	38B 5280-006	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	8/13/12 1253	Yes No ~~Field~~	—	—	8.19	9.46	CMW 8/14/12 0946	Buffer	WC1120222E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	40A 5280-013	7199 218.6 RL ~~218.6 LL~~ 218.7	~~Water~~ Drinking Water	8/13/12 1225	Yes No ~~Field~~	—	—	8.11	9.61	CMW 8/14/12 0947	Buffer	WC1120222E
											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

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
0755 8/14/12	42B 5280-022	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1205	Yes No Field	—	—	8.08	9.53	CMW 8/14/12 0948	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	45C 5280-035	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1426	Yes No Field	—	—	8.21	9.59	CMW 8/14/12 0949	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	45D 5280-036	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1430	Yes No Field	—	—	8.09	9.61	CMW 8/14/12 0951	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	39D 5280-012	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1452	Yes No Field	—	—	8.14	9.63	CMW 8/14/12 0953	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	39C 5280-011	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1443	Yes No Field	—	—	8.15	9.60	CMW 8/14/12 0954	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	43A 5280-025	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1325	Yes No Field	—	—	8.10	9.54	CMW 8/14/12 0955	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	45B 5280-034	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1420	Yes No Field	—	—	8.20	9.57	CMW 8/14/12 0956	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	44D 5280-032	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1407	Yes No Field	—	—	8.13	9.60	CMW 8/14/12 0958	Buffer	WC112022E
											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

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
8/14/12 0755	45A 5280-033	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1414	Yes No Field	—	—	7.79	9.39	CMW 8/14/12 1000	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	41D 5280-020	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1322	Yes No Field	—	—	7.91	9.46	CMW 8/14/12 1001	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	43D 5280-028	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1345	Yes No Field	—	—	7.96	9.55	CMW 8/14/12 1003	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	44C 5280-031	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1400	Yes No Field	—	—	8.02	9.51	CMW 8/14/12 1004	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	43C 5280-027	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1337	Yes No Field	—	—	7.97	9.49	CMW 8/14/12 1006	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	38D 5280-006	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1302	Yes No Field	—	—	8.04	9.61	CMW 8/14/12 1007	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	43B 5280-026	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1334	Yes No Field	—	—	8.07	9.60	CMW 8/14/12 1008	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
▼	44A 5280-029	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1351	Yes No Field	—	—	7.99	9.53	CMW 8/14/12 1010	Buffer	WC112022E
											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

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
8/14/12 0755	44B 5280-030	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1356	Yes No Field	—	—	7.65	9.49	AMW 8/14/12 1011	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	39B 5280-010	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1441	Yes No Field	—	—	7.97	9.53	AMW 8/14/12 1013	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	41C 5280-019	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1318	Yes No Field	—	—	8.05	9.59	AMW 8/14/12 1014	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	39A 5280-009	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1436	Yes No Field	—	—	8.07	9.63	AMW 8/14/12 1016	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	41A 5280-017	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1308	Yes No Field	—	—	7.98	9.51	AMW 8/14/12 1017	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	41B 5280-018	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1312	Yes No Field	—	—	8.06	9.55	AMW 8/14/12 1019	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
8/14/12 0920	5310-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/ 7/23/12 1500	Yes No Field	—	—	9.33	—	AMW 8/14/12 1257	Buffer	—
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	5311-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/1/12 1330	Yes No Field	—	—	5.08	9.51	AMW 8/14/12 1302	Buffer	WC112022E
											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

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
8/14/12 0920	5312-001	7199 ~~218.6 RL~~ 218.6 LL 218.7	~~Water~~ Drinking Water	8/1/12 0930	Yes ~~No~~ Field	—	—	5.23	9.69	CMV 8/14/12 1305	Buffer	WC1120226
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
↓	5313-001	~~7199 218.6 RL~~ 218.6 LL 218.7	~~Water~~ Drinking Water	8/8/12 1319	Yes ~~No~~ Field	—	—	6.69	9.63	CMV 8/14/12 1310	Buffer	WC1120226
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer	
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer	
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer	
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer	
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer	
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
		7199 218.6 RL 218.6 LL 218.7	Water Drinking Water		Yes No Field						Buffer	
											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
Residual Chlorine	20 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
8/10/12 0910	BR-323-1 5041-019	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	(Water) Drinking Water	8/9/12 0930	Yes No (Field)	—	—	9.84	9.34	CMW 8/10/12 1007	Buffer	
											10%H2SO4	WC103196F
											10%NH4OH	
											NH4OH(conc)	
	BR-262-1 5041-017	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	(Water) Drinking Water	8/9/12 0915	Yes No (Field)	—	—	10.00	9.62	CMW 8/10/12 1008	Buffer	
											10%H2SO4	WC103196F
											10%NH4OH	
											NH4OH(conc)	
8/14/12 0755	SW37A 8/14/12 5280-002	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	8/13/12 1142	Yes No (Field)	—	—	8.05	9.47	GL 8/14/12 0843	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	SW37BA 8/14/12 5280-001	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	8/13/12 ~~1144~~ 1137	Yes No (Field)	—	—	8.31	9.52	GL 8/14/12 0849	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	SW37D 5280-004	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	8/13/12 1150	Yes No (Field)	—	—	8.45	9.46	GL 8/14/12 0852	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	SW37C 5280-003	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	8/13/12 1147	Yes No (Field)	—	—	8.31	9.41	GL 8/14/12 0900	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	SW24A 5280-021	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	8/13/12 1200	Yes No (Field)	—	—	8.31	9.43	GL 8/14/12 0917	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	SW40B 5280-014	7199 218.6 RL ~~218.6 LL~~ 218.7	(Water) Drinking Water	8/13/12 1232	Yes No (Field)	—	—	7.79	9.35	CMW 8/14/12 0925	Buffer	WC112022E
											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

