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From:
Lisa Collins

Date:
February 22, 2013

Subject:
2012 Annual Groundwater Monitoring Report

ARCADIS Project No.:
NJ001040.0001

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2012 Annual Groundwater Monitoring Report Lockheed Martin Former French Road Facility Utica, New York

Prepared for:

Lockheed Martin Corporation

Prepared by:

ARCADIS U.S., Inc.

February 2013



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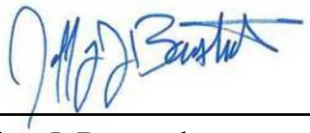

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ACRONYMS

1,1,-DCA	1,1-dichloroethane
ASP	analytical services protocol
BBL	Blasland, Bouck, & Lee, Inc.
bgs	below ground surface
cis-1,2-DCE	cis-1,2-dichloroethene
CMIP	corrective measures implementation plan
CMS	corrective measures study
CO	consent order
COC	constituent(s) of concern
ConMed	ConMed Corporation
DCE	dichloroethene
DER	(NYSDEC) Division of Environmental Remediation
DO	dissolved oxygen
ERD	enhanced reductive-dechlorination
FNPD	Former Northern Perimeter Ditch
FNPD SIR	*Former Northern Perimeter Ditch Supplemental Investigation Report*
FS	feasibility study
GCTS	groundwater collection and treatment system
GE	General Electric Company
HDPE	high-density polyethylene
ICM	interim corrective measures
IGWMP	Interim Groundwater Monitoring Program
IRZ	in situ reactive zone
Lockheed Martin	Lockheed Martin Corporation
MMC	Martin Marietta Corporation
MNA	monitored natural-attenuation
MW	monitoring well
NYCRR	*New York Codes, Rules, and Regulations*
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
OCIDA	Oneida County Industrial Development Agency
OSWER	(USEPA) Office of Solid Waste and Environmental Restoration

PCE	tetrachloroethene
PZ	piezometer
QA/QC	quality assurance/quality control
RGC	remedial goals and criteria
SGV	standards and guidance values
SPDES	"State Pollutant Discharge Elimination System"
SSDS	sub-slab depressurization-system
TCE	trichloroethene
TOGS	(USEPA) *Technical and Operational Guidance Series*
trans-1,2-DCE	trans-1,2-dichloroethene
USEPA	U.S. Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound

Section 1
Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), ARCADIS of New York, Inc. (ARCADIS) has prepared this *2012 Annual Groundwater Monitoring Report* (report) for the former Lockheed Martin French Road facility (herein, "the site") in Utica, New York (see Figure 1-1). Figure 1-1 presents a site location map. This work was completed as a part of the Corrective Measures Implementation Plan (CMIP) required by the October 3, 2008 "Order on Consent" (herein, the Order) issued by the New York State Department of Environmental Conservation (NYSDEC) (CO6-20080321-5). The *Interim Groundwater Monitoring Program* (IGWMP) (revised February 2012) is the basis for the groundwater monitoring program presented in the sections below. As stipulated by NYSDEC, alterations to the IGWMP will be retained in an internal draft until more substantive changes are adopted and NYSDEC directs that an updated version be submitted for their review. This report is organized as follows:

Section 2—Site Description and History: Briefly describes the history and condition of the site and previous investigations.

Section 3—Groundwater Monitoring and Sampling Program: Presents the technical approach to the groundwater monitoring program, describes the sampling and analyses performed, and discusses the results.

Section 4—2012 MNA Program Evaluation: Discusses and evaluates the monitored natural-attenuation (MNA) program based on sampling results from the subject site monitoring wells (with respect to Objectives 1–4, described in section 3.2), the role of site geochemistry, and the data-validation procedures employed.

Section 5—Summary and Conclusions: Summarizes the 2012 annual groundwater monitoring results and discusses their implications for future site remedial efforts.

Section 6—References: Lists the references used in this report.

Figure 1-1

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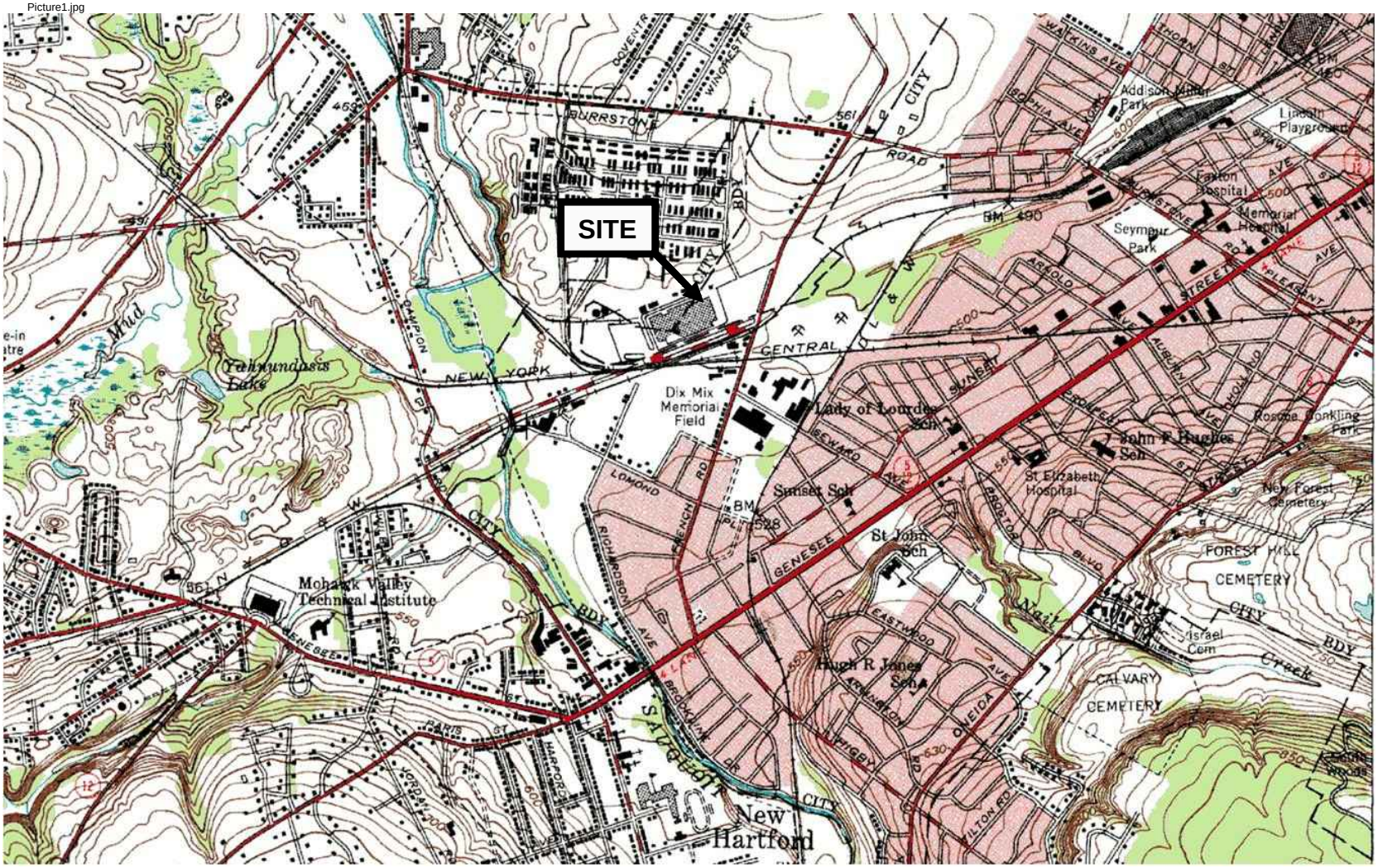

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SCALE IN FEET

2012 ANNUAL GROUNDWATER MONITORING REPORT
FORMER LOCKHEED MARTIN, FRENCH ROAD PROPERTY
UTICA, NEW YORK

SITE LOCATION MAP

ARCADIS

FIGURE
1-1

Section 2
Site Description and History

In the early 1950s, General Electric Company (GE) acquired approximately 55 acres of undeveloped land on French Road in Utica, New York and built a 500,000-square-foot manufacturing facility. (See Figure 1-1 for a site location map.) GE production operations included manufacturing, assembling, and testing electrical components for the defense and aerospace industries. GE production operations continued until April 1993, when the facility was acquired by Martin Marietta Corporation (MMC).

In March 1995, MMC merged with Lockheed Corporation to form Lockheed Martin Corporation. In March 1996, Lockheed Martin sold the property to Pinnacle Park, Inc., which subsequently transferred the property to and leased it back from the Oneida County Industrial Development Agency (OCIDA). ConMed Corporation (ConMed), a medical supplies manufacturer and distributor, now occupies the facility under a lease with OCIDA. Although Lockheed Martin no longer owns the property, the corporation retains responsibility for environmental cleanup related to past releases at the site. Figure 2-1 presents a facility map.

Groundwater beneath the northeast portion of the main manufacturing building (known as the Solvent Dock Area) and in an area along the Former Northern Perimeter Ditch (FNPD) has been adversely affected by volatile organic compounds (VOCs). The former Solvent Dock and immediate vicinity (referred to hereafter as the Solvent Dock Area) once included a 275-gallon fiberglass overflow-retention tank. This tank stored spent waste solvents, which were periodically sampled, pumped from the tank, and disposed of by waste haulers. The tank was removed in June 1990, at which time the tank was observed as dented and leaking fluid. The FNPD (running along the northern property boundary) was an open-drainage swale that received storm water from the area north of the manufacturing building and conveyed the water, along with storm water from the western portion of the property, to a manhole before discharging it to the municipal storm sewer.

GE, MMC, and Lockheed Martin have investigated groundwater in these areas since 1991. In November 1994, Blasland, Bouck, & Lee, Inc. (BBL) investigated the facility storm sewer in the Solvent Dock Area. That investigation determined that VOCs detected in the storm sewer are attributable to the discharge of VOC-contaminated groundwater into the FNPD and infiltration of VOC-contaminated groundwater from the Solvent Dock Area into the storm sewer beneath the building.

In May 1995, BBL completed a *Storm Sewer Investigation Report* (BBL, 1995a), which recommended that the contaminated portion of the storm sewer flow be collected, treated, and discharged to meet proposed "State Pollutant Discharge Elimination System" (SPDES) VOC-effluent limitations. BBL evaluated remedial design alternatives (in accordance with NYSDEC recommendations) that would remedy contaminated groundwater by addressing the source of VOCs entering the storm sewer. The results of this evaluation are in the *Storm Sewer Basis of Design Report* (BBL, 1995d).

BBL completed the final design of the French Road facility groundwater collection and treatment system (GCTS) in October 1995. System construction was completed in June 1996 as an interim corrective measure (ICM). It collects groundwater from the Solvent Dock Area and the FNPD area via two under-drains, conveys the collected groundwater to a treatment building where a low profile air stripper removes the VOCs, and the treated effluent is then discharged to the municipal storm water system.

Once the system was installed and the ditch was replaced by a 24-inch-diameter high-density polyethylene (HDPE) pipe, groundwater no longer discharged into the northern perimeter ditch. The pipe now conveys storm water that formerly flowed in the ditch. The ditch area was filled and contoured to match the existing grade. The GCTS was expanded in 2010 to include a third collection line running through the facility's eastern parking lot, parallel to a storm sewer running east–west toward a common storm sewer line (with eventual discharge to Nail Creek). This work also upgraded several GCTS components, notably the air stripper and associated controls.

BBL subsequently developed a hydraulic- and chemical-oriented groundwater-monitoring program to evaluate the effectiveness of the GCTS for the Solvent Dock Area. This program, as presented in the *Ground-Water Sampling and Analysis Work Plan* (BBL, 1998), has been modified through monthly and quarterly correspondence with NYSDEC to accommodate

changing conditions over the project life. In response to observed groundwater contamination at the site (as described above), Lockheed Martin voluntarily installed and operated the GCTS and began an investigation of soil vapor and indoor air quality.

The results of several soil-vapor and indoor-air quality studies led to the installation (in July 2008) of a sub-slab depressurization system (SSDS) in the northeast portion of the facility's main industrial building as an interim corrective measure (ICM). The ICM is designed to mitigate elevated chlorinated-VOC vapors detected below the concrete slab of the building. Soil vapors extracted from the subsurface are treated by carbon filtering before being discharged to the atmosphere. This minimizes the potential migration of VOCs from sub-slab soil-vapor to air inside the main building where workers are often present. This system was expanded in 2010 in response to continued investigation and evaluation of the system's performance.

Lockheed Martin's investigations into the area of concern identified at the site were completed as part of the Corrective Measures Study (CMS) and presented in *the Corrective Measures Study Repor*t (CMS Report, ARCADIS, 2009). The CMS Report selected monitored natural attenuation (MNA) as one of the remedial technologies for the corrective measures alternative to address site groundwater contamination, but Lockheed Martin deemed that supplemental investigations into specific areas of the site were warranted, to fully characterize the extent of contamination and to confirm the effectiveness of the remedial actions recommended in the CMS Report. An initial supplemental investigation was completed in late 2009, with a second investigation in 2010. These investigations are summarized in the *Former Northern Perimeter Ditch Supplemental Investigation Report* (FNPD SIR, ARCADIS, 2011), which confirmed the presence of VOC-contaminated groundwater near the FNPD and recommended further investigation of contaminants in soil, groundwater, and soil vapor, as well as improved characterization of groundwater flow and water table elevations.

The data presented in both the FNPD SIR and the CMS Report have been the basis for identifying and evaluating potential remedial technologies for the FNPD area. A Feasibility Study Report (ARCADIS, 2011) for the FNPD was submitted to NYSDEC in June 2011. It selected a combination of *in situ* biological treatment, continued operation of the GCTS, implementation of institutional controls, and conduct of MNA as the most feasible remedial

alternative for the FNPD. A work plan for a pre-design investigation at the FNPD, appended to the FS Report, is aimed at filling remaining data gaps from the FNPD SIR.

The work plan also called for a bioremediation (in situ reactive zone, IRZ) pilot-test, which was implemented in April 2012. The low permeability of the soils and the low injection flow rates observed during the IRZ pilot test demonstrated that in situ biological treatment is not a viable component for full scale application. This report is being submitted to the NYSDEC under separate cover. Historical data generated as part of the activities referenced above are in Appendices A–D. Appendix A presents data collected from 1996–2008; Appendix B presents data collected from 2008–2009; Appendix C presents data collected in 2010; and Appendix D presents data collected in 2011.

2.1 REMEDIAL GOALS AND CRITERIA

The goal of the MNA system is to (while regularly monitoring) allow natural processes to reduce concentrations of constituents of concern (COC) in groundwater until NYSDEC groundwater-quality standards have been achieved, thereby protecting human health and the environment. The Remedial Goals and Criteria (RGCs) for the system designed to implement MNA at the French Road facility are as follows:

- demonstrate that COC concentrations in site groundwater are not a significant risk to human health or the environment;
- prevent migration of contaminants in groundwater at concentrations above cleanup goals.

The MNA system described below achieves these objectives through natural attenuation.

2.2 DESCRIPTION OF TREATMENT TECHNOLOGY

MNA (as defined by the United States Environmental Protection Agency [USEPA] in Office of Solid Waste and Emergency Response "Directive 9200.4-17P" [1999]) refers to the reliance on natural attenuation processes to achieve site-specific remedial objectives within a reasonable period (as compared to other methods). Under favorable conditions, these natural attenuation processes (e.g., biodegradation, dispersion, dilution, sorption, volatilization, chemical or biological stabilization, transformation, or destruction of contaminants) act without human intervention to reduce the mass, toxicity, mobility, volume, or concentrations of contaminants in soil and groundwater. The time required for these processes to reduce contaminant

concentrations to levels that protect human health and the environment varies widely among different hydrogeologic systems and different chemical contaminants, and depends on the quantity of contaminant released.

In general, MNA is an appropriate remediation method only where its use would protect human health and the environment and where it can achieve site-specific remediation objectives within a reasonable period (as compared to other alternatives). When relying on natural attenuation processes for site remediation, USEPA prefers processes that degrade or destroy contaminants. USEPA recognizes MNA as complementary to other remediation technologies (e.g., source control). USEPA generally expects that MNA will be appropriate only for sites with a low potential for contaminant migration (USEPA, 1999).

MNA can involve various natural processes, including:

- Biodegradation—Changing the form of compounds by means of living creatures, such as microorganisms. Under optimal conditions, microorganisms can produce or encourage chemical reactions that change contaminants into a form(s) posing little or no health risk.

- Dispersion and dilution—As dissolved contaminants move farther from the source area, they disperse and are diluted to progressively lower concentrations over time. Contaminant concentrations eventually may be reduced sufficiently so that risk to human and environmental health is minimal.

- Sorption—Contaminant molecules dissolved in groundwater moving through soil and sediment particles (e.g., sand, silt, clay, organic matter) can sorb (i.e., adhere) onto these particle surfaces and hold bulk liquids in the pores in and between the particles, thereby slowing or stopping contaminant migration.

- Chemical reactions—Some contaminants, such as trichloroethane, can undergo significant degradation by chemical reactions without microbial activity. Recent research has shown that enhanced degradation of tetrachloroethene (PCE), trichloroehtene (TCE) and their daughter products can be achieved by abiotic mechanisms. In particular, a variety of iron- and sulfur-bearing mineral species participate in degradation reactions with chlorinated ethenes at the mineral/water interface. Abiotic-reaction conditions favor transformation of chlorinated ethenes by dichloroelimination rather than by sequential hydrogenolysis (Suthersan, 2005).

- Volatilization—Many organic contaminants (e.g., petroleum hydrocarbons and chlorinated solvents) evaporate readily into the atmosphere, where air currents disperse the contaminants, thus reducing concentrations in groundwater.

Groundwater cleanup goals for the site are the NYSDEC *Technical Operational and Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values* (NYSDEC, 1998). Remedial criteria for site groundwater (per the Order) stipulate that groundwater contaminants will no longer pose a threat to human health or the environment.

Site conditions meet the criteria for MNA because:

- contaminants in groundwater can potentially be remedied by natural attenuation-processes;
- the contaminant plume appears stable, with a low probability that environmental conditions influencing plume stability will change over time;
- human health, drinking water supplies, other groundwater, surface water, ecosystems, sediments, air, or other resources would not be adversely affected as a consequence of selecting MNA as the remediation option; little or no demand is projected for the affected groundwater over the period during which the remedy would remain in effect;
- the contamination would not exert a long-term detrimental effect on available water supplies or other environmental resources;
- the estimated remediation period is regulatory acceptable;
- no continuing source of contamination exists; and
- reliable site-specific mechanisms for implementing institutional controls are available.

As selected in the CMS Report, the major components of the selected corrective-measures alternative for site groundwater include MNA, operation and maintenance of the existing GCTS, and institutional controls.