Sample Dilutions

Analyst: CWoods Date: 8/14/12
Instrument: IC8 Analysis: 218.6LL

	Sample ID	1st Dilution				2nd Dilution			3nd Dilution		
		mL's of Sample	mL's of Diluent	Matrix of Diluent	Dilution Factor	mL's of 1st Dilution	mL's of Diluent	Dilution Factor	mL's of 2nd Dilution	mL's of Diluent	Dilution Factor
1	All 1/2 analyses	3	3	Buffered DI	2						
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
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22											
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26											
27											
28											

Instrument Name: R-IC-08 **Analyst:** CWOODS **Analysis Lot:** 305067 **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
RQ1209451-04	Chromium, Hexavalent, Dissolved	CCV		Water	0.48 µg/L	10 mL	0.475 µg/L	1					8/15/12 09:52:00	N	IV
RQ1209451-06	Chromium, Hexavalent, Dissolved	CCB		Water	0.01 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/15/12 10:00:00	N	IV
RQ1209451-07	Chromium, Hexavalent, Dissolved	MB		Water	0.01 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/15/12 10:00:00	N	IV
RQ1209451-08	Chromium, Hexavalent, Dissolved	LCS		Water	0.19 µg/L	10 mL	0.186 µg/L	1	0.010	0.020	93		8/15/12 10:08:00	N	IV
R1205280-032	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 10:38:00	N	IV
R1205280-033	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 10:47:00	N	IV
R1205280-034	Chromium, Hexavalent, Dissolved	N/A		Water	0.02 µg/L	10 mL	0.022 µg/L J	2	0.020	0.040			8/15/12 10:55:00	N	IV
R1205280-035	Chromium, Hexavalent, Dissolved	N/A		Water	0.01 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 11:03:00	N	IV
R1205280-036	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.040 µg/L U	2	0.020	0.040			8/15/12 11:11:00	N	IV
R1205041-007	Chromium, Hexavalent, Dissolved	N/A		Water	0.00 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/15/12 11:19:00	N	IV
RQ1209451-01	Chromium, Hexavalent, Dissolved	MS	R1205041-007	Water	0.15 µg/L	10 mL	0.150 µg/L	1	0.010	0.020	75*		8/15/12 11:27:00	N	IV
RQ1209451-02	Chromium, Hexavalent, Dissolved	DMS	R1205041-007	Water	0.16 µg/L	10 mL	0.158 µg/L	1	0.010	0.020	79*	5	8/15/12 11:35:00	N	IV
R1205280-008	Chromium, Hexavalent, Dissolved	N/A		Water	0.03 µg/L	10 mL	0.025 µg/L J	2	0.020	0.040			8/15/12 11:54:00	N	IV
RQ1209451-03	Chromium, Hexavalent, Dissolved	CCV		Water	0.50 µg/L	10 mL	0.499 µg/L	1					8/15/12 12:31:00	N	IV
RQ1209451-05	Chromium, Hexavalent, Dissolved	CCB		Water	0.01 µg/L	10 mL	0.020 µg/L U	1	0.010	0.020			8/15/12 12:43:00	N	IV

# indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

08-15-12 IC#8 218.6LL Analyst: CWoods Pipets: OIBWe, Way, Spideman

Injection Number	Injection Name	Type	Level	Volume (µL)	Processing Method	Inject Time	Dilution
1	STANDARD 1	Calibration Standard	01	500.00	8-081412B	14/08/12 18:39	1.0000
2	STANDARD 2	Calibration Standard	02	500.00	8-081412B	14/08/12 18:47	1.0000
3	STANDARD 3	Calibration Standard	03	500.00	8-081412B	14/08/12 18:55	1.0000
4	STANDARD 4	Calibration Standard	04	500.00	8-081412B	14/08/12 19:04	1.0000
5	STANDARD 5	Calibration Standard	05	500.00	8-081412B	14/08/12 19:12	1.0000
6	STANDARD 6	Calibration Standard	06	500.00	8-081412B	14/08/12 19:20	1.0000
7	STANDARD 7	Calibration Standard	07	500.00	8-081412B	14/08/12 19:28	1.0000
8	STANDARD 8	Calibration Standard	08	500.00	8-081412B	14/08/12 19:36	1.0000
9	CCV	Unknown		500.00	8-081412B	15/08/12 09:52	1.0000
10	CCB	Unknown		500.00	8-081412B	15/08/12 10:00	1.0000
11	LCS	Unknown		500.00	8-081412B	15/08/12 10:08	1.0000
12	R1205280-032	Unknown		500.00	8-081412B	15/08/12 10:38	2.0000
13	R1205280-033	Unknown		500.00	8-081412B	15/08/12 10:47	2.0000
14	R1205280-034	Unknown		500.00	8-081412B	15/08/12 10:55	2.0000
15	R1205280-035	Unknown		500.00	8-081412B	15/08/12 11:03	2.0000
16	R1205280-036	Unknown		500.00	8-081412B	15/08/12 11:11	2.0000
17	R1205041-007	Unknown		500.00	8-081412B	15/08/12 11:19	1.0000
18	R1205041-007 MS	Unknown		500.00	8-081412B	15/08/12 11:27	1.0000
19	R1205041-007 MSD	Unknown		500.00	8-081412B	15/08/12 11:35	1.0000
20	R1205280-008	Unknown		500.00	8-081412B	15/08/12 11:54	2.0000
21	CCV	Unknown		500.00	8-081412B	15/08/12 12:31	1.0000
22	CCB	Unknown		500.00	8-081412B	15/08/12 12:43	1.0000

R5280
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Reviewed & Approved
By: CK
Date: 8/16/12

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
8-4-12 09:15	BR-125-1 5041-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8-3-12 09:30	Yes No Field	—	—	~~8-4-12~~ ~~9.60~~ 9.61	—	AE 8-4-12 10:05	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	—
↓	BR-183-1 5041-002	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8-3-12 09:40	Yes No Field	—	—	9.68	—	AE 8-4-12 10:08	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	—
	BR93-1 5041-003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8-3-12 09:35	Yes No Field	—	—	9.65	—	AE 8-4-12 10:10	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	—
	BR-93-1 5041-003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8-3-12 09:35	Yes No Field	—	—	9.65	—	AE 8-4-12 10:12	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	—
↓	BR-93-1 5041-003	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8-3-12 09:35	Yes No Field	—	—	9.64	—	AE 8-4-12 10:15	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	—
8/7/12 10:05	BR-335-1 5041-007	~~7199~~ 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/6/12 1230	Yes No Field	—	—	9.80	9.67	CMW 8/7/12 1043	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC103196F
	BR-289-1 5041-~~010~~ 005 8/7/12	7199 ~~218.6 RL~~ ~~218.6 LL~~ 218.7	Water Drinking Water	8/6/12 1345	Yes No Field	—	—	9.92	9.46	CMW 8/7/12 1045	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC103196F
↓	BR-235-1 5041-004	~~7199~~ 218.6 RL ~~218.6 LL~~ 218.7	Water Drinking Water	8/6/12 1105	Yes No Field	—	—	9.88	9.65	CMW 8/7/12 1048	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC103196F

	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

Reviewed & Approved
By: [signature]
Date: 8/6/12

Peer Review 8/6/12

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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
0755 8/14/12	42B 5280-022	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1205	Yes No Field	—	—	8.08	9.53	CMW 8/14/12 0948	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120222E
	45C 5280-035	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1426	Yes No Field	—	—	8.21	9.59	CMW 8/14/12 0949	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120222E
	45D 5280-036	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1430	Yes No Field	—	—	8.09	9.61	CMW 8/14/12 0951	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120222E
	39D 5280-012	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1452	Yes No Field	—	—	8.14	9.63	CMW 8/14/12 0953	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120222E
	39C 5280-011	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1443	Yes No Field	—	—	8.15	9.60	CMW 8/14/12 0954	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120222E
	43A 5280-025	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1325	Yes No Field	—	—	8.10	9.54	CMW 8/14/12 0955	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120222E
	45B 5280-034	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1420	Yes No Field	—	—	8.20	9.57	CMW 8/14/12 0956	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120222E
	44D 5280-032	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1407	Yes No Field	—	—	8.13	9.60	CMW 8/14/12 0958	Buffer 10%H2SO4 10%NH4OH NH4OH(conc)	WC1120222E

	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
8/14/12 0755	45A 5280-033	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	8/13/12 1414	Yes No (Field)	—	—	7.79	9.39	AMW 8/14/12 1000	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	41D 5280-020	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	8/13/12 1322	Yes No (Field)	—	—	7.91	9.46	AMW 8/14/12 1001	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	43D 5280-028	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	8/13/12 1345	Yes No (Field)	—	—	7.96	9.55	AMW 8/14/12 1003	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	44C 5280-031	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	8/13/12 1400	Yes No (Field)	—	—	8.02	9.51	AMW 8/14/12 1004	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	43C 5280-027	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	8/13/12 1337	Yes No (Field)	—	—	7.97	9.49	AMW 8/14/12 1006	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	38D 5280-008	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	8/13/12 1302	Yes No (Field)	—	-	8.04	9.61	AMW 8/14/12 1007	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	43B 5280-026	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	8/13/12 1334	Yes No (Field)	—	-	8.07	9.60	AMW 8/14/12 1008	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	44A 5280-029	7199 218.6 RL (218.6 LL) 218.7	(Water) Drinking Water	8/13/12 1351	Yes No (Field)	—	—	7.99	9.53	AMW 8/14/12 1010	Buffer	WC112022E
											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

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
8/14/12 0755	44B 5280-030	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1356	Yes No Field	—	—	7.65	9.49	AMW 8/14/12 1011	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	39B 5280-010	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1441	Yes No Field	—	—	7.97	9.53	AMW 8/14/12 1013	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	41C 5280-019	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1318	Yes No Field	—	—	8.05	9.59	AMW 8/14/12 1014	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	39A 5280-009	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1436	Yes No Field	—	—	8.07	9.63	AMW 8/14/12 1016	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	41A 5280-017	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1308	Yes No Field	—	—	7.98	9.51	AMW 8/14/12 1017	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	41B 5280-016	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/13/12 1312	Yes No Field	—	—	8.06	9.55	AMW 8/14/12 1019	Buffer	WC112022E
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
8/14/12 0920	5310-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	~~8/14/12~~ 7/23/12 1500	Yes No Field	—	—	9.33	—	AMW 8/14/12 1257	Buffer	—
											10%H2SO4	
											10%NH4OH	
											NH4OH(conc)	
	5311-001	7199 218.6 RL 218.6 LL 218.7	Water Drinking Water	8/1/12 1330	~~Yes~~ No Field	—	—	5.08	9.51	AMW 8/14/12 1302	Buffer	WC112022E
											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

Columbia Analytical Services
Rochester, NY

Analyst: CWoods
Date: 8/15/12
pH Meter ID: Bulwinkle
Adjustment Solutions: — **Lot:** —

Hexavalent Chromium: **Method 218.6-LL** **Method 218.6-RL** **Method 7199**

Folder Number	Sample ID	Matrix (Water or DW)	Sample pH at analysis	Analysis Date
	5280-032	W	9.59	8/15/12
	5280-033	W	9.41	
	5280-034	W	9.57	
	5280-035	W	9.61	
	5280-036	W	9.63	
	5280-008	W	9.60	
	5041-007	W	9.66	

CW 8/15/12

Sample pH must be between 9.3 and 9.7 for 218.6 Water.
Sample pH must be between 9.0 and 9.5 for 7199 and 218.6 Drinking Water.