2.3 GROUNDWATER CONTAMINANT DISTRIBUTION

Groundwater under the northeast portion of the main manufacturing building and the FNPD has been contaminated by VOCs, including tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride. These constituents, as well as trans-1,2-dichloroethene (trans-1,2-DCE) and 1,1-dichloroethane (1,1-DCA), generally define the COC for the site MNA program. Depth to groundwater in these areas is shallow and ranges from two to seven feet below ground surface (ft bgs). The source of the groundwater contamination under the northeast portion of the main building is probably the former 275-gallon overflow-retention tank, which was located immediately north of the loading dock along the

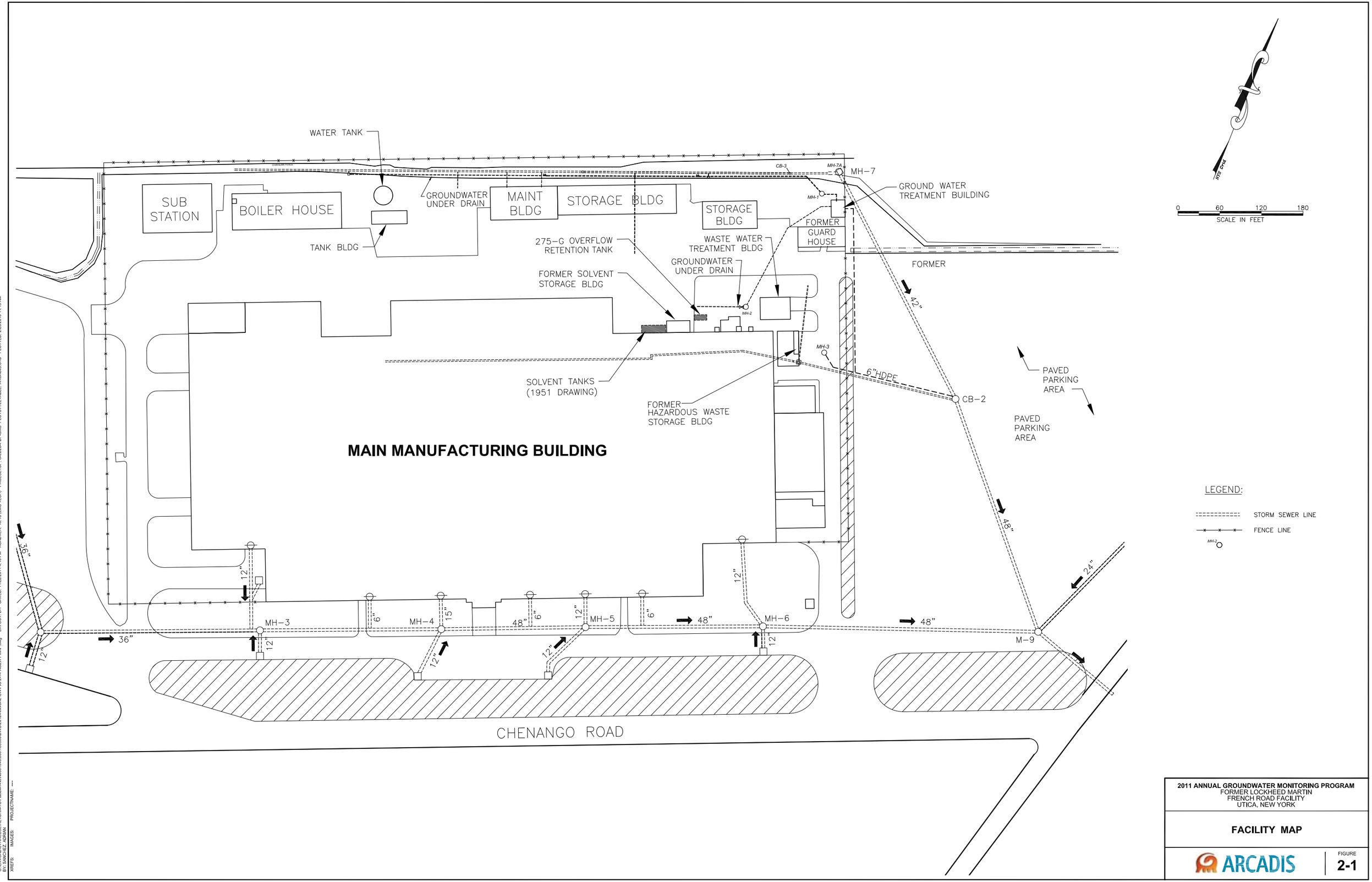
northern wall of the manufacturing building. This tank was removed in 1990 as part of an interim remedial measure. Reports indicate that the overflow-retention tank was in poor condition and leaking upon removal.

As part of the tank removal, approximately five cubic yards of contaminated soil were removed for off-site disposal. Analytical data for soil samples collected near where the tank was removed indicate no remaining soil contamination. Residual on-site dissolved-phase constituents in groundwater are believed to result from isolated releases that affected both soil and groundwater. The inverts (bottom) of former underground-storage tanks were likely near or below the water table.

Soil, groundwater, and surface-water samples collected at the FNPD during initial and supplemental CMS investigations did not identify a specific source of observed groundwater contamination, but did identify areas of higher relative impacts that may be contributing to the continued detections of VOCs in groundwater along the FNPD. These areas are at the western and eastern ends of the maintenance building and may be due to localized disposal during past facility operations.

Groundwater contamination is found primarily in fill and shallow till. The water table is encountered near the bottom of the fill, typically within one foot of contact with the underlying till. Groundwater contamination is observed primarily in wells screened either solely within the fill or within the fill and underlying till. Hydropunch data collected from several vertical intervals within the till indicate decreased contamination with depth. Grain-size analysis and hydraulic-conductivity testing show that the fill and till both have a very low capacity to transmit water; that is, the fill and till exhibit very low permeability. This has naturally "contained" the migration of contaminated groundwater within the northeastern portion of the site. Off-site migration of contaminated groundwater has not been observed.

Figure 2-1



2011 ANNUAL GROUNDWATER MONITORING PROGRAM
FORMER LOCKHEED MARTIN
FRENCH ROAD FACILITY
UTICA, NEW YORK

FACILITY MAP

ARCADIS

FIGURE
2-1

Section 3
Groundwater Monitoring Program

To achieve the site RGCs, the IGWMP specifies monitoring parameters, sampling frequency, and sampling locations for the site monitoring program.

3.1 MONITORING PARAMETERS

Groundwater VOCs comprise the parameters being monitored at the site (USEPA Method 8260). Measurement of field parameters depends on the sampling method used at individual sampling locations. Sampling locations were purged for three well volumes (when location will yield acceptable volume) and sampled using dedicated bailers or a peristaltic pump. At these locations, field parameters consisted of pH, dissolved oxygen (DO), conductivity, temperature, turbidity and water levels. A final DO reading at these locations was not measured from bailer samples but was instead measured using a down-hole sensor. In addition, all locations were analyzed for ferrous iron (via field kit). Appendix F contains the completed sampling logs for each of the quarterly events in 2012.

Three monitoring wells (MW-1, MW-3, and MW-10) were sampled via low-flow purging and sampling procedures. For these wells, oxidation-reduction potential (ORP) was also recorded using low-flow techniques. Selected points were also monitored for additional parameters, including nitrate, sulfate, total alkalinity, and methane in 2012. All low-flow locations were analyzed for ferrous iron (via field kit). As specified in the IGWMP, these MNA parameters will be monitored quarterly for one year. After four quarters, only VOCs and field parameters (as described above) will be monitored at all locations. We assume that these parameters will provide sufficient information to evaluate natural attenuation mechanisms. Sampling protocols and standard operating procedures are included as Attachment 2 of the site-specific Quality Assurance Project Plan (ARCADIS, 2009). Exclusive VOCs and field parameters monitoring (no MNA parameters) will take effect with the first quarter 2013 sampling event.

3.2 MONITORING LOCATIONS

The well network for MNA monitoring at the site is presented in Table 3-1 and shown in Figure 3-1. Existing wells were selected as VOC monitoring points based on the current and anticipated extent of contaminants in groundwater (and as presented in the CMS Report and supporting documents). Monitoring wells were selected for annual, semi-annual, or quarterly sampling. Monitoring wells selected for sampling, their corresponding sampling frequencies, and sampling rationales are as follows:

- MW-1 (quarterly) is within the plume and typically exhibits elevated VOC concentrations;
- MW-2 (annually) is within the plume and typically exhibits elevated VOC concentrations;
- MW-3 (quarterly) is within the plume and typically exhibits elevated VOC concentrations;
- MW-4 (annually) is at the fringe of the plume and hydraulically upgradient;
- MW-5 (semi-annually) is at the fringe of the plume and hydraulically upgradient;
- MW-10 (annually) is at the fringe of the plume and hydraulically cross-gradient;
- MW-13S (quarterly) is at the fringe of the plume, hydraulically upgradient, and monitors the shallow undifferentiated-fill unit;
- MW-14BR (annually) is downgradient of the plume and monitors the bedrock unit;
- MW-18 (quarterly) is at the western fringe of the FNPD plume and exhibits measurable VOC concentrations;
- MW-20 (quarterly) is at the fringe of the plume and monitors groundwater quality at the western extent of the FNPD impacts;
- MW-21 (quarterly) is at the fringe of the plume and monitors groundwater quality at the south western extent of the FNPD impacts;
- PZ-5 (quarterly) is within the plume and typically exhibits elevated VOC concentrations;
- PZ-6 (semi-annually) is within the plume and typically exhibits elevated VOC concentrations;
- PZ-7 (semi-annually) is near the downgradient extent of the plume and typically does not exhibit elevated VOC concentrations;

- PZ-8 (quarterly) is within the plume and typically exhibits measurable VOC concentrations;
- PZ-11R (quarterly) is at the edge of the plume and typically exhibit elevated VOC concentrations;
- PZ-13R (quarterly) is at the edge of the plume and typically exhibit elevated VOC concentrations;
- PZ-18 (annually) is at the fringe of the plume, hydraulically cross-gradient, and monitors groundwater quality at the eastern extent of the site;
- PZ-26 (annually) is upgradient of the plume and monitors groundwater quality at the northern extent of the site;
- A1-PZ-2 (quarterly) is at the fringe of the plume and monitors groundwater quality at the western extent of the FNPD impacts;
- A2-PZ-1 (quarterly) is within the FNPD plume and exhibits measurable VOC concentrations; and
- A2-PZ-2 (semi-annually) is within the FNPD plume and exhibits measurable VOC concentrations.

It should be noted that following the baseline round of sampling in September 2011 piezometers PZ-27 and A2-PZ-7 were removed from the sampling list and wells A2-PZ-2, MW-18, MW-20 and MW-21 were subsequently added to the sampling list beginning with the second quarter 2012 sampling event. These modifications to the program were presented to and accepted by the NYSDEC. As identified in Table 3-1, groundwater-elevation measurements were collected before groundwater sampling at all accessible site monitoring-wells. Groundwater-elevation measurements are in Table 3-2 and Figures 3-2(a-d). Table 3-3 shows the construction details of monitoring wells and piezometers.

Monitoring wells selected for the MNA monitoring program will ensure that the site RGCs are being achieved. The objectives of the MNA network wells are:

Objective 1—Verify that contaminant concentrations are decreasing with time such that cleanup goals will be met. This objective will be met by monitoring those wells where exceedances have been reported. Long-term trend analysis will measure downward trends in contaminant concentration, and MNA performance will be gauged against this analysis. At no

point during the MNA period are contaminant concentrations expected to exceed historical maximums. Table 3-4 includes Objective 1 monitoring locations.

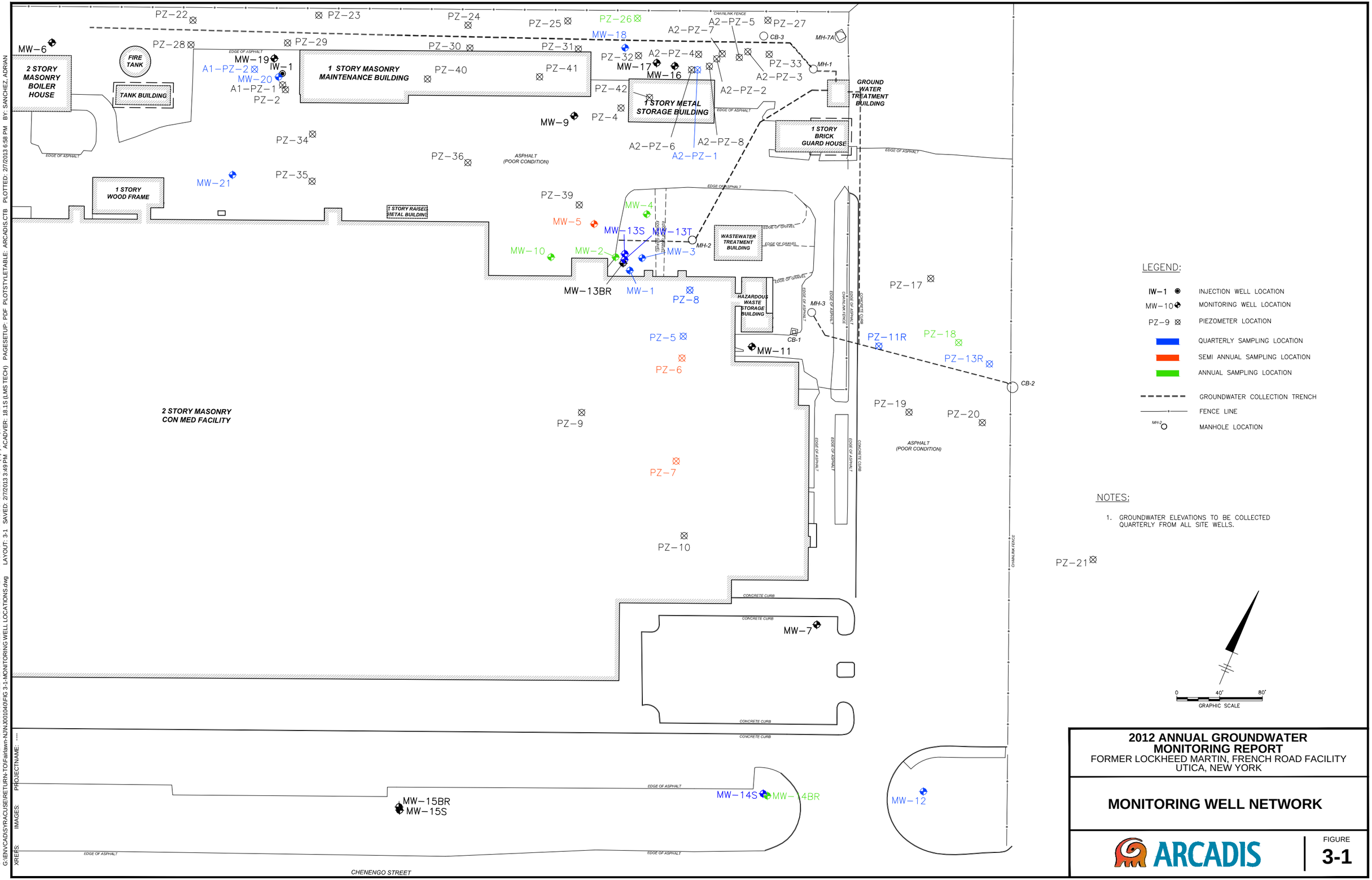
***Objective 2*—**Confirm that contamination is not spreading to uncontaminated areas. Contaminants are expected to continue to disperse within known groundwater-flow pathways throughout the duration of the remedy. This objective will be met by monitoring those wells spanning the site (laterally and vertically) that yield concentrations below cleanup goals. Contamination in these locations is expected to be detectable but below cleanup goals or below detection limits. Table 3-4 includes Objective 2 monitoring locations.

***Objective 3*—**Monitor contaminant levels at potential exposure points under current land use conditions. The monitoring well network will monitor contaminant levels at the site such that, in the event that subsurface work is performed in Objective 3 areas, workers may be informed in advance of the types and levels of chemicals present. Based on this information, subsurface work can be performed while employing appropriate worker protection and waste management procedures. Wells selected for this objective are in locations that would cover potential areas of subsurface work, including both interior and exterior areas. Table 3-4 presents Objective 3 monitoring locations.

***Objective 4*—**Monitor site hydrologic conditions over time to identify any changes in groundwater flow that might compromise human health or the environment. This includes evaluating groundwater elevations in both the overburden and bedrock monitoring wells. Monitoring wells that support this objective span the site (laterally and vertically) and will detect changes in groundwater flow and contaminant migration. All site monitoring well locations will be monitored quarterly for groundwater elevations, and will therefore be included as Objective 4 locations.

The four objectives listed above aim to verify that contaminant concentrations are not a significant risk to human health or the environment, to monitor the migration of contaminants at the site, and to monitor the hydrogeologic nature of the site to detect changes for use in future environmental decision-making. Monitoring locations at the site have been mapped to primary objectives, but various monitoring locations will be used for all objectives during data analysis and interpretation. Table 3-4 identifies the monitoring locations for Objectives 1 through 3.

Figure 3-1



LEGEND:

- IW-1 — INJECTION WELL LOCATION
- MW-10 — MONITORING WELL LOCATION
- PZ-9 — PIEZOMETER LOCATION
- QUARTERLY SAMPLING LOCATION
- SEMI ANNUAL SAMPLING LOCATION
- ANNUAL SAMPLING LOCATION
- GROUNDWATER COLLECTION TRENCH
- FENCE LINE
- MH-2 — MANHOLE LOCATION

NOTES:

1. GROUNDWATER ELEVATIONS TO BE COLLECTED QUARTERLY FROM ALL SITE WELLS.

0 40' 80'
GRAPHIC SCALE

2012 ANNUAL GROUNDWATER MONITORING REPORT
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

MONITORING WELL NETWORK

ARCADIS

FIGURE
3-1

CITY:MAHWAH DIV/GROUP:ENVIRONMENTAL DB:J.GONZALEZ LD:J.BONSTEEL PIC:L.MCBURNEY PM:C.MOTTA TM:J.BONSTEEL LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\RETURN-TO\Fairlawn-NJ\NJ001040\FIG 3-1-MONITORING WELL LOCATIONS.dwg LAYOUT: 3-1 SAVED: 2/7/2013 3:49 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: PDF PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/7/2013 6:58 PM BY: SANCHEZ, ADRIAN
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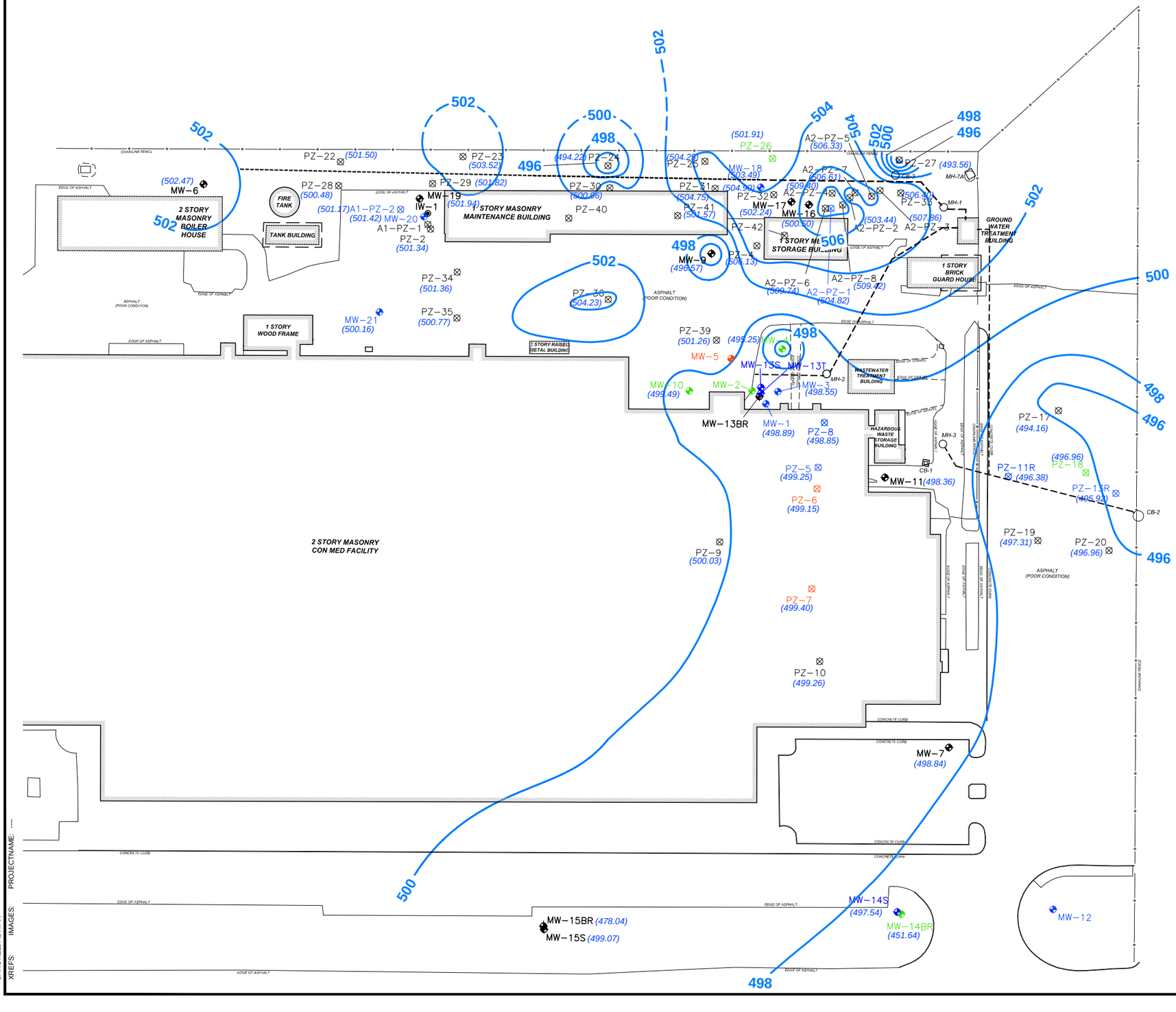
Figure 3-2a