J:\ACQUDATA\IC\IC STUFF\Cr6 pH Adjust Sheet

Sample Dilutions

Analyst: CWoods Date: 8/15/12

Instrument: IC8 Analysis: 218.6 LL

	Sample ID	1st Dilution				2nd Dilution			3nd Dilution		
		mL's of Sample	mL's of Diluent	Matrix of Diluent	Dilution Factor	mL's of 1st Dilution	mL's of Diluent	Dilution Factor	mL's of 2nd Dilution	mL's of Diluent	Dilution Factor
1	All 1/2 Analyses	3	3	Buffered DI	2						
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-SW37C-081312	R1205280-003	NM	8/13/2012	8/14/2012	8/14/2012	1	0	1
CR6	UG/L	MSA-SW37B-081312	R1205280-002	NM	8/13/2012	8/14/2012	8/14/2012	1	0	1
CR6	UG/L	MSA-SW39C-081312	R1205280-011	NM	8/13/2012	8/14/2012	8/14/2012	1	0	1
CR6	UG/L	MSA-SW43C-081312	R1205280-027	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW45C-081312	R1205280-035	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW45B-081312	R1205280-034	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW45A-081312	R1205280-033	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW44D-081312	R1205280-032	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW44C-081312	R1205280-031	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW44B-081312	R1205280-030	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW41A-081312	R1205280-017	NM	8/13/2012	8/14/2012	8/14/2012	1	0	1
CR6	UG/L	MSA-SW43D-081312	R1205280-028	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW45D-081312	R1205280-036	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW43B-081312	R1205280-026	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW43A-081312	R1205280-025	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW42D-081312	R1205280-024	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW42C-081312	R1205280-023	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW42B-081312	R1205280-022	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
CR6	UG/L	MSA-SW42A-081312	R1205280-021	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW41D-081312	R1205280-020	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2
CR6	UG/L	MSA-SW44A-081312	R1205280-029	NM	8/13/2012	8/15/2012	8/15/2012	2	0	2

APPENDIX C—CHEMICAL RESULTS DATA TABLE

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EL-SW01A	EL-SW01B	EL-SW01C	EL-SW01D	MSA-SW-37A	MSA-SW-37B
SAMPLE ID	EL-SW01A-081312	EL-SW01B-081312	EL-SW01C-081312	EL-SW01D-081312	MSA-SW37A-081312	MSA-SW37B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
DISSOLVED METALS (UG/L)						
ANTIMONY	NA	NA	NA	NA	0.39 J	0.39 J
ARSENIC	NA	NA	NA	NA	2.6 J	2.6 J
BARIUM	NA	NA	NA	NA	74	74
BERYLLIUM	NA	NA	NA	NA	0.2 UL	0.2 UL
CADMIUM	NA	NA	NA	NA	0.13 U	0.13 U
CHROMIUM	NA	NA	NA	NA	0.71 U	0.71 U
COBALT	NA	NA	NA	NA	0.15 J	0.058 U
COPPER	NA	NA	NA	NA	3.3 K	3 K
LEAD	NA	NA	NA	NA	0.18 U	0.18 U
MERCURY	NA	NA	NA	NA	0.12 U	0.12 U
MOLYBDENUM	NA	NA	NA	NA	2.7 J	2.7 J
NICKEL	NA	NA	NA	NA	1.3 J	1.2 J
SELENIUM	NA	NA	NA	NA	0.57 U	0.57 U
SILVER	NA	NA	NA	NA	0.08 U	0.08 U
THALLIUM	NA	NA	NA	NA	0.41 J	0.38 J
TUNGSTEN	NA	NA	NA	NA	0.37 U	0.37 U
VANADIUM	NA	NA	NA	NA	1.1 J	1.2 J
ZINC	NA	NA	NA	NA	3.5 J	2.3 U
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	NA	NA	NA	NA	0.04 UL	0.04 UL
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	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	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	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	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	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	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	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	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	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	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	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	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	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	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	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	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	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	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
Page 2 of 22

LOCATION	EL-SW01A	EL-SW01B	EL-SW01C	EL-SW01D	MSA-SW-37A	MSA-SW-37B
SAMPLE ID	EL-SW01A-081312	EL-SW01B-081312	EL-SW01C-081312	EL-SW01D-081312	MSA-SW37A-081312	MSA-SW37B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
1,4-DICHLOROBENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
2-BUTANONE	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	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	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	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	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	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	0.32 U	0.32 U
ACETONE	1.1 UR	1.1 UR	1.1 UR	1.1 UR	2.6 B	1.4 B
BENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	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	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	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	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.6 J	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	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	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	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	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	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	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.31 U	0.31 U
DIISOPROPYL ETHER	1.5 U	1.5 U	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	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	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	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	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	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	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	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	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	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	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	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	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	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	EL-SW01A	EL-SW01B	EL-SW01C	EL-SW01D	MSA-SW-37A	MSA-SW-37B
SAMPLE ID	EL-SW01A-081312	EL-SW01B-081312	EL-SW01C-081312	EL-SW01D-081312	MSA-SW37A-081312	MSA-SW37B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	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	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	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	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	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	0.19 U	0.19 U
TRICHLOROETHENE	0.17 U	0.17 U	0.17 U	0.17 U	0.28 J	0.43 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	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	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	MSA-SW-37C	MSA-SW-37D	MSA-SW-38A	MSA-SW-38B	MSA-SW-38C	MSA-SW-38D
SAMPLE ID	MSA-SW37C-081312	MSA-SW37D-081312	MSA-SW38A-081312	MSA-SW38B-081312	MSA-SW38C-081312	MSA-SW38D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
DISSOLVED METALS (UG/L)						
ANTIMONY	0.31 J	0.3 J	0.3 J	0.29 J	0.3 J	0.29 J
ARSENIC	2.4 J	2.5 J	2.5 J	2.3 J	2.3 J	2.6 J
BARIUM	75	74	76	74	76	77
BERYLLIUM	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL
CADMIUM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	0.082 J	0.076 J	0.17 J	0.058 U	0.058 U	0.22 J
COPPER	3.2 K	3.5 K	3.8 K	3.2 K	3 K	5
LEAD	0.18 U	0.18 U	0.32 J	0.18 U	0.18 U	0.63 J
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	2.3 J	2.2 J	2.3 J	2.4 J	2.3 J	2.3 J
NICKEL	1.3 J	1.5 J	1.3 J	1.2 J	1.2 J	1.5 J
SELENIUM	0.57 U	0.57 U	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	0.08 U	0.08 U
THALLIUM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TUNGSTEN	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
VANADIUM	1.1 J	1.1 J	1.4 J	0.92 J	1.1 J	1.5 J
ZINC	2.3 U	3.5 J	2.6 J	2.3 J	3.2 J	3.4 J
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.04 UL	0.04 UL	0.04 UL	0.02 J	0.04 UL	0.025 J
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	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	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	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	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	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	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	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	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	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	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	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	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	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	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	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	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	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	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-37C	MSA-SW-37D	MSA-SW-38A	MSA-SW-38B	MSA-SW-38C	MSA-SW-38D
SAMPLE ID	MSA-SW37C-081312	MSA-SW37D-081312	MSA-SW38A-081312	MSA-SW38B-081312	MSA-SW38C-081312	MSA-SW38D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
1,4-DICHLOROBENZENE	0.13 U	0.13 U	0.38 J	0.13 U	0.13 U	0.13 U
2,2-DICHLOROPROPANE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
2-BUTANONE	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	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	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	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	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	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	0.32 U	0.32 U
ACETONE	5.3 B	2.2 B	4.4 B	1.8 B	1.9 B	2.5 B
BENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	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	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	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	0.41 U	0.41 U
CARBON DISULFIDE	0.23 J	0.36 J	0.24 J	0.13 U	0.2 J	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHLOROBENZENE	0.15 U	0.15 U	0.22 J	0.15 U	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	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	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.17 U	0.17 U	1.5	0.46 J	0.55 J	0.41 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	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	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	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	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	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	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	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	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	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	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	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	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	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	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-37C	MSA-SW-37D	MSA-SW-38A	MSA-SW-38B	MSA-SW-38C	MSA-SW-38D
SAMPLE ID	MSA-SW37C-081312	MSA-SW37D-081312	MSA-SW38A-081312	MSA-SW38B-081312	MSA-SW38C-081312	MSA-SW38D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	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	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	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	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	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	0.19 U	0.19 U
TRICHLOROETHENE	0.32 J	0.25 J	0.73 J	0.99 J	0.96 J	0.69 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	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	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	3	0.22 U	0.22 U	0.22 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-39A	MSA-SW-39B	MSA-SW-39C	MSA-SW-39D	MSA-SW-40A	MSA-SW-40B
SAMPLE ID	MSA-SW39A-081312	MSA-SW39B-081312	MSA-SW39C-081312	MSA-SW39D-081312	MSA-SW40A-081312	MSA-SW40B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
DISSOLVED METALS (UG/L)						
ANTIMONY	0.28 J	0.26 J	0.25 J	0.23 J	0.28 J	0.3 J
ARSENIC	2.3 J	2.4 J	2.5 J	2.5 J	2.5 J	2.4 J
BARIUM	75	77	78	77	76	76
BERYLLIUM	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL
CADMIUM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	0.11 J	0.058 U	0.058 U	0.058 U	0.12 J	0.058 U
COPPER	3 K	2.8 K	2.6 K	2.7 K	2.9 K	3.4 K
LEAD	0.18 U	0.18 U	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	0.12 U	0.12 U
MOLYBDENUM	2.3 J	2.4 J	2.4 J	2.4 J	2.2 J	2.2 J
NICKEL	1.3 J	1.1 J	1.2 J	1.3 J	1.2 J	1.5 J
SELENIUM	0.57 U	0.57 U	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	0.08 U	0.08 U
THALLIUM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TUNGSTEN	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
VANADIUM	1.3 J	1.2 J	1.4 J	1.3 J	1.4 J	0.94 J
ZINC	2.3 U	2.3 U	2.3 U	5.3 J	2.3 U	2.3 U
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.04 UL	0.04 UL	0.04 UL	0.04 UL	0.034 J	0.025 J
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	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	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	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	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	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	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	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	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	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	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	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	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	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	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	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	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	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	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	MSA-SW-39A	MSA-SW-39B	MSA-SW-39C	MSA-SW-39D	MSA-SW-40A	MSA-SW-40B
SAMPLE ID	MSA-SW39A-081312	MSA-SW39B-081312	MSA-SW39C-081312	MSA-SW39D-081312	MSA-SW40A-081312	MSA-SW40B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
1,4-DICHLOROBENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
2-BUTANONE	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	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	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	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	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	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	0.32 U	0.32 U
ACETONE	1.8 B	1.8 B	1.5 B	1.6 B	3.1 B	2.4 B
BENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	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	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	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	0.41 U	0.41 U
CARBON DISULFIDE	0.13 U	0.13 U	0.3 J	0.16 J	0.88 J	0.53 J
CARBON TETRACHLORIDE	0.13 U	0.13 U	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	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	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	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	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	0.6 J	0.95 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	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	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	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	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	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	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	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	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	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	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	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	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	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	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-39A	MSA-SW-39B	MSA-SW-39C	MSA-SW-39D	MSA-SW-40A	MSA-SW-40B
SAMPLE ID	MSA-SW39A-081312	MSA-SW39B-081312	MSA-SW39C-081312	MSA-SW39D-081312	MSA-SW40A-081312	MSA-SW40B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	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	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	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	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	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	0.19 U	0.19 U
TRICHLOROETHENE	0.17 U	0.2 J	0.17 U	0.17 U	0.48 J	1.8
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	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	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	1.1	0.22 U