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SANCHEZ, ADRIAN
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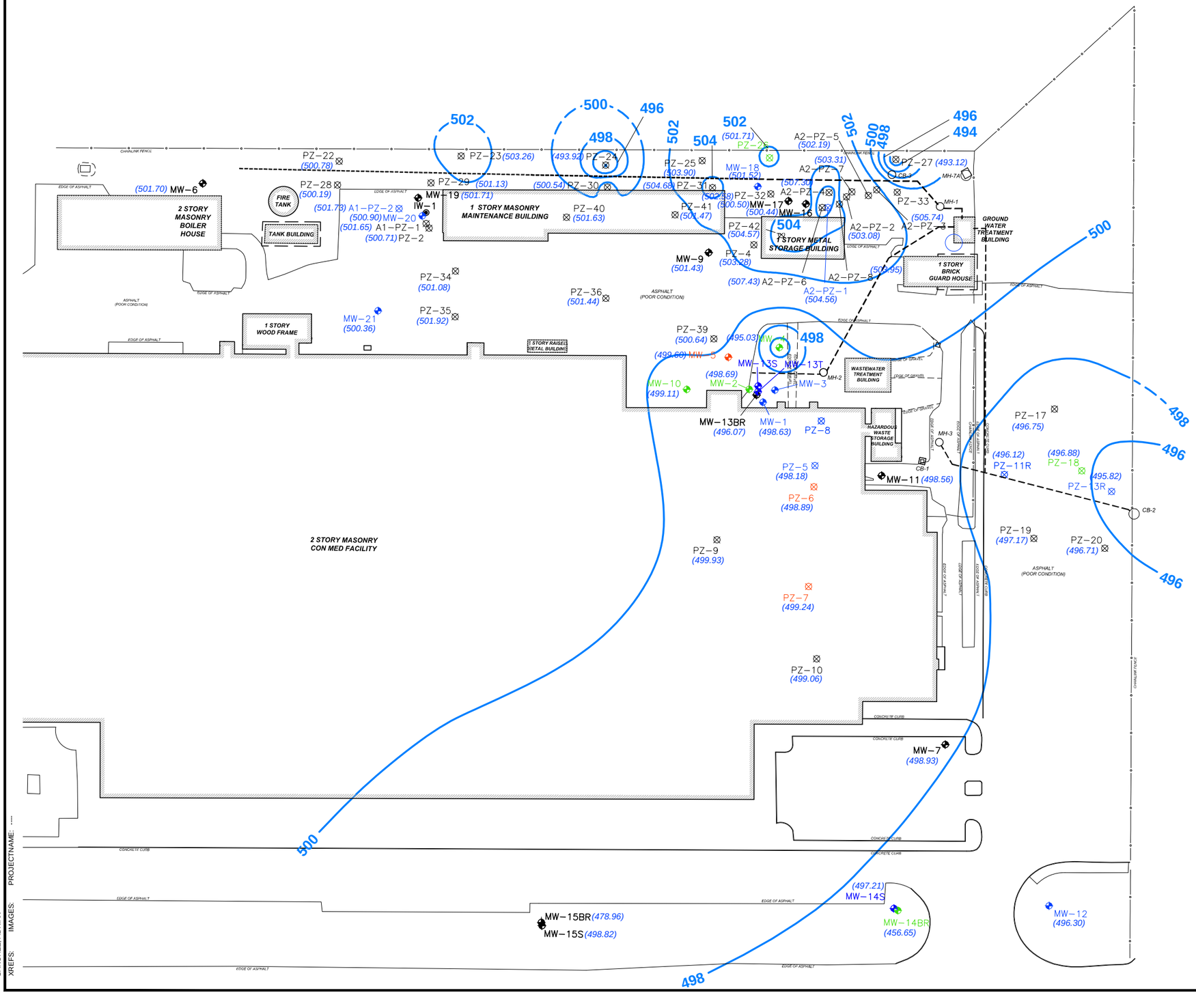
Figure 3-2b



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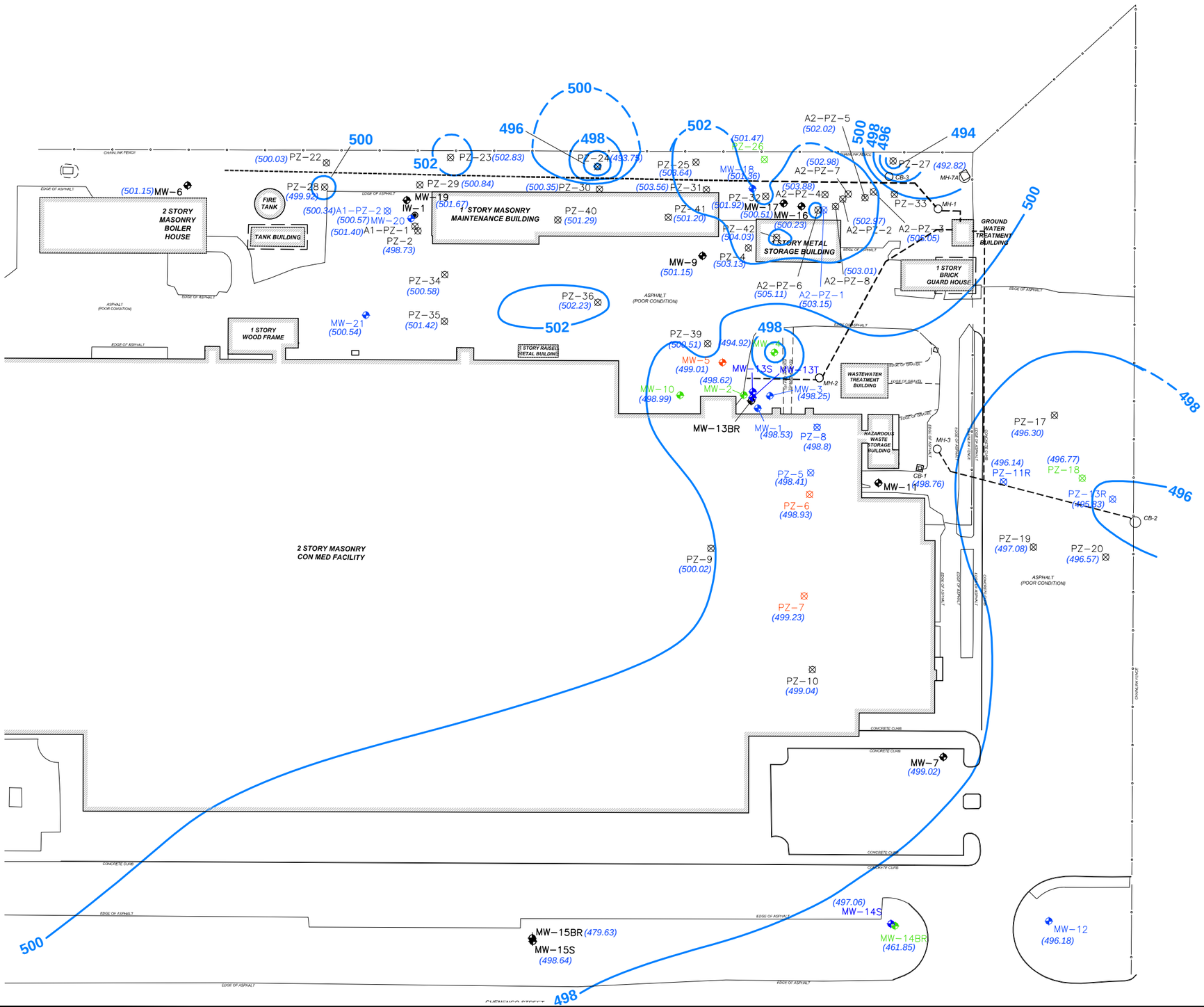
SANCHEZ, ADRIAN
XREFS: IMAGES: PROJECTNAME: ----

Figure 3-2c



LEGEND:

- IW-1 — INJECTION WELL LOCATION
- MW-10 — MONITORING WELL LOCATION
- PZ-9 — PIEZOMETER LOCATION
- QUARTERLY SAMPLING LOCATION
- SEMI ANNUAL SAMPLING LOCATION
- ANNUAL SAMPLING LOCATION
- (496.99) — GROUNDWATER ELEVATION (AMSL)
- 500 — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER COLLECTION TRENCH
- FENCE LINE
- MH-2 — MANHOLE LOCATION

NOTE:

1. ALL WELLS AND PIEZIOMETERS SHOWN ARE UTILIZED FOR QUARTERLY GROUNDWATER ELEVATIONS EXCEPT WELLS IW-1, MW-13BR, MW-14BR, AND MW-15BR.
2. WELLS MW-13BR WAS UNABLE TO BE ACCESSED DUE TO SITE CONDITIONS.
3. WELLS MW-13S, PZ-8, PZ-21, AND PZ-33 WERE NOTED TO BE DRY AND NOT USED FOR GROUNDWATER CONTOURS.
4. THIS DRAWING IS REFERENCED HORIZONTALLY TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND PROJECTED ON THE NEW YORK STATE PLAN COORDINATE SYSTEM (CENTRAL ZONE).
5. THE REFERENCED HORIZONTAL CONTROL STATION IS A GPS CONTINUOUSLY OPERATING REFERENCE STATION (CORS) DESIGNATED AS "ROME CORS ARP" (NYRM). NYRM IS A SPECIAL HORIZONTAL AND VERTICAL CONTROL STATION ESTABLISHED BY NATIONAL GEODETIC SURVEY IN JULY 1997.

0 50' 100'
GRAPHIC SCALE

2012 ANNUAL GROUNDWATER MONITORING REPORT

FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

GROUNDWATER CONTOURS JULY 2012

ARCADIS

FIGURE
3-2c

CITY:MAHWAH DIV/GROUP:ENVIRONMENTAL DB:J.GONZALEZ LD:J.BONSTEEL PIC:L.MCBURNEY PM:C.MOTTA TM:J.BONSTEEL LYR:(Opt)ON=*;OFF=*REF*
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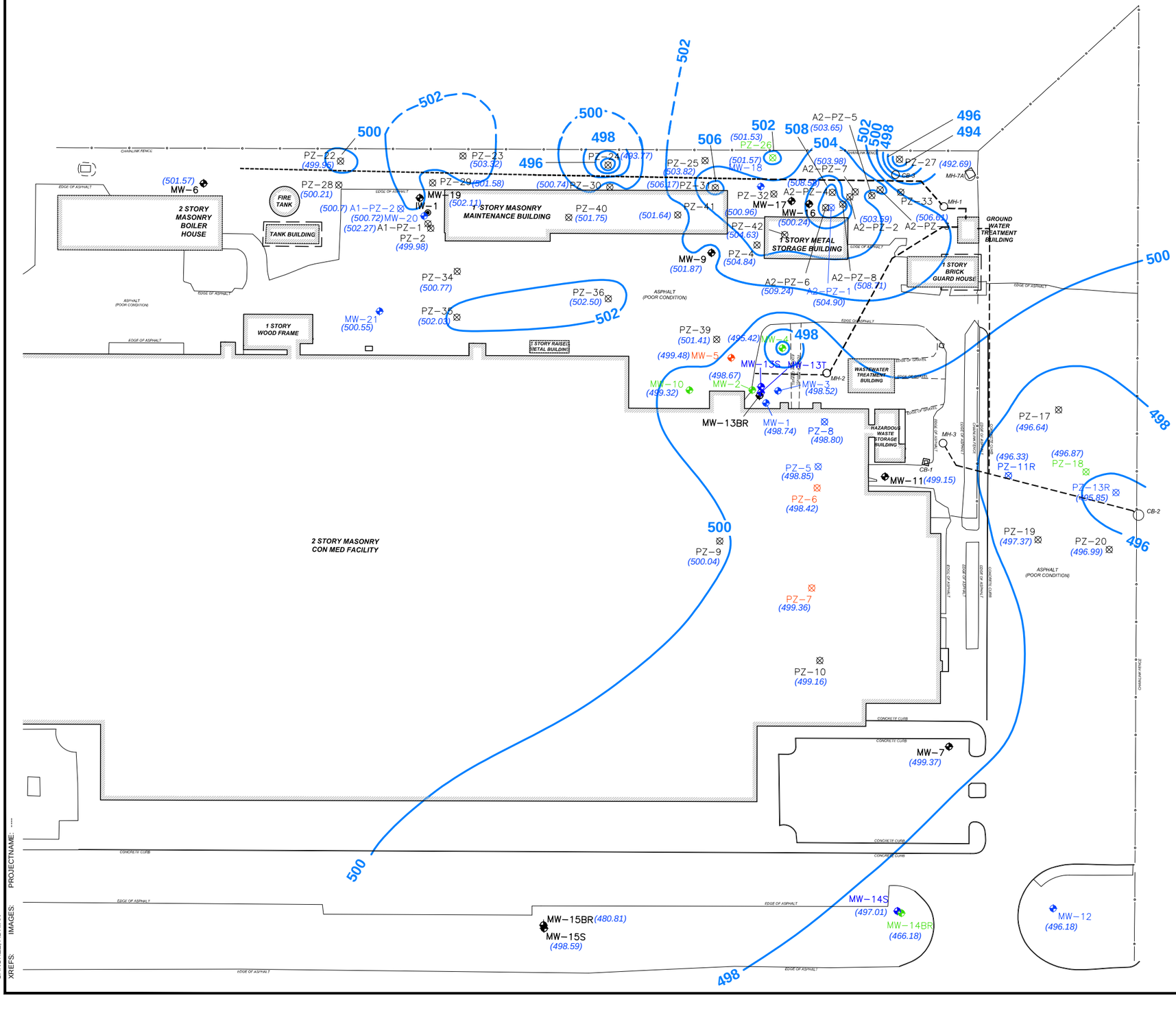
Figure 3-2d



LEGEND:

- IW-1 — INJECTION WELL LOCATION
- MW-10 — MONITORING WELL LOCATION
- PZ-9 — PIEZOMETER LOCATION
- QUARTERLY SAMPLING LOCATION
- SEMI ANNUAL SAMPLING LOCATION
- ANNUAL SAMPLING LOCATION
- (496.99) — GROUNDWATER ELEVATION (AMSL)
- 500 — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER COLLECTION TRENCH
- FENCE LINE
- MH-2 — MANHOLE LOCATION

NOTE:

1. ALL WELLS AND PIEZIOMETERS SHOWN ARE UTILIZED FOR QUARTERLY GROUNDWATER ELEVATIONS EXCEPT WELLS IW-1, MW-13BR, MW-14BR, AND MW-15BR.
2. WELLS MW-13S, PZ-21, AND PZ-33 WERE UNABLE TO BE ACCESSED DUE TO SITE CONDITIONS.
3. THIS DRAWING IS REFERENCED HORIZONTALLY TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND PROJECTED ON THE NEW YORK STATE PLAN COORDINATE SYSTEM (CENTRAL ZONE).
4. THE REFERENCED HORIZONTAL CONTROL STATION IS A GPS CONTINUOUSLY OPERATING REFERENCE STATION (CORS) DESIGNATED AS "ROME CORS ARP" (NYRM). NYRM IS A SPECIAL HORIZONTAL AND VERTICAL CONTROL STATION ESTABLISHED BY NATIONAL GEODETIC SURVEY IN JULY 1997.

0 50' 100'
GRAPHIC SCALE

2012 ANNUAL GROUNDWATER MONITORING REPORT
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

GROUNDWATER CONTOURS OCTOBER 2012

ARCADIS

FIGURE
3-2d

CITY:MAHWAH DIV/GROUP:ENVIRONMENTAL DB:J.GONZALEZ LD:J.BONSTEEL PIC:L.MCBURNEY PM:C.MOTTA TM:J.BONSTEEL LYR:(Opt)ON=*;OFF=*REF*
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SANCHEZ, ADRIAN
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Table 3-1

Table 3-1
Sampling Parameters and Sampling Frequency for the Monitoring-Network Wells

Former Lockheed Martin French Road Facility
Utica, New York

Monitoring Well	Sampling Frequency	Sampling Parameters
MW - 1	Quarterly	VOCs, MNA Parameters*, Field Parameters (Fe) + TOC
MW - 2	Annual	VOCs, Field Parameters (Fe)
MW - 3	Quarterly	VOCs, MNA Parameters*, Field Parameters (Fe) + TOC
MW - 4	Annual	VOCs, Field Parameters (Fe)
MW - 5	Semi-Annual	VOCs, Field Parameters (Fe)
MW - 6	-	-
MW - 7	-	-
MW - 8	-	-
MW - 9	-	-
MW - 10	Annual	VOCs, MNA Parameters*, Field Parameters (Fe) + TOC
MW - 11	-	-
MW - 12	-	-
MW - 13S	Quarterly	VOCs, Field Parameters (Fe)
MW - 13T	-	-
MW - 13BR	-	-
MW - 14S	-	-
MW - 14BR	Annual	VOCs, Field Parameters (Fe)
MW - 15S	-	-
MW - 15BR	-	-
MW-16	-	-
MW-17	-	-
MW-18	Quarterly (Starting Spring 2012)	VOCs, Field Parameters (Fe)
MW-19	-	-
MW-20	Quarterly (Starting Spring 2012)	VOCs, Field Parameters (Fe)
MW-21	Quarterly (Starting Spring 2012)	VOCs, Field Parameters (Fe)
PZ - 2	-	-
PZ - 4	-	-
PZ - 5	Quarterly	VOCs, Field Parameters (Fe)
PZ - 6	Semi-Annual	VOCs, Field Parameters (Fe)
PZ - 7	Semi-Annual	VOCs, Field Parameters (Fe)
PZ - 8	Quarterly	VOCs, Field Parameters (Fe)
PZ - 9	-	-
PZ - 10	-	-
PZ - 11R	Quarterly	VOCs, Field Parameters (Fe)
PZ - 13R	Quarterly	VOCs, MNA Parameters*, Field Parameters (Fe) + TOC
PZ - 17	-	-
PZ - 18	Annual	VOCs, Field Parameters (Fe)
PZ - 19	-	-
PZ - 20	-	-
PZ - 21	-	-
PZ - 22	-	-
PZ - 23	-	-
PZ - 24	-	-
PZ - 25	-	-

Table 3-1
Sampling Parameters and Sampling Frequency for the Monitoring-Network Wells

Former Lockheed Martin French Road Facility
Utica, New York

Monitoring Well	Sampling Frequency	Sampling Parameters
PZ - 26	Annual	VOCs, Field Parameters (Fe)
PZ - 27	Annual (Fall 2011 Only)	VOCs, Field Parameters
PZ - 28	-	-
PZ - 29	-	-
PZ - 30	-	-
PZ - 31	-	-
PZ - 32	-	-
PZ - 33	-	-
PZ - 34	-	-
PZ - 35	-	-
PZ - 36	-	-
PZ - 39	-	-
PZ - 40	-	-
PZ - 41	-	-
A1 - PZ - 1	-	-
A1 - PZ - 2	Quarterly	VOCs, MNA Parameters*, Field Parameters (Fe) + TOC
A2 - PZ - 1	Quarterly	VOCs, MNA Parameters*, Field Parameters (Fe) + TOC
A2 - PZ - 2	Quarterly (Starting Spring 2012)	VOCs, Field Parameters (Fe)
A2 - PZ - 3	-	-
A2 - PZ - 4	-	-
A2 - PZ - 5	-	-
A2 - PZ - 6	-	-
A2 - PZ - 7	Annual (Fall 2011 Only)	VOCs, Field Parameters
A2 - PZ - 8	-	-

Notes:

1. All wells and piezometers will be measured for groundwater elevations on a quarterly basis.
2. MNA = monitored natural attenuation
3. VOCs = volatile organic compounds
4. - = Not sampled as part of MNA Program.
5. * = MNA parameters are proposed to only be collected quarterly during the first year of monitoring.

Table 3-2

Table 3-2
Groundwater Elevation Measurements - 2012

Former Lockheed Martin French Road Facility
Utica, New York

	Well ID	Top of PVC Riser Elevation (ft)	Ground Water Elevation (ft)	Ground Water Elevation (ft)	Ground Water Elevation (ft)	Ground Water Elevation (ft)
Sampling Date			**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1						
	MW-1	507.27	498.89	498.63	498.53	498.74
	MW-3	509.45	498.55	--	498.25	498.52
	MW-18	504.97	503.49	501.52	501.36	501.57
	MW-20	503.40	501.42	500.90	500.57	500.72
	PZ-6	508.37	499.15	498.89	498.93	498.42
	PZ-5	508.29	499.25	498.18	498.41	498.85
	PZ-8	508.23	498.85	DRY	DRY	498.80
	PZ-11R	504.88	496.38	496.12	496.14	496.33
	PZ-13R	503.98	495.92	495.82	495.83	495.85
	A1-PZ-2	503.00	501.17	501.73	500.34	500.70
	A2-PZ-1	509.00	504.82	504.56	503.15	504.90
	A2-PZ-7	509.59	506.61	503.31	502.98	503.98
Objective 2						
	MW-5	504.33	--	499.60	499.01	499.48
	MW-13S	505.81	498.87	DRY	DRY	DRY
	MW-14BR	507.95	451.64	456.65	461.85	466.18
	MW-21	503.66	500.16	500.36	500.54	500.55
	PZ-18	504.85	496.96	496.88	496.77	496.87
	PZ-26	510.95	501.91	501.71	501.47	501.53
Objective 3						
	MW-2	504.60	--	498.69	498.62	498.67
	MW-4	506.73	495.25	495.03	494.92	495.42
	PZ-7	508.36	499.40	499.24	499.23	499.36
	MW-10	504.48	499.49	499.11	498.99	499.32
Objective 4						
	MW-6	508.06	502.47	501.70	501.15	501.57
	MW-7	506.94	498.84	498.93	499.02	499.37
	MW-9	504.84	496.57	501.43	501.15	501.87
	MW-11	507.03	496.36	498.56	498.76	499.15
	MW-12	508.30	--	496.30	496.18	496.18
	MW-13BR	506.12	495.45	496.07	--	495.30
	MW-14S	507.85	497.54	497.21	497.06	497.01
	MW-15S	507.26	499.07	498.82	498.64	498.59
	MW-15BR	507.24	478.04	478.96	479.93	480.81
	MW-16	504.69	500.50	500.44	500.23	500.24
	MW-17	504.64	502.24	500.50	500.51	500.96
	MW-19	503.13	501.94	501.71	501.67	502.11
	PZ-2	503.69	501.34	500.71	498.73	499.98
	PZ-4	506.13	506.13	503.28	503.13	504.84
	PZ-9	508.08	500.03	499.93	500.02	500.04
	PZ-10	508.14	499.26	499.06	499.04	499.16
	PZ-17	504.05	494.16	496.75	496.30	496.64
	PZ-19	504.60	497.31	497.17	497.08	497.37

Table 3-2
Groundwater Elevation Measurements - 2012

Former Lockheed Martin French Road Facility
Utica, New York

Sampling Date	Well ID	Top of PVC Riser Elevation (ft)	Ground Water Elevation (ft) Jan-12	Ground Water Elevation (ft) Apr-12	Ground Water Elevation (ft) Jul-12	Ground Water Elevation (ft) Oct-12
Objective 4 (Cont.)						
	PZ-20	503.85	496.96	496.71	496.57	496.99
	PZ-21	505.70	DRY	DRY	DRY	DRY
	PZ-22	508.57	501.50	500.78	500.03	499.95
	PZ-23	510.07	503.52	503.26	502.83	503.32
	PZ-24	504.77	494.22	493.92	493.75	493.77
	PZ-25	510.62	504.25	503.90	503.64	503.82
	PZ-27	504.12	493.56	493.12	492.82	492.69
	PZ-28	504.12	500.48	500.19	499.92	500.21
	PZ-29	503.84	501.82	501.13	500.84	501.58
	PZ-30	504.72	500.96	500.54	500.35	500.74
	PZ-31	506.17	504.75	504.68	503.56	506.17
	PZ-32	504.90	504.90	502.58	501.92	504.30
	PZ-33	510.00	506.40	DRY	DRY	DRY
	PZ-34	503.88	501.36	501.08	500.58	500.77
	PZ-35	503.98	500.77	501.92	501.42	502.03
	PZ-36	504.23	504.23	501.44	502.23	502.50
	PZ-39	504.51	501.26	500.64	500.51	501.41
	PZ-40	506.68	--	501.63	501.29	501.75
	PZ-41	506.27	501.57	501.47	501.20	501.64
	PZ-42	505.18	--	504.57	504.03	504.63
	A1-PZ-1	503.77	--	501.65	501.40	502.27
	A2-PZ-2	509.74	503.44	503.08	502.97	503.59
	A2-PZ-3	509.46	507.86	505.74	505.05	506.61
	A2-PZ-4	509.40	509.40	507.30	503.88	508.58
	A2-PZ-5	510.03	506.33	502.19	502.02	503.65
	A2-PZ-6	509.74	509.74	507.43	505.11	509.24
	A2-PZ-8	509.70	509.42	503.95	503.01	508.71

Notes:
1. "--" - Not measured
2. DRY - No measurable water
3. All measurment presented above are in feet Above Mean Sea Level (AMSL), as measured from July 1997 National Geodetic Survey datum.

Table 3-3

Table 3-3
Monitoring Well and Piezometer Construction Details

Former Lockheed Martin French Road Facility
Utica, New York

Monitoring Well	Diameter/Material	Screen Length	Ground Surface Elevation	Top of PVC Riser Elevation	Well Depth (ft bgs)	Screen Depth (ft bgs)		Screen/Borehole Elevation		Hydrogeologic Unit Monitored	Date Installed	Consultant Name
						From (Top)	To (Bottom)	Top	Bottom			
MW - 1	4" PVC	10	507.51	507.27	17.2	7.0	17.0	500.5	490.5	Fill/Till	1991	O'Brien & Gere
MW - 2	4" PVC	15	504.95	504.60	16.5	1.5	16.5	503.5	488.5	Fill/Till	1991	O'Brien & Gere
MW - 3	2" PVC	10	507.06	509.45	13.0	3.0	13.0	504.1	494.1	Fill/Till	1991	O'Brien & Gere
MW - 4	2" PVC	10	506.98	506.73	14.0	4.0	14.0	503.0	493.0	Fill/Till	1991	O'Brien & Gere
MW - 5	2" PVC	10	504.72	504.33	14.0	4.0	14.0	500.7	490.7	Fill/Till	1991	O'Brien & Gere
MW - 6	2" PVC	10	505.70	508.06	15.0	5.0	15.0	500.7	490.7	Fill/Till	--	O'Brien & Gere
MW - 7	2" PVC	15	507.45	506.94	21.0	6.0	21.0	501.5	486.5	Fill/Till	1993	O'Brien & Gere
MW - 9	2" PVC	10	505.18	504.84	13.5	3.5	13.5	501.7	491.7	Fill/Till	1993	O'Brien & Gere
MW - 10	2" PVC	10	504.83	504.48	14.0	4.0	14.0	500.8	490.8	Fill/Till	1993	O'Brien & Gere
MW - 11	2" PVC	20	507.26	507.03	25.0	5.0	25.0	502.3	482.3	Fill/Till	1993	O'Brien & Gere
MW - 12	2" PVC	10	508.60	508.30	23.4	13.0	23.0	495.6	485.6	Fill/Till	--	--
MW - 13S	2" PVC	5	506.32	505.81	7.0	2.0	7.0	504.3	499.3	Fill	2008	ARCADIS
MW - 13T	2" PVC	10	506.11	505.68	20.0	10.0	20.0	496.1	486.1	Till	2008	ARCADIS
MW - 13BR	2" PVC	10	506.36	506.12	45.0	35.0	45.0	471.4	461.4	Bedrock	2008	ARCADIS
MW - 14S	2" PVC	10	508.22	507.85	16.0	6.0	16.0	502.2	492.2	Undifferentiated Overburden	2008	ARCADIS
MW - 14BR	2" PVC	10	508.20	507.95	67.2	57.2	67.2	451.0	441.0	Bedrock	2008	ARCADIS
MW - 15S	2" PVC	10	507.60	507.26	20.0	10.0	20.0	497.6	487.6	Undifferentiated Overburden	2008	ARCADIS
MW - 15BR	2" PVC	10	507.53	507.24	67.6	57.6	67.6	449.9	439.9	Bedrock	2008	ARCADIS
MW- 16	2" PVC	10	505.09	504.69	15.5	4.9	14.9	500.2	490.2	Undifferentiated Overburden	2011	ARCADIS
MW- 17	2" PVC	10	505.04	504.64	15.1	5.1	15.1	499.9	489.9	Undifferentiated Overburden	2011	ARCADIS
MW- 18	2" PVC	10	505.42	504.97	15.0	5.0	15.0	500.4	490.4	Undifferentiated Overburden	2011	ARCADIS
MW- 19	2" PVC	10	503.43	503.13	15.5	5.0	15.0	498.4	488.4	Undifferentiated Overburden	2011	ARCADIS
MW- 20	2" PVC	10	503.70	503.40	14.9	4.9	14.9	498.8	488.8	Undifferentiated Overburden	2011	ARCADIS
MW- 21	2" PVC	10	504.16	503.66	14.9	4.9	14.9	499.3	489.3	Undifferentiated Overburden	2011	ARCADIS
PZ - 2	1.5" PVC	5	504.13	503.69	10.3	5.0	10.0	499.1	494.1	Fill/Till	--	--
PZ - 4	1.5" PVC	5	505.49	505.13	14.3	9.0	14.0	496.5	491.5	Fill/Till	--	--
PZ - 5	1.5" PVC	5	508.44	508.29	10.7	5.7	10.7	502.7	497.7	Till	--	--
PZ - 6	1.5" PVC	5	508.52	508.37	10.4	5.4	10.4	503.1	498.1	Till	--	--
PZ - 7	1.5" PVC	5	508.51	508.36	10.2	5.0	10.0	503.5	498.5	Till	--	--
PZ - 8	1.5" PVC	10	508.43	508.23	16.0	6.0	16.0	502.4	492.4	Till	2008	ARCADIS
PZ - 9	1.5" PVC	5	508.55	508.08	10.0	5.0	10.0	503.6	498.6	Till	2008	ARCADIS
PZ - 10	1.5" PVC	5	508.44	508.14	12.0	7.0	12.0	501.4	496.4	Fill	2008	ARCADIS
PZ - 11R	1.5" PVC	5	505.03	504.68	10.0	5.0	10.0	500.0	495.0	Fill	2010	ARCADIS
PZ - 13R	1.5" PVC	5	504.25	503.98	10.0	5.0	10.0	499.3	494.3	Fill	2010	ARCADIS
PZ - 17	1.5" PVC	5	504.40	504.05	8.5	3.5	8.5	500.9	495.9	Fill	2009	ARCADIS
PZ - 18	1.5" PVC	5	504.20	504.85	9.0	4.0	9.0	500.2	495.2	Fill	2009	ARCADIS
PZ - 19	1.5" PVC	5	504.90	504.60	8.5	3.5	8.5	501.4	496.4	Fill	2009	ARCADIS
PZ - 20	1.5" PVC	5	504.10	503.85	8.0	3.0	8.0	501.1	496.1	Fill	2009	ARCADIS

Table 3-3
Monitoring Well and Piezometer Construction Details

Former Lockheed Martin French Road Facility
Utica, New York

Monitoring Well	Diameter/Material	Screen Length	Ground Surface Elevation	Top of PVC Riser Elevation	Well Depth (ft bgs)	Screen Depth (ft bgs)		Screen/Borehole Elevation		Hydrogeologic Unit Monitored	Date Installed	Consultant Name
						From (Top)	To (Bottom)	Top	Bottom			
PZ - 21	1.5" PVC	6.5	506.00	505.70	9.5	3.0	9.5	503.0	496.5	Fill	2009	ARCADIS
PZ - 22	1.5" PVC	10	505.54	508.57	11.5	1.5	11.5	504.0	494.0	Fill/Till	2010	ARCADIS
PZ - 23	1.5" PVC	2	507.05	510.07	20.0	18.0	20.0	489.1	487.1	Till	2010	ARCADIS
PZ - 24	1.5" PVC	10	504.77	504.77	14.0	4.0	14.0	500.8	490.8	Fill/Till	2010	ARCADIS
PZ - 25	1.5" PVC	10	507.54	510.62	20.0	10.0	20.0	497.5	487.5	Fill/Till	2010	ARCADIS
PZ - 26	1.5" PVC	10	507.80	510.95	20.0	10.0	20.0	497.8	487.8	Fill/Till	2010	ARCADIS
PZ - 27	1.5" PVC	10	504.39	504.12	15.0	5.0	15.0	499.4	489.4	Fill/Till	2010	ARCADIS
PZ - 28	1.5" PVC	10	504.39	504.12	12.0	2.0	12.0	502.4	492.4	Fill/Till	2010	ARCADIS
PZ - 29	1.5" PVC	10	504.06	503.84	12.0	2.0	12.0	502.1	492.1	Fill/Till	2010	ARCADIS
PZ - 30	1.5" PVC	8	505.08	504.72	10.0	2.0	10.0	503.1	495.1	Fill/Till	2010	ARCADIS
PZ - 31	1.5" PVC	8	505.56	505.17	10.0	2.0	10.0	503.6	495.6	Fill/Till	2010	ARCADIS
PZ - 32	1.5" PVC	9	505.29	504.90	11.0	2.0	11.0	503.3	494.3	Fill/Till	2010	ARCADIS
PZ - 33	1.5" PVC	4.5	510.27	510.00	6.5	2.0	6.5	508.3	503.8	Fill/Till	2010	ARCADIS
PZ - 34	1.5" PVC	9	504.12	503.88	11.0	2.0	11.0	502.1	493.1	Fill/Till	2010	ARCADIS
PZ - 35	1.5" PVC	8	504.18	503.98	12.0	2.0	12.0	502.2	492.2	Fill/Till	2010	ARCADIS
PZ - 36	1.5" PVC	10	504.23	504.23	12.0	2.0	12.0	502.2	492.2	Fill/Till	2010	ARCADIS
PZ - 39	1.5" PVC	10	504.71	504.51	12.0	2.0	12.0	502.7	492.7	Fill/Till	2010	ARCADIS
PZ - 40	1.5" PVC	10	506.46	506.68	11.5	1.5	11.5	505.0	495.0	Fill/Till	2010	ARCADIS
PZ - 41	1.5" PVC	10	506.55	506.27	11.5	1.5	11.5	505.1	495.1	Fill/Till	2010	ARCADIS
A1 - PZ - 1	1.5" PVC	10	503.96	503.77	12.5	2.5	12.5	501.5	491.5	Fill/Till	2010	ARCADIS
A1 - PZ - 2	1.5" PVC	10	503.25	503.00	12.0	2.0	12.0	501.3	491.3	Fill/Till	2010	ARCADIS
A2 - PZ - 1	1.5" PVC	10	510.04	509.00	15.0	5.0	15.0	505.0	495.0	Fill/Till	2010	ARCADIS
A2 - PZ - 2	1.5" PVC	10	509.90	509.74	15.0	5.0	15.0	504.9	494.9	Fill/Till	2010	ARCADIS
A2 - PZ - 3	1.5" PVC	10	509.67	509.46	12.0	2.0	12.0	507.7	497.7	Fill/Till	2010	ARCADIS
A2 - PZ - 4	1.5" PVC	12	509.56	509.40	15.0	3.0	15.0	506.6	494.6	Fill/Till	2010	ARCADIS
A2 - PZ - 5	1.5" PVC	10	510.24	510.03	12.0	2.0	12.0	508.2	498.2	Fill/Till	2010	ARCADIS
A2 - PZ - 6	1.5" PVC	12	509.92	509.74	14.0	2.0	14.0	507.9	495.9	Fill/Till	2010	ARCADIS
A2 - PZ - 7	1.5" PVC	12.5	509.74	509.59	15.0	2.5	15.0	507.2	494.7	Fill/Till	2010	ARCADIS
A2 - PZ - 8	1.5" PVC	12	509.91	509.70	14.5	1.5	14.5	508.4	495.4	Fill/Till	2010	ARCADIS

Notes:
1. All elevations are reported as feet mean sea level (ft msl).
2. Construction details for MW-1, MW-6, PZ-2, and PZ-4 through PZ-7 estimated based on field measurements.
3. ft bgs = feet below ground surface
4. PVC - polyvinyl chloride
5. Survey data referenced horizontally to the NAD83 and projected on the New York State Plane Coordinate System (Central Zone).
6. The reference vertical benchmark is the finished floor elevation of the southeasterly corner of the Boiler House Building (Elevation 506.50 feet).
7. -- = unknown detail

Table 3-4

Table 3-4
List of Monitoring Wells Based on Objectives

Former Lockheed Martin French Road Facility
Utica, New York

Objective 1 Monitoring Network	Objective 2 Monitoring Network	Objective 3 Monitoring Network
MW-1	MW-5	MW-2
MW-3	MW-13S	MW-4
MW-18	MW-14BR	MW-10
MW-20	MW-21	PZ-7
PZ-5	PZ-18	
PZ-6	PZ-26	
PZ-8		
PZ-11R		
PZ-13R		
A1-PZ-2		
A2-PZ-1		
A2-PZ-2		

Note:
1. All wells will be measured for groundwater elevations on a quarterly basis for Objective 4 requirements.

Section 4
2012 MNA Program Evaluation

4.1 PROGRAM INTRODUCTION

The IGWMP calls for quarterly, semi-annual, and annual monitoring to evaluate the performance of the MNA remedy. The first groundwater-sampling event as part of the IGWMP was conducted on September 26–28, 2011. It constitutes the annual event for 2011. In 2012, four groundwater monitoring events were conducted on January 24th through the 25th, April 10th through the 11th, July 11th through the 12th, and October 2nd through the 4th. Selected constituents are summarized according to Objective-monitoring locations in Table 4-1; and are plotted spatially in Figures 4-1(a-d). Additional data are provided for monitoring wells MW-20 and A1-PZ-2, as these wells were sampled as part of the FNPD pilot test during April and July 2012 while concurrent sampling was taking place as part of the site-wide program. Those pilot test data for MW-20 and A1-PZ-2 are here summarized with the site-wide results. Historical chemical-analytical results of groundwater samples collected from piezometers and monitoring wells are summarized in Appendices A through C. Appendix A presents data collected from 1996–2008, Appendix B presents data collected from 2008–2009, Appendix C presents data collected in 2010, and results of the September 2011 sampling are summarized in Appendix D. Appendix E presents laboratory data related to 2012 sampling.

As prescribed in the IGWMP, evaluation of data for each of the four objectives will be conducted after each sampling event. The evaluation of the sampling events conducted in 2012 is presented in the following sections. The limited historical data set for several monitoring points (most monitoring points are newly installed) means that the statistical evaluation defined in the IGWMP cannot be applied to all locations until more data are collected as part of ongoing monitoring. Nonetheless, for those qualifying locations, available historical data that were

evaluated against recent results (in accordance with the IGWMP) and conclusions and recommendations are presented, where appropriate.

4.2 OBJECTIVE 1 WELL EVALUATIONS AND RESULTS

Groundwater quality from Objective 1 monitoring locations were assessed by comparing the analytical results to the NYSDEC TOGS 1.1.1 "Ambient Water Quality Standards and Guidance Values" (SGVs, Table 4-1). The constituents detected at the Site are similar to those previously identified. Chlorinated VOCs are among the predominant constituents detected at concentrations greater than the SGVs. In addition, dichlorodifluoromethane and 1,1,2-trichloro-1,2,2-trifluoroethane were detected at concentrations above the SGVs at sampling location A2-PZ-1. Non-aqueous-phase liquids were not detected in any wells during the well-gauging events in 2011 or 2012. COC concentrations at piezometer A2-PZ-1 continue to be greater than those reported historically at the site.

Long-term trend analysis of analytical results from Objective 1 wells evaluated whether an unexpected expansion of a contaminated area or a sustained increase in COC concentrations in the area of known contamination has occurred. Recent data were also compared against historical maximums. The eight most recent sampling results for a given well and any COC detected were used to complete the trend analysis. Samples included in this analysis were collected from February 1995 through October 2012.

To account for seasonal variations and to detect a current trend, two full years of data (eight rounds of quarterly data) is used for Mann-Kendall statistical analysis. The needed eight rounds of recent data for an accurate statistical analysis was limited to sampling locations MW-1, MW-3, A1-PZ-2, A2-PZ-1, and PZ-5. This is because other locations that were more recently installed and/or are less frequently sampled, lack the requisite eight or more data points needed for statistical evaluation. Currently, sample locations MW-18, MW-20, PZ-8, PZ-11R, and PZ-13R have five data points, and PZ-6 has seven points. The results from these statistical tests were used in conjunction with the performance-monitoring decision tree to select response actions for further evaluation. The site-wide performance-monitoring decision tree for Objective 1 sampling locations is presented on Figure 4-2.

The decision tree provides a common process for evaluating statistical results and triggering a response action (when necessary) to ensure remedy effectiveness. The performance-monitoring well network monitors long-term trends in recognized areas of contamination, based on the objectives of the IGWMP. Persistent, increasing trends and/or a sudden increase in individual COC concentrations may signify unexpected changes in the plume and therefore initiate a response action within the decision tree. The three results of statistical analyses that trigger an action are (1) a statistically increasing trend, (2) a sudden increase, and (3) exceedance of a historical maximum paired with an increasing trend.