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Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
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LOCATION	MSA-SW-40C	MSA-SW-40D	MSA-SW-41A	MSA-SW-41B	MSA-SW-41C	MSA-SW-41D
SAMPLE ID	MSA-SW40C-081312	MSA-SW40D-081312	MSA-SW41A-081312	MSA-SW41B-081312	MSA-SW41C-081312	MSA-SW41D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
DISSOLVED METALS (UG/L)						
ANTIMONY	0.29 J	0.27 J	0.26 J	0.27 J	0.31 J	0.24 J
ARSENIC	2.4 J	2.1 J	2.3 J	2.2 J	2.3 J	2.2 J
BARIUM	76	71	76	73	74	73
BERYLLIUM	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL
CADMIUM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	0.058 U	0.058 U	0.2 J	0.12 J	0.058 U	0.058 U
COPPER	3.5 K	3 K	3.8 K	3.6 K	4	3.3 K
LEAD	0.18 U	0.18 U	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	0.12 U	0.12 U
MOLYBDENUM	2.3 J	2.2 J	2.3 J	2.2 J	2.2 J	2.1 J
NICKEL	1.3 J	1.1 J	2.6	2.4	1.3 J	1.2 J
SELENIUM	0.57 U	0.57 U	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	0.08 U	0.08 U
THALLIUM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TUNGSTEN	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
VANADIUM	1.1 J	1.2 J	1.2 J	1.1 J	0.99 J	1 J
ZINC	2.6 J	2.3 U	4.5 J	4 J	2.3 U	2.3 U
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.04 UL	0.04 UL	0.04 UL	0.04 UL	0.026 J	0.04 UL
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	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	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	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	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	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	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	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	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	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	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	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	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	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	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	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	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	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	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U

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Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	MSA-SW-40C	MSA-SW-40D	MSA-SW-41A	MSA-SW-41B	MSA-SW-41C	MSA-SW-41D
SAMPLE ID	MSA-SW40C-081312	MSA-SW40D-081312	MSA-SW41A-081312	MSA-SW41B-081312	MSA-SW41C-081312	MSA-SW41D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
1,4-DICHLOROBENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
2-BUTANONE	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	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	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	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	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	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	0.32 U	0.32 U
ACETONE	1.8 B	4.9 B	2.4 B	1.9 B	1.8 B	1.5 B
BENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	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	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	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	0.41 U	0.41 U
CARBON DISULFIDE	0.13 J	0.34 J	0.17 J	0.13 U	0.26 J	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	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	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	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	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	1.3	0.17 U	1.4	0.53 J	0.5 J	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 U	0.31 U	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	1.5 U	1.5 U
ETHYL TERT-BUTYL ETHER	0.11 U	0.11 U	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	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.3 U	0.3 U	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	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	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	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	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	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	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	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	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	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-40C	MSA-SW-40D	MSA-SW-41A	MSA-SW-41B	MSA-SW-41C	MSA-SW-41D
SAMPLE ID	MSA-SW40C-081312	MSA-SW40D-081312	MSA-SW41A-081312	MSA-SW41B-081312	MSA-SW41C-081312	MSA-SW41D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	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	0.29 U	0.29 U
TOLUENE	0.13 U	0.33 J	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	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	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	0.19 U	0.19 U
TRICHLOROETHENE	2.5	0.5 J	1.9	1	0.86 J	0.62 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	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	0.19 UR	0.19 UR
VINYL CHLORIDE	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-42A	MSA-SW-42B	MSA-SW-42C	MSA-SW-42D	MSA-SW-43A	MSA-SW-43B
SAMPLE ID	MSA-SW42A-081312	MSA-SW42B-081312	MSA-SW42C-081312	MSA-SW42D-081312	MSA-SW43A-081312	MSA-SW43B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
DISSOLVED METALS (UG/L)						
ANTIMONY	0.38 J	0.39 J	0.31 J	0.27 J	0.24 J	0.27 J
ARSENIC	2.7 J	2.6 J	2.4 J	2.5 J	2.1 J	2.3 J
BARIUM	74	76	75	73	70	75
BERYLLIUM	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL
CADMIUM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	0.15 J	0.15 J	0.081 J	0.062 J	0.11 J	0.073 J
COPPER	3.4 K	5.4	3.2 K	3.1 K	2.8 K	3.2 K
LEAD	0.4 J	0.18 U	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	0.12 U	0.12 U
MOLYBDENUM	2.5 J	2.7 J	2.3 J	2.2 J	2 J	2.2 J
NICKEL	1.3 J	1.2 J	1.2 J	1.2 J	1.3 J	1.3 J
SELENIUM	0.57 U	0.57 U	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	0.08 U	0.08 U
THALLIUM	0.14 U	0.17 J	0.14 U	0.14 U	0.14 U	0.14 U
TUNGSTEN	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
VANADIUM	1.5 J	1.2 J	1.1 J	1.1 J	0.9 J	1.1 J
ZINC	2.5 J	4.4 J	2.3 U	2.3 U	2.3 U	2.3 U
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.04 UL	0.04 UL	0.04 UL	0.026 J	0.024 J	0.022 J
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	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	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	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	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	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	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	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	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	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	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	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	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	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	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	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	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	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	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	MSA-SW-42A	MSA-SW-42B	MSA-SW-42C	MSA-SW-42D	MSA-SW-43A	MSA-SW-43B
SAMPLE ID	MSA-SW42A-081312	MSA-SW42B-081312	MSA-SW42C-081312	MSA-SW42D-081312	MSA-SW43A-081312	MSA-SW43B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
1,4-DICHLOROBENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
2-BUTANONE	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	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	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	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	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	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	0.32 U	0.32 U
ACETONE	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR
BENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	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	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	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	0.41 U	0.41 U
CARBON DISULFIDE	0.36 J	0.13 U	0.13 U	0.39 J	0.13 U	0.29 J
CARBON TETRACHLORIDE	0.13 U	0.13 U	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	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	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	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.38 J	0.32 J	0.17 U	0.32 J	3.6	0.59 J
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ
DIISOPROPYL ETHER	1.5 U	1.5 U	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	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
HEXACHLOROBUTADIENE	0.77 B	0.3 U	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	0.13 U	0.13 U
M+P-XYLENES	0.24 U	0.24 U	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	0.17 U	0.17 U
METHYLENE CHLORIDE	0.33 U	0.33 U	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	0.24 U	0.24 U
N-BUTYLBENZENE	0.12 U	0.12 U	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	0.14 U	0.14 U
O-XYLENE	0.14 U	0.14 U	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	0.13 U	0.13 U
STYRENE	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-42A	MSA-SW-42B	MSA-SW-42C	MSA-SW-42D	MSA-SW-43A	MSA-SW-43B
SAMPLE ID	MSA-SW42A-081312	MSA-SW42B-081312	MSA-SW42C-081312	MSA-SW42D-081312	MSA-SW43A-081312	MSA-SW43B-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	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	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	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	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	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	0.19 U	0.19 U
TRICHLOROETHENE	0.59 J	0.53 J	0.72 J	0.52 J	3.7	0.95 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	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	0.19 UR	0.19 UR
VINYL CHLORIDE	0.29 J	0.29 J	0.32 J	0.22 U	0.61	0.29 J