The initial step of the overall trend analysis is to screen COC concentrations found in Objective 1 wells against their respective cleanup goals. If the eight most recent results for a specific COC at a monitoring well were less than its respective cleanup goal, the COC trend analysis for that particular well was not performed. If any of the eight most recent results for a specific COC at Objective 1 wells were equal to or greater than the respective cleanup goals, then a statistical-trend method using the non-parametric Mann-Kendall test was employed. A pre-statistical test evaluation was also included to develop concentration/time plots of data from a given well, which can identify temporal patterns in the data, such as periodic fluctuations (e.g., seasonality), or an overall trend in the data (e.g., increasing, decreasing, or stable).

The statistics for the Mann-Kendall test were calculated on a spreadsheet following USEPA (2009) guidance. The Mann-Kendall trend test is a non-parametric test that evaluates trends based on ranked concentration-data, rather than individual concentration-values. Mann-Kendall trend tests were conducted to evaluate concentration trends without the potential confounding effects of large variations in concentrations over time at a given location. A series of pair-wise slopes were calculated to determine the change in the concentration divided by the time interval between sequential sampling events. A test-statistic "S" was computed based on the difference between the number of pair-wise slopes that are strictly positive differences and negative differences (i.e., increasing or decreasing within the pair, respectively). The null hypothesis of *no trend* (equal numbers of positive and negative differences) was evaluated at a 95% confidence interval.

The p-value of the correlation provides a measure of the level of significance of the statistical test. Correlations were accepted as significant for p-values less than or equal to 0.05 (significant

trend identified at the 95% confidence level) and not significant for p-values greater than 0.05 (no significant trend identified at the 95% confidence level,). The trend direction was defined based on review of concentration/time plots of data from a given location. Trend direction was defined as decreasing if concentrations indicated a significant decreasing trend over time, or increasing if concentrations indicated a significant increasing trend over time.

Where non-detect concentrations were used in computations, the concentrations were assumed to be one-half the method detection limits. Use of this value for concentrations that were below detection provides a commonly acceptable estimate for evaluating concentration trends over time. Wells with greater than 50% non-detects were not included in the analysis.

The term *sudden increase* identifies an unexpected increase in COC concentrations. Evaluation of monitoring data identified sudden increases that may have occurred after implementation of the MNA remedy. The most recent eight samples were used to calculate a COC-specific mean and standard deviation. A result exceeding the mean plus three standard deviations was considered a sudden increase. The most recent concentration of a given COC in a well was compared to this threshold to determine whether a sudden increase had occurred. An *exceedance of a historical maximum* is a term used in the Objective 1 decision tree and defined as any value exceeding the maximum concentration of the entire historical data set. After each sampling event, the concentrations of COC detected were compared with their respective historical maximums for each location.

The results of the Mann-Kendall analysis, including interpretation of trend directions and p-values of the test at the 95% confidence level, are summarized in Table 4-2. Results of the sudden increase evaluation for the selected Objective 1 wells are presented alongside the trend analysis in Table 4-2. The table also presents historical maximums for statistically qualified locations. Trend directions listed in Table 4-2 are summarized from the review of concentration/time plots presented as Figures 4-3a through 4-3j.

As shown in Table 4-2, no increasing trends were identified for Objective 1 locations A1-PZ-2, A2-PZ-1, MW-1, MW-3, and PZ-5. All identified trends from Mann-Kendall analysis were determined to be decreasing based on review of respective concentration/time plots. No sudden increases or historical maximum exceedances were identified. The statistical results of monitoring data from sampling locations A1-PZ-2, A2-PZ-1, MW-1, MW-3, and PZ-5 were

reviewed according to the steps in the performance-monitoring decision tree shown in Figure 4-2. Each of these sampling locations are subject only to continued monitoring (as indicated in the decision tree) because these results do not identify increasing trends, sudden increases, or exceeded maximums.

4.3 OBJECTIVE 2 WELL EVALUATIONS AND RESULTS

The Objective 2 monitoring wells are intended to confirm that contamination is not spreading to uncontaminated areas of the site. Objective 2 monitoring wells are MW-5, MW-13S, MW-14BR, MW-21, PZ-18, and PZ-26. Results from these wells are summarized and compared to cleanup goals in Table 4-1. These results are also plotted spatially on a facility plan in Figure 4-1. With the exception of vinyl chloride at MW-21 (newly installed, November 2011), all other COCs in Objective 2 wells are below SGVs and most of these COCs are below their detection limits (Table 4-1). No historic data are available for monitoring well MW-21. Vinyl chloride concentrations detected in this well (6.5 to 13 ug/l in Table 4-1) during three 2012 monitoring events are of similar levels that do not readily identify an increasing or decreasing trend. Vinyl chloride was earlier detected at 12 ug/l in a groundwater sample collected from MW-21 in November 2011 as part of the FNPD pre-design investigation. This earlier concentration is consistent with 2012 vinyl chloride levels. Therefore, the presence of one contaminant (vinyl chloride) at a relatively constant level at this location does not prove/disprove spreading of contaminants. In general, the results of Objective 2 monitoring wells indicate that contamination is not spreading to uncontaminated areas of the site.

4.4 OBJECTIVE 3 WELL EVALUATIONS AND RESULTS

The Objective 3 monitoring wells defined in the IGWMP monitor contaminant levels at potential exposure points under current land use conditions such that, in the event that subsurface work is performed in Objective 3 areas, workers may be informed in advance of the types and levels of chemicals present. Based on this information, subsurface work can be performed while employing appropriate worker protection and waste management procedures. Wells selected for this objective are in locations that would be potential areas of subsurface work, including both interior and exterior areas. With respect to Objective 3, all COC in well PZ-7 are below their respective cleanup goals (Table 4-1). In well MW-4, only one constituent (vinyl chloride) was detected above its SGV. Vinyl chloride was also detected above its SGV in well MW-2, and at

well MW-10 only two constituents, cis-1,2-DCE, and vinyl chloride, remain above cleanup goals during 2012 sampling events.

4.5 OBJECTIVE 4 WELL EVALUATIONS AND RESULTS

Objective 4 monitoring wells defined in the IGWMP monitor hydrologic conditions at the site over time to identify any changes in groundwater flow that might alter the basis of the assumptions used to create the IGWMP. This includes evaluating groundwater elevations in both the overburden and bedrock monitoring wells. Monitoring wells that support this objective span the site (laterally and vertically) and will detect changes in groundwater flow and the direction of potential contaminant migration. All on-site monitoring wells are monitored quarterly for groundwater elevations and are included as Objective 4 locations. Groundwater-elevation data from the 2012 monitoring events are summarized in Table 3-2 and shown in Figures 3-2 (a-d). The elevation data indicate that groundwater is generally flowing to the southeast, with localized variations due to the effects of the GCTS, utility corridors, and other subsurface features, which is consistent with historical observations.

4.6 SITE GEOCHEMISTRY EVALUATION

Field parameters consisting of pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), specific conductivity, and temperature are periodically collected to evaluate potential natural-attenuation mechanisms at the site. Additional geochemical parameters, including ferrous iron (via a field kit), nitrate, sulfate, total alkalinity, total organic carbon (TOC), and methane, are also periodically collected at selected locations. These data provide information on geochemical conditions, which help assess whether the chemical and biological degradation mechanisms of natural attenuation could be occurring.

Geochemistry results for the 2012 sampling events are summarized below. Table 4-3 provides the field parameters and geochemical parameters for all monitoring locations sampled during 2012:

- The pH measured was in the neutral range (6.2–8.0), except for well A1-PZ-2 (pH 2.3 in July 2012), which was identified as an instrument error.
- Nitrate concentrations were generally low (≤ 2 mg/L); an indication of nitrate reducing environment. Nitrate concentrations measured at most of the locations were near or

below the detection limit, except for well MW-1, where the nitrate concentration was measured at 2 mg/L in October 2012 and 1.9 mg/L in January 2012.

- Dissolved Oxygen (DO) concentrations remain relatively low (0.2 mg/L to 4.34 mg/L during October 2012 sampling event) for most sampling locations. A gradual decrease of DO concentration was observed for wells PZ-11R and A1-PZ-2, where DO concentrations decreased to 2.91 mg/L and 0.1 mg/L from 4.34 mg/L and 8.24 mg/L, respectively, over the 2012 monitoring events. It should be noted that the DO reading of 8.24 mg/L, was most likely an error associated with the DO meter itself and not a decreasing trend. Several other wells indicated single, isolated readings of DO greater than 4.0 mg/L during the reporting period. Though a decrease in DO concentration is observed for most of the sampling locations during 2012 monitoring events, the validity of DO concentrations trend will be further considered with future results.

- Consistent with previous sampling events, methane concentrations were detected in all wells selected for analysis (18 mg/L to 2800 mg/L). Methane concentration at A1-PZ-2 and A2-PZ-1 were significantly higher than all other locations, which is consistent with the 2011 sampling event.

- ORP measurements during January 2012 and October 2012 were all negative (-254.5 mV to -2.0 mV), indicating slightly to moderately reducing conditions during those monitoring rounds. The magnitude of several ORP measurements in October 2012, particularly in the context of companion DO concentrations, suggest a possible field instrument error. The validity of these data will be further considered with future results. The limitations of ORP field measurements when using ORP data should be noted. ORP measurements are semi-quantitative and are less reliable redox indicators, since they are sensitive to interferences from aquifer geochemical conditions (USEPA Region 4, 2009).

- Ferrous iron is measureable in all sampled locations (except MW-1, MW-3, and A2-PZ-2), with higher concentrations measured during October 2012 sampling event at MW-20 (2.9 mg/L), MW-14BR (2.6 mg/L), A1-PZ-1 (1.7 mg/L) and MW-10 (3.0 mg/L). These detections are an indication of mild reducing conditions across the site.

- Total Organic Carbon (TOC) was evaluated at select wells between April and October 2012 (MW-1, MW-3, PZ-13R, A1-PZ-2 and A2-PZ-1). Detected concentrations ranged from 0.47 mg/L to 6.9 mg/L). TOC concentrations at A2-PZ-1 were higher than all other locations ranging from a low of 3.3 mg/L to a high of 6.9 mg/L.

Geological characterization shows a dark-gray clay lens in the till at most site locations. Gray clay is typically observed in iron-to-sulfate reducing conditions, as iron oxyhydroxide in the aquifer sediment is reduced to Fe^{2+} minerals. The presence of reduced-iron minerals suggests that the natural-attenuation mechanism for abiotic degradation of chlorinated VOCs may be active at this site. As demonstrated in many laboratory and field studies reviewed by USEPA (USEPA, 2009), reactive iron minerals such as iron sulfides, pyrite, magnetite, green rust, and a number of Fe(II)-containing clay minerals commonly observed in reducing environments may

play a significant role degrading chlorinated solvents through abiotic mechanisms. Taken together, site geochemical conditions (neutral pH and reducing environment) may be conducive to the natural degradation of chlorinated VOCs by biotic and/or abiotic pathways at the study area.

4.7 DATA VALIDATION

Groundwater-sample analyses were performed according to USEPA SW-846 Method 8260B. Data were reviewed in accordance with the USEPA *National Functional Guidelines* (USEPA, 1999) and January 2005. Data packages were compiled by a New York State-certified laboratory and prepared as New York State "analytical services protocol Category B" deliverables. The review was conducted as a "NYSDEC Tier III evaluation" and included a review of data-package completeness. Field documentation was not included, but the validation-annotated sampling-result sheets and chain-of-custody documentation were. Data usability summary reports were completed in accordance with NYSDEC DER-10 (*Technical Guidance for Site Investigation and Remediation* [May 2010]).

Data review evaluates data technically, rather than simply determining contract compliance. As such, the standards against which the data are weighed may differ from those specified in the contractually stipulated analytical method. The data package is thus presumed to represent the best efforts of the laboratory, and the data are likewise presumed to have been subjected to adequate and sufficient quality review before submission. During data review, laboratory qualified and unqualified data are verified against the supporting documentation. The data reviewer may add, delete, or modify qualifier codes. The NYSDEC ASP Category-B deliverable data review includes checks of the following:

- chain-of-custody forms;
- holding times;
- GC/MS instrument performance-checks;
- instrument calibration;
- trip- and/or laboratory (method)-blank detected constituents;
- surrogate-spike recoveries;

- matrix-spike/matrix-spike-duplicate precision and accuracy;
- internal standards;
- checking for transcriptions between quantitation reports and laboratory, hard-copy Form "I"s; and
- blind-duplicate precision.

The data validator performed final validation of data obtained during field sampling and analysis. Laboratory deliverables were reviewed for accuracy, precision, completeness, and overall data quality. All laboratory data were reviewed for adherence to method-specific quality assurance/quality control (QA/QC) guidelines and the data-validation guidelines described above.

***Data usability*—**The review classified the data as valid, usable, or unusable. Valid data are data for which all QA/QC review criteria have been met and that are acceptable (as per details outlined in the preceding section). Data were characterized as usable when QA/QC parameters were marginally outside acceptable limits (e.g., sample holding times had been slightly exceeded), such that the data may be questionable, but still usable with limitations. Unusable data are data observed to have gross errors or analytical interference that would render them invalid for any purpose. Data usability summary reports were prepared in accordance with NYSDEC guidance and are included as Appendix G. Data qualifications resulting from validation are included in the data tables. All data reviewed are considered usable based on the validation as described above. During FY 2013, in accordance with NYSDEC's written approval, *Data Validation Requirements Interim Groundwater Monitoring Plan, (NYSDEC, 5/24/2012*); DUSRS will be prepared for fourth quarter (October 2013) data only.

Figure 4-1a

CITY:MAHWAH DIV/GROUP:ENVIRONMENTAL DB:J.GONZALEZ LD:J.BONSTEEL PIC:L.MCBURNEY PM:C.MOTTA TM:J.BONSTEEL LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\RETURN-TO\Fairlawn-NJ\NJ001040000\100303\DWG\2012-ANNUAL GW\01040C01rev.dwg LAYOUT: 4-1A SAVED: 2/7/2013 3:32 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/7/2013 7:05 PM BY:
SANCHEZ, ADRIAN
XREFS: IMAGES: PROJECTNAME: ---

A1–PZ–2	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	0.48 J
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 UB
cis–1,2 DCE	**22**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	1.0 U
VC	**11**
Xylenes, total	2.0 U

A2–PZ–1	
1,1,1–TCA	250 U
1,1,2,TCA	250 U
1,1,2–TFA	**1900**
1,1–DCA	**2800**
1,1–DCE	250 U
1,2–DCA	250 U
Acetone	2500 U
cis–1,2 DCE	**42000 D**
Dichlorodifluoromethane	**1200**
Ethylbenzene	250 U
Methylene Chloride	250 U
PCE	250 U
Toluene	250 U
trans 1,2–DCE	250 U
TCE	**2300**
VC	**1800**
Xylenes, total	500 U

MW–2	
1,1,1–TCE	––
1,1,2,TCA	––
1,1,2–TFA	––
1,1–DCA	––
1,1–DCE	––
1,2–DCA	––
Acetone	––
cis–1,2 DCE	––
Dichlorodifluoromethane	––
Ethylbenzene	––
Methylene Chloride	––
PCE	––
Toluene	––
trans 1,2–DCE	––
TCE	––
VC	––
Xylenes, total	––

MW–1	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	3.8
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	**35**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**78**
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	**23**
VC	1.5
Xylenes, total	2.0 U

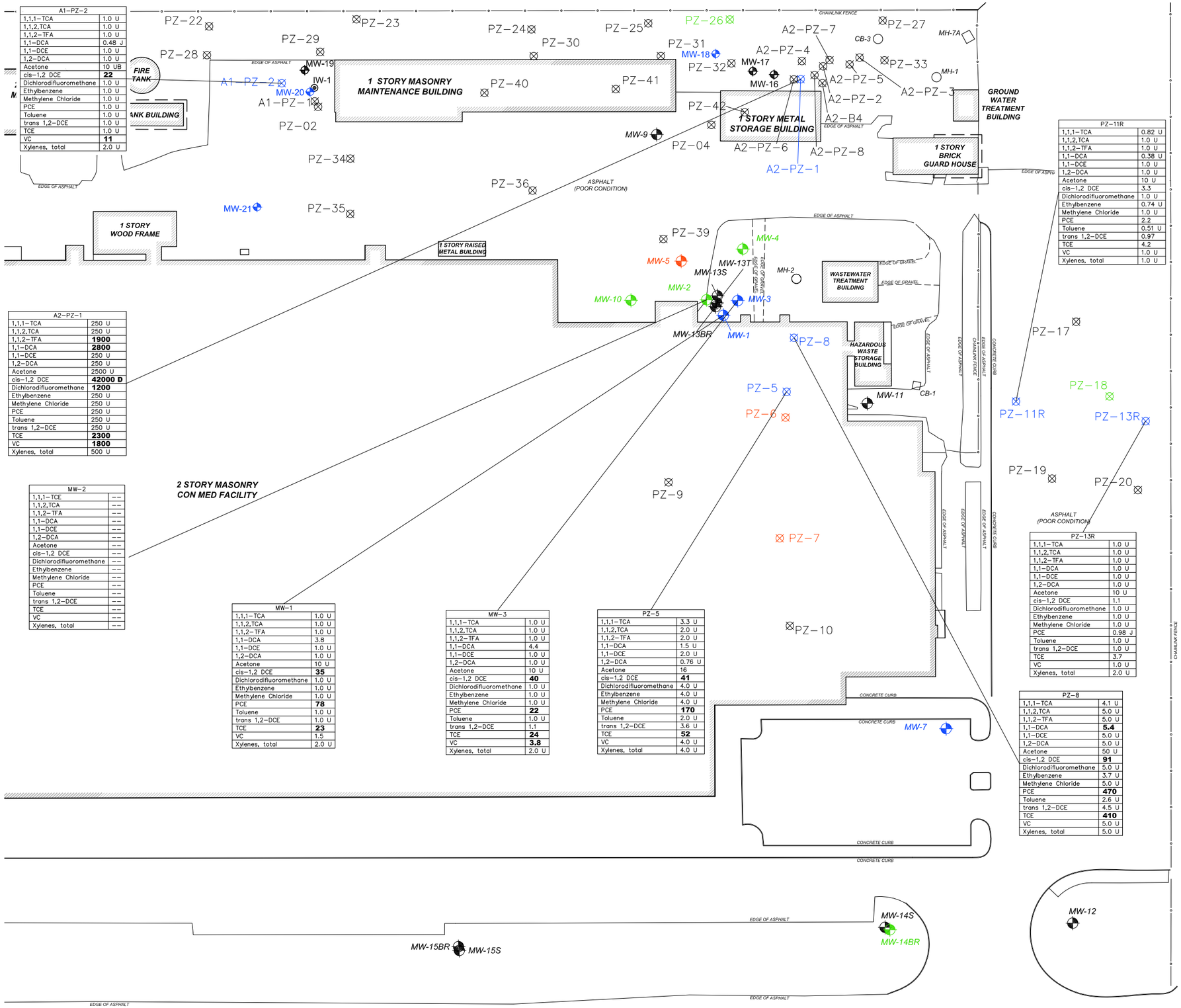
MW–3	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	4.4
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	**40**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**22**
Toluene	1.0 U
trans 1,2–DCE	1.1
TCE	**24**
VC	**3.8**
Xylenes, total	2.0 U

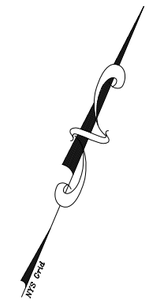
PZ–5	
1,1,1–TCA	3.3 U
1,1,2,TCA	2.0 U
1,1,2–TFA	2.0 U
1,1–DCA	1.5 U
1,1–DCE	2.0 U
1,2–DCA	0.76 U
Acetone	16
cis–1,2 DCE	**41**
Dichlorodifluoromethane	4.0 U
Ethylbenzene	4.0 U
Methylene Chloride	4.0 U
PCE	**170**
Toluene	2.0 U
trans 1,2–DCE	3.6 U
TCE	**52**
VC	4.0 U
Xylenes, total	4.0 U

PZ–11R	
1,1,1–TCA	0.82 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	0.38 U
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	3.3
Dichlorodifluoromethane	1.0 U
Ethylbenzene	0.74 U
Methylene Chloride	1.0 U
PCE	2.2
Toluene	0.51 U
trans 1,2–DCE	0.97
TCE	4.2
VC	1.0 U
Xylenes, total	1.0 U

PZ–13R	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	1.0 U
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	1.1
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	0.98 J
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	3.7
VC	1.0 U
Xylenes, total	2.0 U

PZ–8	
1,1,1–TCA	4.1 U
1,1,2,TCA	5.0 U
1,1,2–TFA	5.0 U
1,1–DCA	**5.4**
1,1–DCE	5.0 U
1,2–DCA	5.0 U
Acetone	50 U
cis–1,2 DCE	**91**
Dichlorodifluoromethane	5.0 U
Ethylbenzene	3.7 U
Methylene Chloride	5.0 U
PCE	**470**
Toluene	2.6 U
trans 1,2–DCE	4.5 U
TCE	**410**
VC	5.0 U
Xylenes, total	5.0 U





0 40 80 120
SCALE IN FEET

LEGEND:

MW 10	MONITORING WELL LOCATION
PZ–9	PIEZOMETER LOCATION
IW-1	INJECTION WELL LOCATION
	QUARTERLY SAMPLING
	SEMI ANNUAL SAMPLING
	ANNUAL SAMPLING
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
cis–1,2–DCE	cis–1,2–DICHLOROETHENE
trans–1,2–DCE	trans–1,2–DICHLOROETHENE
VC	VINYL CHLORIDE
1,1,1–TCA	1,1,1–TRICHLOROETHANE
1,1–DCA	1,1–DICHLOROETHANE
1,2–DCA	1,2–DICHLOROETHANE
1,1–DCE	1,1–DICHLOROETHENE
1,1,2–TCA	1,1,2–TRICHLOROETHANE
1,1,2–TFA	1,1,2–TRICHLORO–1,2,2–TRIFLUOROETHANE

NOTES:

1. LABORATORY ANALYSIS TCL EPA 624/SW846 8260.
2. CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l).
3. DATA COMPARED TO TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES.
4. EXCEEDENCES OF STANDARDS AND GUIDANCE VALUES NOTED IN BOLD.
5. D FLAG IDENTIFIES DILUTED SAMPLE RESULTS WITHIN CALIBRATION RANGE.
6. E FLAG IDENTIFIES THAT CONCENTRATION EXCEEDED CALIBRATION RANGE.
7. J FLAG IDENTIFIES ESTIMATED CONCENTRATION.
8. U FLAG IDENTIFIES CONCENTRATION BELOW DETECTION, QUANTITATION LIMIT VALUE USED.
9. WELL MW–13S WAS NOTED TO BE DRY AND WAS UNABLE TO BE SAMPLED IN JANUARY 2012.