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-43C	MSA-SW-43D	MSA-SW-44A	MSA-SW-44B	MSA-SW-44C	MSA-SW-44D
SAMPLE ID	MSA-SW43C-081312	MSA-SW43D-081312	MSA-SW44A-081312	MSA-SW44B-081312	MSA-SW44C-081312	MSA-SW44D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
DISSOLVED METALS (UG/L)						
ANTIMONY	0.25 J	0.25 J	0.27 J	0.25 J	0.25 J	0.26 J
ARSENIC	2.4 J	2.5 J	2.4 J	2.6 J	2.5 J	2.6 J
BARIUM	75	77	74	80	76	77
BERYLLIUM	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL	0.2 UL
CADMIUM	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	0.058 U	0.058 U	0.065 J	0.18 J	0.058 U	0.11 J
COPPER	3.3 K	3.2 K	3.1 K	4.4	2.9 K	3.3 K
LEAD	0.18 U	0.18 U	0.18 U	0.45 J	0.18 U	0.28 J
MERCURY	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
MOLYBDENUM	2.2 J	2.3 J	2.1 J	2.3 J	2.3 J	2.3 J
NICKEL	1.2 J	1.3 J	1.2 J	1.4 J	1.4 J	1.3 J
SELENIUM	0.57 U	0.57 U	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	0.08 U	0.08 U
THALLIUM	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
TUNGSTEN	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
VANADIUM	1.2 J	1 J	1.1 J	1.5 J	1.1 J	1.6 J
ZINC	2.3 U	2.6 J	2.3 U	2.6 J	2.3 J	2.5 J
MISCELLANEOUS PARAMETERS (UG/L)						
HEXAVALENT CHROMIUM	0.021 J	0.04 UL	0.04 UL	0.021 J	0.021 J	0.04 UL
VOLATILES (UG/L)						
1,1,1,2-TETRACHLOROETHANE	0.23 U	0.23 U	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	0.22 U	0.22 U
1,1,2,2-TETRACHLOROETHANE	0.18 U	0.18 U	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	0.28 U	0.28 U
1,1-DICHLOROETHANE	0.15 U	0.15 U	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	0.19 U	0.19 U
1,1-DICHLOROPROPENE	0.13 U	0.13 U	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	0.17 U	0.17 U
1,2,3-TRICHLOROPROPANE	0.43 U	0.43 U	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	0.0059 U	0.0059 U
1,2,4-TRICHLOROBENZENE	0.15 U	0.15 U	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	0.12 U	0.12 U
1,2-DIBROMO-3-CHLOROPROPANE	0.67 U	0.67 U	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	0.24 U	0.24 U
1,2-DICHLOROBENZENE	0.13 U	0.13 U	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	0.22 U	0.22 U
1,2-DICHLOROPROPANE	0.18 U	0.18 U	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	0.14 U	0.14 U
1,3-DICHLOROPROPANE	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland
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LOCATION	MSA-SW-43C	MSA-SW-43D	MSA-SW-44A	MSA-SW-44B	MSA-SW-44C	MSA-SW-44D
SAMPLE ID	MSA-SW43C-081312	MSA-SW43D-081312	MSA-SW44A-081312	MSA-SW44B-081312	MSA-SW44C-081312	MSA-SW44D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
1,4-DICHLOROBENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
2-BUTANONE	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR	0.57 UR
2-CHLOROETHYL VINYL ETHER	0.99 U	0.99 U	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	0.11 U	0.11 U
2-HEXANONE	0.41 U	0.41 U	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	0.18 U	0.18 U
4-ISOPROPYLTOLUENE	0.12 U	0.12 U	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	0.32 U	0.32 U
ACETONE	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR	1.1 UR
BENZENE	0.13 U	0.13 U	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	0.13 U	0.13 U
BROMOCHLOROMETHANE	0.29 U	0.29 U	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	0.15 U	0.15 U
BROMOFORM	0.64 U	0.64 U	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	0.41 U	0.41 U
CARBON DISULFIDE	0.25 J	0.14 J	0.13 U	0.13 U	0.13 U	0.13 U
CARBON TETRACHLORIDE	0.13 U	0.13 U	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	0.15 U	0.15 U
CHLORODIBROMOMETHANE	0.18 U	0.18 U	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	0.29 U	0.29 U
CHLOROFORM	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
CHLOROMETHANE	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
CIS-1,2-DICHLOROETHENE	0.45 J	0.4 J	0.73 J	0.82 J	0.17 U	0.17 U
CIS-1,3-DICHLOROPROPENE	0.14 U	0.14 U	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	0.28 U	0.28 U
DICHLORODIFLUOROMETHANE	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ	0.31 UJ
DIISOPROPYL ETHER	1.5 U	1.5 U	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	0.11 U	0.11 U
ETHYLBENZENE	0.17 U	0.17 U	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	0.3 U	0.3 U
ISOPROPYLBENZENE	0.13 U	0.13 U	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	0.24 U	0.24 U
METHYL TERT-BUTYL ETHER	0.17 U	0.17 U	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	0.33 U	0.33 U
NAPHTHALENE	0.24 U	0.24 U	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	0.12 U	0.12 U
N-PROPYLBENZENE	0.14 U	0.14 U	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	0.14 U	0.14 U
SEC-BUTYLBENZENE	0.13 U	0.13 U	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	0.11 U	0.11 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-43C	MSA-SW-43D	MSA-SW-44A	MSA-SW-44B	MSA-SW-44C	MSA-SW-44D
SAMPLE ID	MSA-SW43C-081312	MSA-SW43D-081312	MSA-SW44A-081312	MSA-SW44B-081312	MSA-SW44C-081312	MSA-SW44D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1	1	1
TERT-AMYL METHYL ETHER	0.067 U	0.067 U	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	0.13 U	0.13 U
TERTIARY-BUTYL ALCOHOL	3.9 UR	3.9 UR	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	0.29 U	0.29 U
TOLUENE	0.13 U	0.13 U	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	0.28 U	0.28 U
TRANS-1,2-DICHLOROETHENE	0.19 U	0.19 U	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	0.19 U	0.19 U
TRICHLOROETHENE	0.83 J	0.71 J	1.3	1.4	0.56 J	0.69 J
TRICHLOROFLUOROMETHANE	0.21 U	0.21 U	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	0.19 UR	0.19 UR
VINYL CHLORIDE	0.24 J	0.23 J	0.38 J	0.42 J	0.24 J	0.22 U