2012 ANNUAL GROUNDWATER MONITORING REPORT

FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

GROUNDWATER MONITORING DATA JANUARY 2012

ARCADIS

FIGURE
4-1A

Figure 4-1b

CITY:MAHWAH DIV/GROUP:ENVIRONMENTAL DB:J.GONZALEZ LD:J.BONSTEEL PIC:L.MCBURNEY PM:C.MOTTA TM:J.BONSTEEL LYR:(OptION■"OFF■"REF"
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SANCHEZ, ADRIAN
XREFS: IMAGES: PROJECTNAME: --

A1–PZ–2	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	1.1
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 UB
cis–1,2 DCE	**58**
Dichlorodifluoromethane	1.0 J
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	1.2
VC	**24**
Xylenes, total	2.0 U

A2–PZ–2	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	**12**
1,1–DCE	1.5
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	**210 D**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	**9**
Methylene Chloride	1.0 U
PCE	**2300 D**
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	**740 D**
VC	**14**
Xylenes, total	2.0 U

PZ–11R	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	1.0 U
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	1.9
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	2.7
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	4.5
VC	1.0 U
Xylenes, total	2.0 U

MW–20	
1,1,1–TCA	16 U
1,1,2–TCA	4.6 U
1,1,2–TFA	6.2 U
1,1–DCA	7.6 U
1,1–DCE	5.8 U
1,2–DCA	15 U
Acetone	**200**
cis–1,2–DCE	**1400 J**
Dichlorodifluoromethane	14 UJ
Ethylbenzene	15 U
Methylene Chloride	8.8 U
PCE	**7.2 U**
Toluene	10 U
trans–1,2–DCE	**18 J**
TCE	**170**
VC	**63**
Xylenes, total	13 U

MW–21	
1,1,1–TCA	1.0 U
1,1,2–TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	1.0 U
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2–DCE	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans–1,2–DCE	1.0 U
TCE	1.0 U
VC	**9.3**
Xylenes, total	2.0 U

MW–18	
1,1,1–TCA	1.0 U
1,1,2–TCA	1.0 U
1,1,2–TFA	1.2
1,1–DCA	**20 D**
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2–DCE	**420 D**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	0.91 J
Methylene Chloride	1.0 U
PCE	**64 D**
Toluene	1.9
trans–1,2–DCE	1.0 U
TCE	**420 D**
VC	**5.5**
Xylenes, total	1.3 J

A2–PZ–1	
1,1,1–TCA	250 U
1,1,2,TCA	250 U
1,1,2–TFA	**1300**
1,1–DCA	**1900**
1,1–DCE	250 U
1,2–DCA	250 U
Acetone	2500 U
cis–1,2 DCE	**24000**
Dichlorodifluoromethane	**830**
Ethylbenzene	250 U
Methylene Chloride	250 U
PCE	250 U
Toluene	250 U
trans 1,2–DCE	250 U
TCE	**4100**
VC	**940**
Xylenes, total	500 U

MW–5	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	1.0 U
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	1.0 U
VC	1.0 U
Xylenes, total	1.0 U

MW–1	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	4.2
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	**34**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**50**
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	**18**
VC	1.7
Xylenes, total	2.0 U

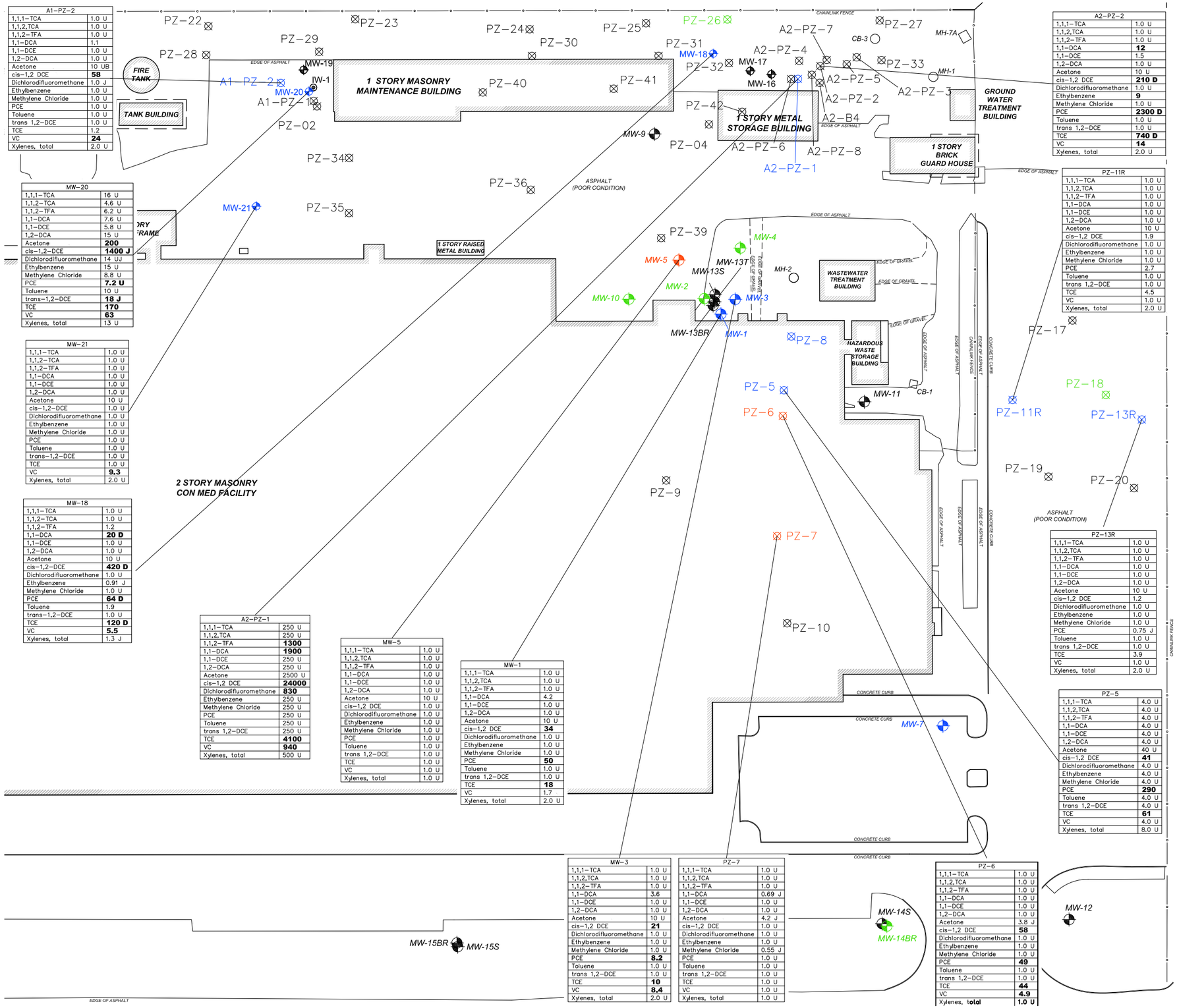
MW–3	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	3.6
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	**21**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**8.2**
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	**10**
VC	**8.4**
Xylenes, total	2.0 U

PZ–7	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	0.69 J
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	4.2 J
cis–1,2 DCE	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	0.55 J
PCE	1.0 U
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	1.0 U
VC	1.0 U
Xylenes, total	1.0 U

PZ–6	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	1.0 U
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	3.8 J
cis–1,2 DCE	**58**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**49**
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	**44**
VC	**4.9**
Xylenes, total	**1.0 U**

PZ–13R	
1,1,1–TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2–TFA	1.0 U
1,1–DCA	1.0 U
1,1–DCE	1.0 U
1,2–DCA	1.0 U
Acetone	10 U
cis–1,2 DCE	1.2
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	0.75 J
Toluene	1.0 U
trans 1,2–DCE	1.0 U
TCE	3.9
VC	1.0 U
Xylenes, total	2.0 U

PZ–5	
1,1,1–TCA	4.0 U
1,1,2,TCA	4.0 U
1,1,2–TFA	4.0 U
1,1–DCA	4.0 U
1,1–DCE	4.0 U
1,2–DCA	4.0 U
Acetone	40 U
cis–1,2 DCE	**41**
Dichlorodifluoromethane	4.0 U
Ethylbenzene	4.0 U
Methylene Chloride	4.0 U
PCE	**290**
Toluene	4.0 U
trans 1,2–DCE	4.0 U
TCE	**61**
VC	4.0 U
Xylenes, total	8.0 U





0 40 80 120
SCALE IN FEET

LEGEND:

MW 10	MONITORING WELL LOCATION
PZ–9	PIEZOMETER LOCATION
IW-1	INJECTION WELL LOCATION
	QUARTERLY SAMPLING
	SEMI ANNUAL SAMPLING
	ANNUAL SAMPLING
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
cis–1,2–DCE	cis–1,2–DICHLOROETHENE
trans–1,2–DCE	trans–1,2–DICHLOROETHENE
VC	VINYL CHLORIDE
1,1,1–TCA	1,1,1–TRICHLOROETHANE
1,1–DCA	1,1–DICHLOROETHANE
1,2–DCA	1,2–DICHLOROETHANE
1,1–DCE	1,1–DICHLOROETHENE
1,1,2–TCA	1,1,2–TRICHLOROETHANE
1,1,2–TFA	1,1,2–TRICHLORO–1,2,2–TRIFLUOROETHANE

NOTES:

1. LABORATORY ANALYSIS TCL EPA 624/SW846 8260.
2. CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l).
3. DATA COMPARED TO TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES.
4. EXCEEDENCES OF STANDARDS AND GUIDANCE VALUES NOTED IN BOLD.
5. D FLAG IDENTIFIES DILUTED SAMPLE RESULTS WITHIN CALIBRATION RANGE.
6. E FLAG IDENTIFIES THAT CONCENTRATION EXCEEDED CALIBRATION RANGE.
7. J FLAG IDENTIFIES ESTIMATED CONCENTRATION.
8. U FLAG IDENTIFIES CONCENTRATION BELOW DETECTION, QUANTITATION LIMIT VALUE USED.
9. WELLS PZ–8 AND MW–13S WERE NOTED TO BE DRY AND UNABLE TO BE SAMPLED IN APRIL 2012.

2012 ANNUAL GROUNDWATER MONITORING REPORT

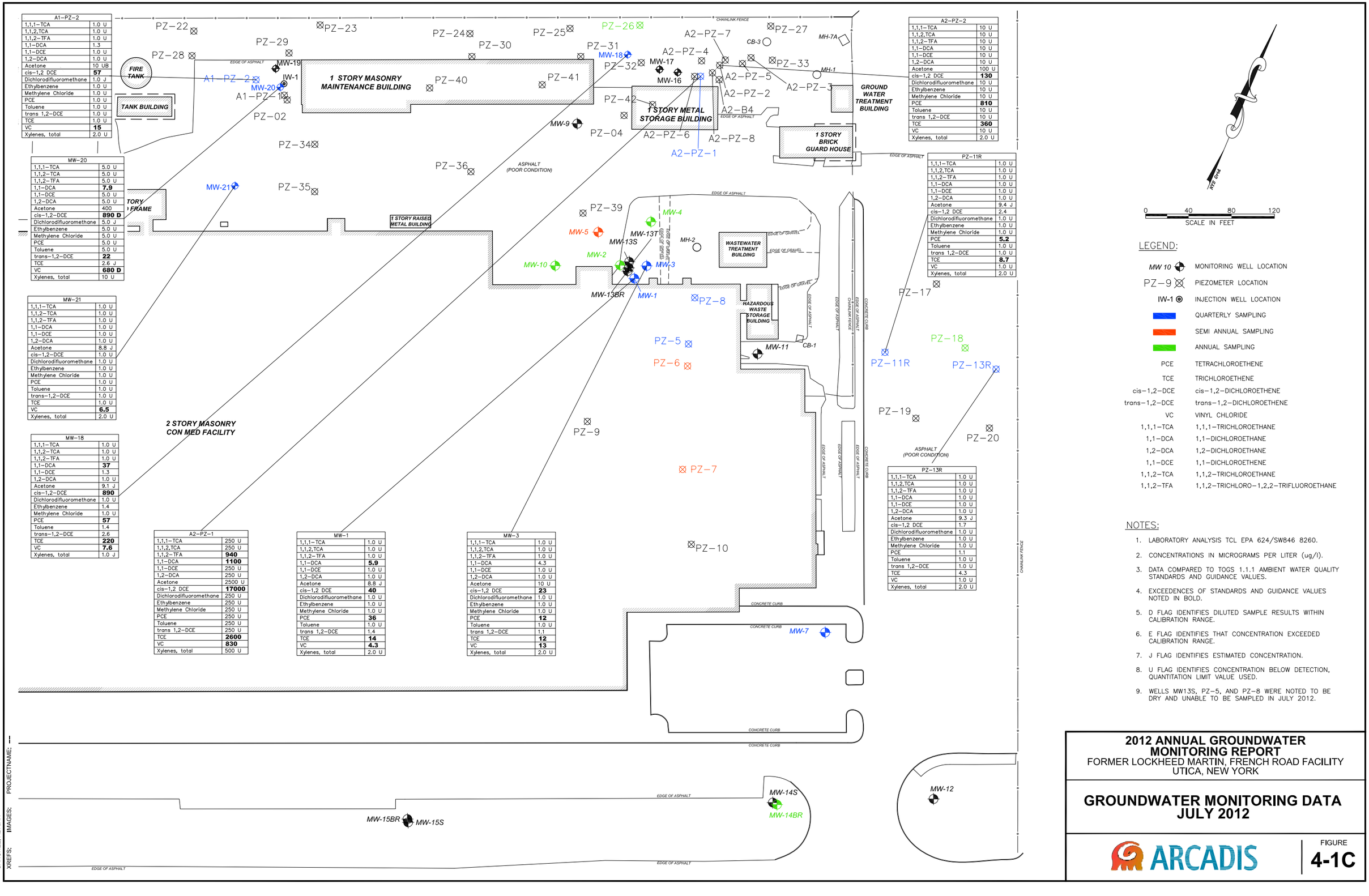
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

GROUNDWATER MONITORING DATA APRIL 2012

ARCADIS

FIGURE
4-1B

Figure 4-1c



A1-PZ-2	
1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.3
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 UB
cis-1,2 DCE	**57**
Dichlorodifluoromethane	1.0 J
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	1.0 U
VC	**15**
Xylenes, total	2.0 U

MW-20	
1,1,1-TCA	5.0 U
1,1,2-TCA	5.0 U
1,1,2-TFA	5.0 U
1,1-DCA	**7.9**
1,1-DCE	5.0 U
1,2-DCA	5.0 U
Acetone	400
cis-1,2-DCE	**890 D**
Dichlorodifluoromethane	5.0 J
Ethylbenzene	5.0 U
Methylene Chloride	5.0 U
PCE	5.0 U
Toluene	5.0 U
trans-1,2-DCE	**22**
TCE	2.6 J
VC	**680 D**
Xylenes, total	10 U

MW-21	
1,1,1-TCA	1.0 U
1,1,2-TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	8.8 J
cis-1,2-DCE	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans-1,2-DCE	1.0 U
TCE	1.0 U
VC	**6.5**
Xylenes, total	2.0 U

MW-18	
1,1,1-TCA	1.0 U
1,1,2-TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	**37**
1,1-DCE	1.3
1,2-DCA	1.0 U
Acetone	9.1 J
cis-1,2-DCE	**890**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.4
Methylene Chloride	1.0 U
PCE	**57**
Toluene	1.4
trans-1,2-DCE	2.6
TCE	**220**
VC	**7.6**
Xylenes, total	1.0 J

A2-PZ-1	
1,1,1-TCA	250 U
1,1,2,TCA	250 U
1,1,2-TFA	**940**
1,1-DCA	**1100**
1,1-DCE	250 U
1,2-DCA	250 U
Acetone	2500 U
cis-1,2 DCE	**17000**
Dichlorodifluoromethane	250 U
Ethylbenzene	250 U
Methylene Chloride	250 U
PCE	250 U
Toluene	250 U
trans 1,2-DCE	250 U
TCE	**2600**
VC	**830**
Xylenes, total	500 U

MW-1	
1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	**5.9**
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	8.8 J
cis-1,2 DCE	**40**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**36**
Toluene	1.0 U
trans 1,2-DCE	1.4
TCE	**14**
VC	**4.3**
Xylenes, total	2.0 U

MW-3	
1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	4.3
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	**23**
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**12**
Toluene	1.0 U
trans 1,2-DCE	1.1
TCE	**12**
VC	**13**
Xylenes, total	2.0 U

A2-PZ-2	
1,1,1-TCA	10 U
1,1,2,TCA	10 U
1,1,2-TFA	10 U
1,1-DCA	10 U
1,1-DCE	10 U
1,2-DCA	10 U
Acetone	100 U
cis-1,2 DCE	**130**
Dichlorodifluoromethane	10 U
Ethylbenzene	10 U
Methylene Chloride	10 U
PCE	**810**
Toluene	10 U
trans 1,2-DCE	10 U
TCE	**360**
VC	10 U
Xylenes, total	2.0 U

PZ-11R	
1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	9.4 J
cis-1,2 DCE	2.4
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**5.2**
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	**8.7**
VC	1.0 U
Xylenes, total	2.0 U

PZ-13R	
1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	9.3 J
cis-1,2 DCE	1.7
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.1
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	4.3
VC	1.0 U
Xylenes, total	2.0 U

LEGEND:

MW 10	MONITORING WELL LOCATION
PZ-9	PIEZOMETER LOCATION
IW-1	INJECTION WELL LOCATION
	QUARTERLY SAMPLING
	SEMI ANNUAL SAMPLING
	ANNUAL SAMPLING
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
cis-1,2-DCE	cis-1,2-DICHLOROETHENE
trans-1,2-DCE	trans-1,2-DICHLOROETHENE
VC	VINYL CHLORIDE
1,1,1-TCA	1,1,1-TRICHLOROETHANE
1,1-DCA	1,1-DICHLOROETHANE
1,2-DCA	1,2-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,1,2-TCA	1,1,2-TRICHLOROETHANE
1,1,2-TFA	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE

NOTES:

1. LABORATORY ANALYSIS TCL EPA 624/SW846 8260.
2. CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l).
3. DATA COMPARED TO TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES.
4. EXCEEDENCES OF STANDARDS AND GUIDANCE VALUES NOTED IN BOLD.
5. D FLAG IDENTIFIES DILUTED SAMPLE RESULTS WITHIN CALIBRATION RANGE.
6. E FLAG IDENTIFIES THAT CONCENTRATION EXCEEDED CALIBRATION RANGE.
7. J FLAG IDENTIFIES ESTIMATED CONCENTRATION.
8. U FLAG IDENTIFIES CONCENTRATION BELOW DETECTION, QUANTITATION LIMIT VALUE USED.
9. WELLS MW13S, PZ-5, AND PZ-8 WERE NOTED TO BE DRY AND UNABLE TO BE SAMPLED IN JULY 2012.

2012 ANNUAL GROUNDWATER MONITORING REPORT
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

GROUNDWATER MONITORING DATA JULY 2012

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FIGURE
4-1C

CITY:MAHWAH DIV/GROUP:ENVIRONMENTAL DB:J.GONZALEZ LD:J.BONSTEEL PIC:L.MCBURNEY PM:C.MOTTA TM:J.BONSTEEL LYR:(Opt)ON=*;OFF=*REF*
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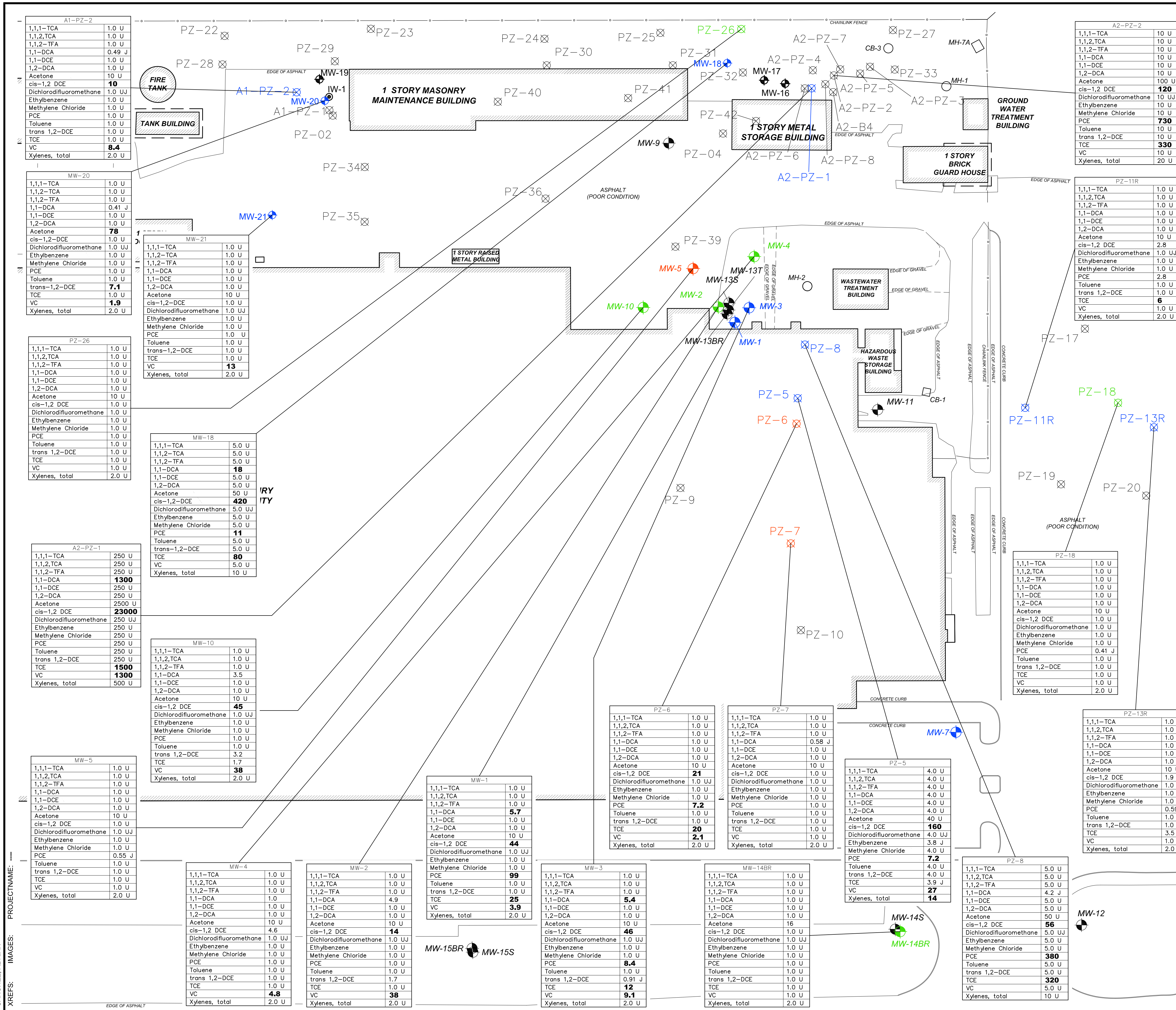
Figure 4-1d



A1-PZ-2

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	0.49 J
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	**10**
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	1.0 U
VC	**8.4**
Xylenes, total	2.0 U

MW-20

1,1,1-TCA	1.0 U
1,1,2-TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	0.41 J
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	**78**
cis-1,2-DCE	1.0 U
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans-1,2-DCE	**7.1**
TCE	1.0 U
VC	**1.9**
Xylenes, total	2.0 U

MW-21

1,1,1-TCA	1.0 U
1,1,2-TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2-DCE	1.0 U
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans-1,2-DCE	1.0 U
TCE	1.0 U
VC	**13**
Xylenes, total	2.0 U

PZ-26

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	1.0 U
VC	1.0 U
Xylenes, total	2.0 U

MW-18

1,1,1-TCA	5.0 U
1,1,2-TCA	5.0 U
1,1,2-TFA	5.0 U
1,1-DCA	**18**
1,1-DCE	5.0 U
1,2-DCA	5.0 U
Acetone	50 U
cis-1,2-DCE	**420**
Dichlorodifluoromethane	5.0 UJ
Ethylbenzene	5.0 U
Methylene Chloride	5.0 U
PCE	**11**
Toluene	5.0 U
trans-1,2-DCE	5.0 U
TCE	**80**
VC	5.0 U
Xylenes, total	10 U

A2-PZ-1

1,1,1-TCA	250 U
1,1,2,TCA	250 U
1,1,2-TFA	250 U
1,1-DCA	**1300**
1,1-DCE	250 U
1,2-DCA	250 U
Acetone	2500 U
cis-1,2 DCE	**23000**
Dichlorodifluoromethane	250 UJ
Ethylbenzene	250 U
Methylene Chloride	250 U
PCE	250 U
Toluene	250 U
trans 1,2-DCE	250 U
TCE	**1500**
VC	**1300**
Xylenes, total	500 U

MW-10

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	3.5
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	**45**
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2-DCE	3.2
TCE	1.7
VC	**38**
Xylenes, total	2.0 U

MW-5

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	1.0 U
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	0.55 J
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	1.0 U
VC	1.0 U
Xylenes, total	2.0 U

MW-4

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	4.6
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	1.0 U
VC	**4.8**
Xylenes, total	2.0 U

MW-2

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	4.9
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	**14**
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2-DCE	1.7
TCE	1.0 U
VC	**38**
Xylenes, total	2.0 U

MW-1

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	**5.7**
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	**44**
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**99**
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	**25**
VC	**3.9**
Xylenes, total	2.0 U

MW-3

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	**5.4**
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	**46**
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**8.4**
Toluene	1.0 U
trans 1,2-DCE	0.91 J
TCE	**12**
VC	**9.1**
Xylenes, total	2.0 U

MW-14BR

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	16
cis-1,2 DCE	1.0 U
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	1.0 U
VC	1.0 U
Xylenes, total	2.0 U

PZ-6

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	**21**
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	**7.2**
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	**20**
VC	**2.1**
Xylenes, total	2.0 U

PZ-7

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	0.58 J
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	1.0 U
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	1.0 U
VC	1.0 U
Xylenes, total	2.0 U

PZ-5

1,1,1-TCA	4.0 U
1,1,2,TCA	4.0 U
1,1,2-TFA	4.0 U
1,1-DCA	4.0 U
1,1-DCE	4.0 U
1,2-DCA	4.0 U
Acetone	40 U
cis-1,2 DCE	**160**
Dichlorodifluoromethane	4.0 UJ
Ethylbenzene	3.8 J
Methylene Chloride	4.0 U
PCE	**7.2**
Toluene	4.0 U
trans 1,2-DCE	4.0 U
TCE	3.9 J
VC	**27**
Xylenes, total	**14**

PZ-8

1,1,1-TCA	5.0 U
1,1,2,TCA	5.0 U
1,1,2-TFA	5.0 U
1,1-DCA	4.2 J
1,1-DCE	5.0 U
1,2-DCA	5.0 U
Acetone	50 U
cis-1,2 DCE	**56**
Dichlorodifluoromethane	5.0 UJ
Ethylbenzene	5.0 U
Methylene Chloride	5.0 U
PCE	**380**
Toluene	5.0 U
trans 1,2-DCE	5.0 U
TCE	**320**
VC	5.0 U
Xylenes, total	10 U

PZ-18

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	1.0 U
Dichlorodifluoromethane	1.0 U
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	0.41 J
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	1.0 U
VC	1.0 U
Xylenes, total	2.0 U

PZ-13R

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	1.9
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	0.59 J
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	3.5
VC	1.0 U
Xylenes, total	2.0 U

A2-PZ-2

1,1,1-TCA	10 U
1,1,2,TCA	10 U
1,1,2-TFA	10 U
1,1-DCA	10 U
1,1-DCE	10 U
1,2-DCA	10 U
Acetone	100 U
cis-1,2 DCE	**120**
Dichlorodifluoromethane	10 UJ
Ethylbenzene	10 U
Methylene Chloride	10 U
PCE	**730**
Toluene	10 U
trans 1,2-DCE	10 U
TCE	**330**
VC	10 U
Xylenes, total	20 U

PZ-11R

1,1,1-TCA	1.0 U
1,1,2,TCA	1.0 U
1,1,2-TFA	1.0 U
1,1-DCA	1.0 U
1,1-DCE	1.0 U
1,2-DCA	1.0 U
Acetone	10 U
cis-1,2 DCE	2.8
Dichlorodifluoromethane	1.0 UJ
Ethylbenzene	1.0 U
Methylene Chloride	1.0 U
PCE	2.8
Toluene	1.0 U
trans 1,2-DCE	1.0 U
TCE	**6**
VC	1.0 U
Xylenes, total	2.0 U

LEGEND:

MW 10	MONITORING WELL LOCATION
PZ-9	PIEZOMETER LOCATION
IW-1	INJECTION WELL LOCATION
(blue)	QUARTERLY SAMPLING
(red)	SEMI ANNUAL SAMPLING
(green)	ANNUAL SAMPLING
PCE	TETRACHLOROETHENE
TCE	TRICHLOROETHENE
cis-1,2-DCE	cis-1,2-DICHLOROETHENE
trans-1,2-DCE	trans-1,2-DICHLOROETHENE
VC	VINYL CHLORIDE
1,1,1-TCA	1,1,1-TRICHLOROETHANE
1,1-DCA	1,1-DICHLOROETHANE
1,2-DCA	1,2-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,1,2-TCA	1,1,2-TRICHLOROETHANE
1,1,2-TFA	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE

NOTES:

1. LABORATORY ANALYSIS TCL EPA 624/SW846 8260.
2. CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l).
3. DATA COMPARED TO TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES.
4. EXCEEDENCES OF STANDARDS AND GUIDANCE VALUES NOTED IN BOLD.
5. D FLAG IDENTIFIES DILUTED SAMPLE RESULTS WITHIN CALIBRATION RANGE.
6. E FLAG IDENTIFIES THAT CONCENTRATION EXCEEDED CALIBRATION RANGE.
7. J FLAG IDENTIFIES ESTIMATED CONCENTRATION.
8. U FLAG IDENTIFIES CONCENTRATION BELOW DETECTION, QUANTITATION LIMIT VALUE USED.
9. WELL MW-13S WAS DRY AND UNABLE TO BE SAMPLED IN OCTOBER 2012.

2012 ANNUAL GROUNDWATER MONITORING REPORT

FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

GROUNDWATER MONITORING DATA OCTOBER 2012

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FIGURE **4-1D**

CITY:MAHWAH DIV/GROUP:ENVIRONMENTAL DB:J.GONZALEZ LD:J.BONSTEEL PIC:L.MCBURNEY PM:C.MOTTA TM:J.BONSTEEL LYR:(Opt)ON=*;OFF=*REF*
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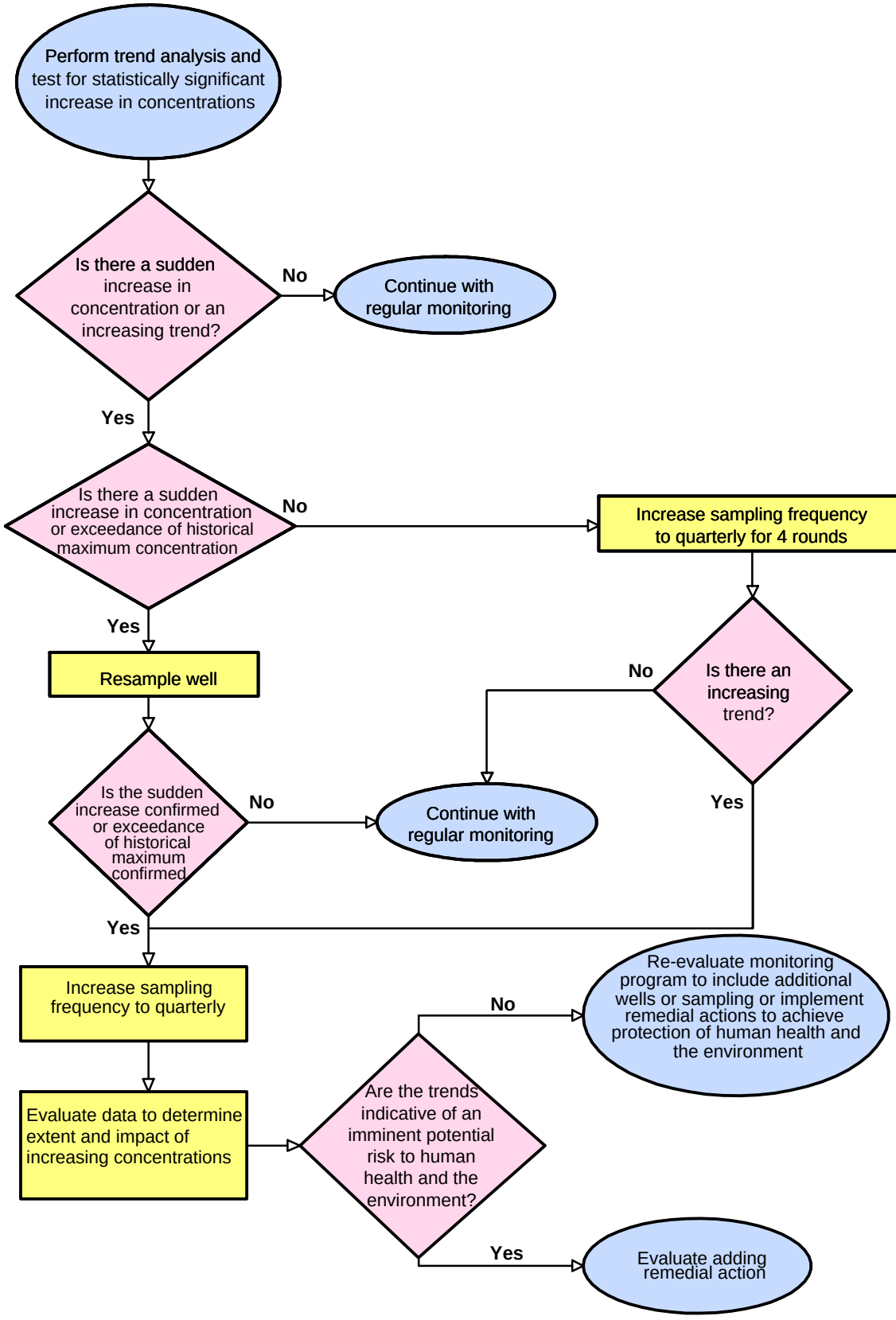
Figure 4-2



ARCADIS

DECISION TREE FOR PERFORMANCE MONITORING IN OBJECTIVE 1 LOCATIONS

2012 ANNUAL GROUNDWATER MONITORING REPORT

FORMER LOCKHEED MARTIN
FRENCH ROAD FACILITY
UTICA, NEW YORK

FIGURE

4-2

PATH: G:\ENVCAD\Mahwah\AVD\2011\ACTIVE\NJ001000\0001\0000\120111-11\FIG 4-2-DECISION TREE - OBJECTIVE 1 LOCATIONS.DWG 1/23/2012 - 9:36:41 AM Layout: 85x11 Hor
DWG DATE: 11/17/11 PRJCT NO: GP3LCAAP.HNE1 DRAWING: DRAWING CHECKED: T. HE APPROVED: E. PANHORST DRAFTER: J. GONZALEZ

Figure 4-3a

Figure 4-3a: Volatile Organic Compound Concentrations in Well MW-1, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

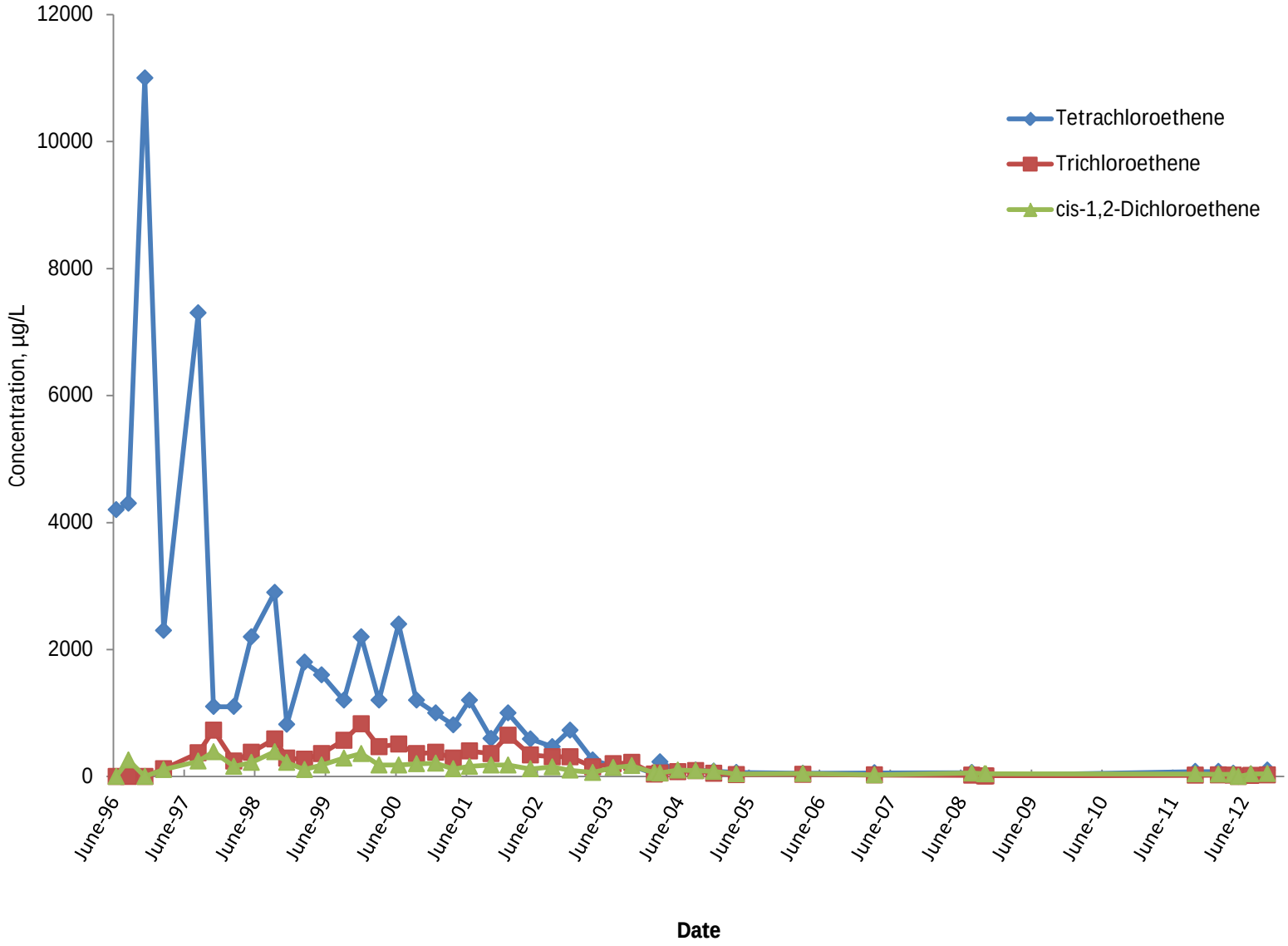


Figure 4-3b

Figure 4-3b: Volatile Organic Compound Concentrations in Well MW-1, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