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-45A	MSA-SW-45B	MSA-SW-45C	MSA-SW-45D
SAMPLE ID	MSA-SW45A-081312	MSA-SW45B-081312	MSA-SW45C-081312	MSA-SW45D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1
DISSOLVED METALS (UG/L)				
ANTIMONY	0.23 J	0.22 J	0.18 J	0.21 J
ARSENIC	2.4 J	2.5 J	2.4 J	2.5 J
BARIUM	76	77	72	76
BERYLLIUM	0.2 UL	0.2 UL	0.2 UL	0.2 UL
CADMIUM	0.13 U	0.13 U	0.13 U	0.13 U
CHROMIUM	0.71 U	0.71 U	0.71 U	0.71 U
COBALT	0.058 U	0.058 U	0.058 U	0.058 U
COPPER	2.9 K	2.9 K	2.7 K	3 K
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	2.3 J	2.2 J	2.2 J	2.2 J
NICKEL	1.2 J	1.3 J	1.2 J	1.2 J
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	0.14 U
TUNGSTEN	0.37 U	0.37 U	0.37 U	0.37 U
VANADIUM	1.2 J	1.2 J	1.2 J	1.1 J
ZINC	2.9 J	2.3 U	2.3 U	2.3 U
MISCELLANEOUS PARAMETERS (UG/L)				
HEXAVALENT CHROMIUM	0.04 UL	0.022 J	0.04 UL	0.04 UL
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

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Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-45A	MSA-SW-45B	MSA-SW-45C	MSA-SW-45D
SAMPLE ID	MSA-SW45A-081312	MSA-SW45B-081312	MSA-SW45C-081312	MSA-SW45D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1
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 UR	0.57 UR	0.57 UR	0.57 UR
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 UR	1.1 UR	1.1 UR	1.1 UR
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	0.48 J	0.19 J	0.13 U	0.15 J
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	0.3 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 UJ	0.31 UJ	0.31 UJ	0.31 UJ
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

Table C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

LOCATION	MSA-SW-45A	MSA-SW-45B	MSA-SW-45C	MSA-SW-45D
SAMPLE ID	MSA-SW45A-081312	MSA-SW45B-081312	MSA-SW45C-081312	MSA-SW45D-081312
SAMPLE DATE	20120813	20120813	20120813	20120813
SAMPLE CODE	NORMAL	NORMAL	NORMAL	NORMAL
MATRIX	SW	SW	SW	SW
SAMPLE TYPE	NORMAL	NORMAL	NORMAL	NORMAL
DEPTH (FEET BELOW WATER SURFACE)	1	1	1	1
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	0.13 U	0.13 U	0.19 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	0.17 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 C-1

Chemical Results for Surface Water Samples - August 2012
Frog Mortar Creek
Lockheed Martin, Martin State Airport, Middle River, Maryland

B - Concentration is attributable to laboratory blank contamination.
J - Positive result is considered estimated.
K - Positive result is considered estimated biased high.
L - Positive result is considered estimated biased low.
NA - Not analyzed.
SW - surface water
U - Not detected. The analyte is considered not detected at the reported value.
UJ - The analyte is not detected. However, the quantitation or detection limit may be inaccurate or imprecise.
UR - The result is considered qualitatively or quantitatively unreliable.
UG/L - micrograms per liter.