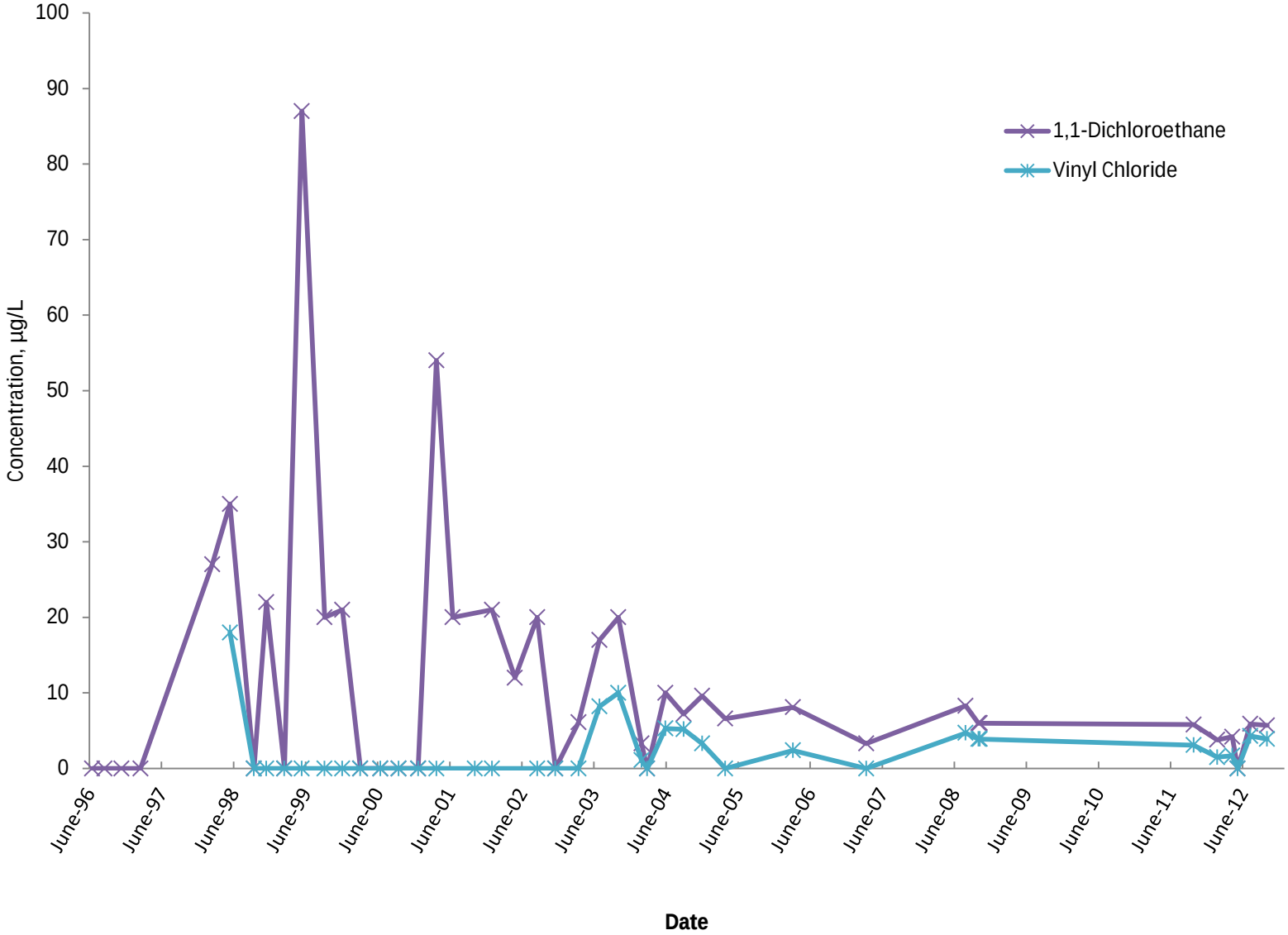


Figure 4-3c

Figure 4-3c: Volatile Organic Compound Concentrations in Well MW-3, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

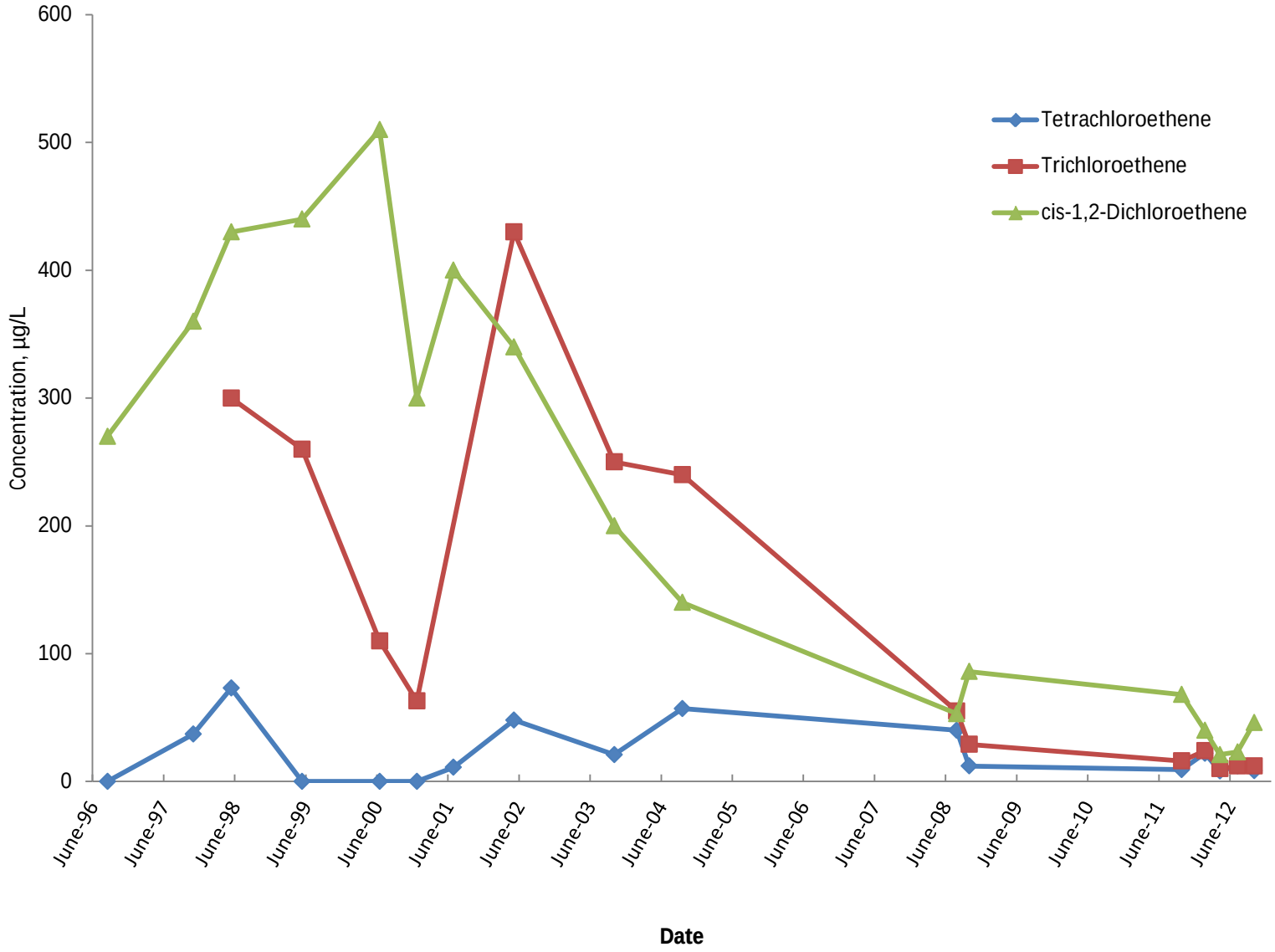


Figure 4-3d

Figure 4-3d: Volatile Organic Compound Concentrations in Well MW-3, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

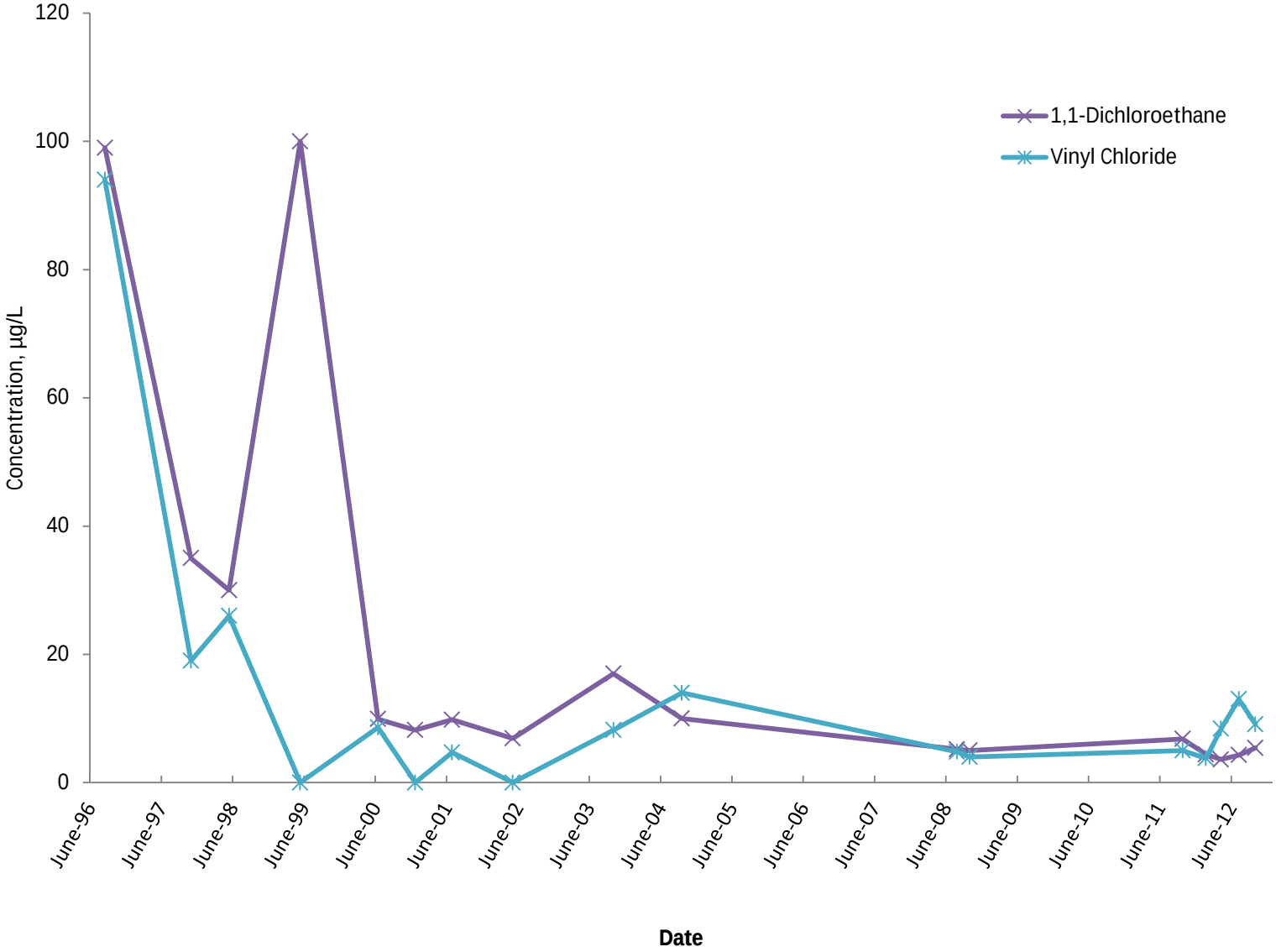


Figure 4-3e

Figure 4-3e: Volatile Organic Compound Concentrations in Well PZ-5, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

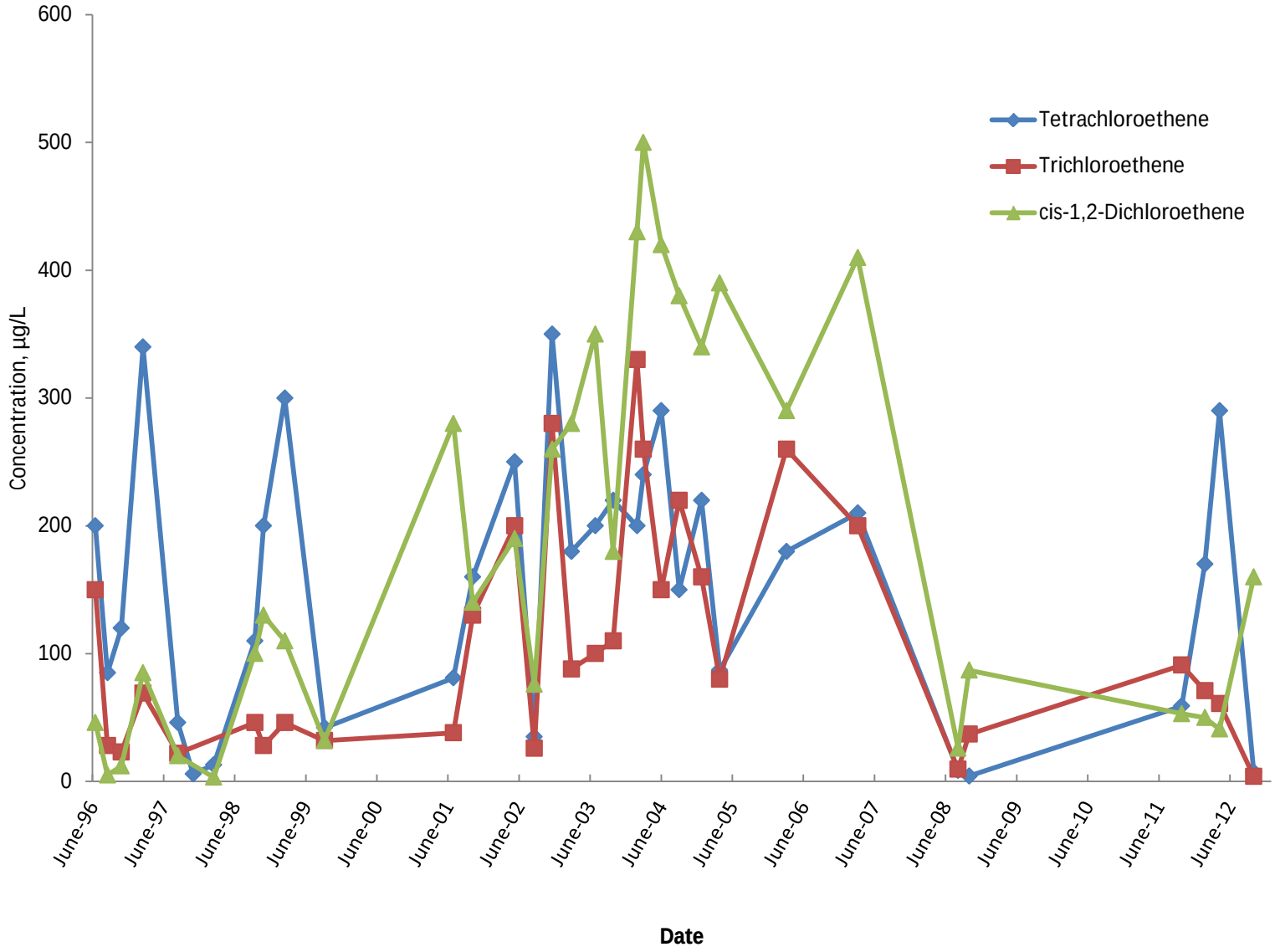


Figure 4-3f

Figure 4-3f: Volatile Organic Compound Concentrations in Well PZ-5, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

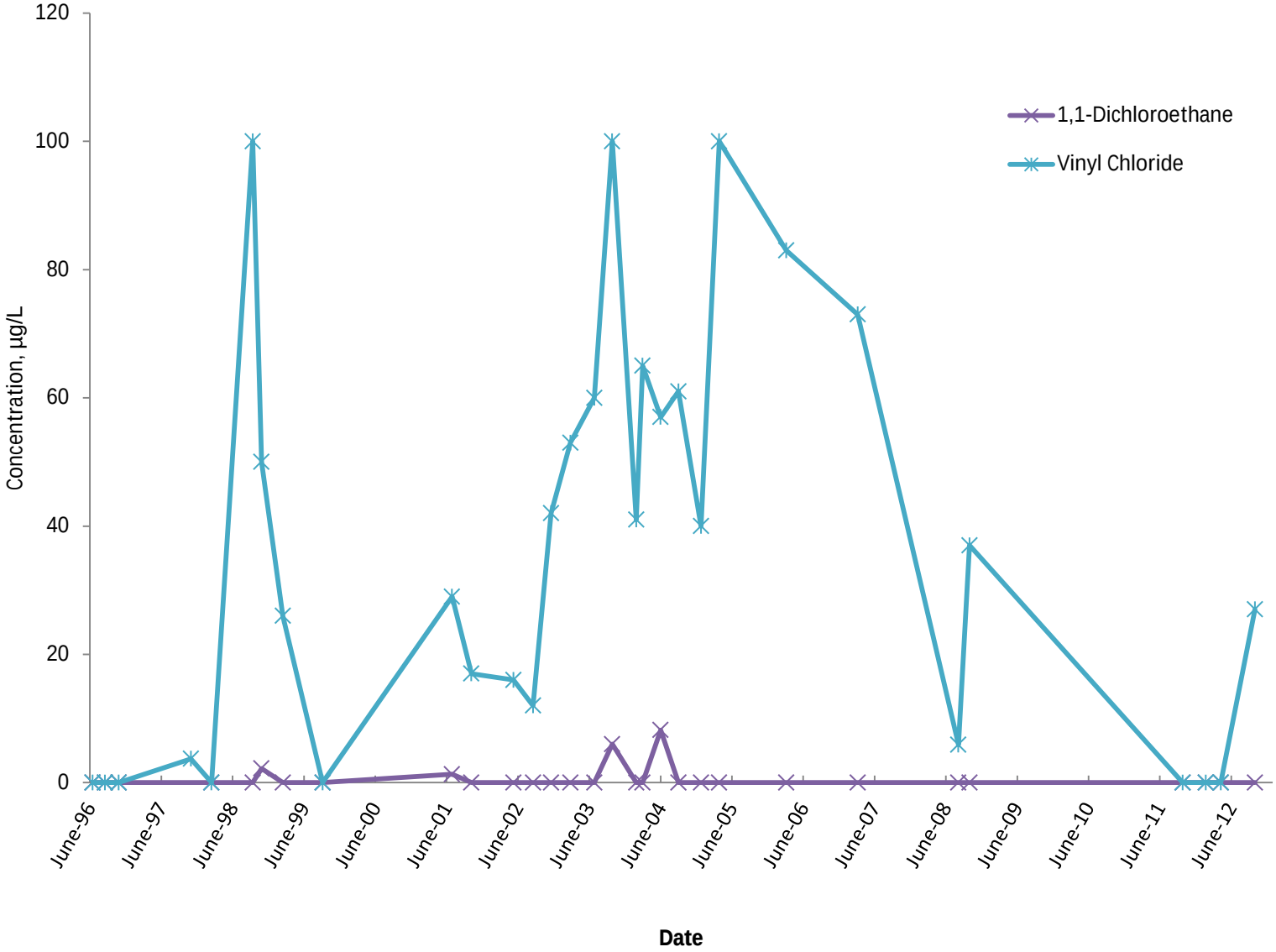


Figure 4-3g

Figure 4-3g: Volatile Organic Compound Concentrations in Well A1-PZ-2, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

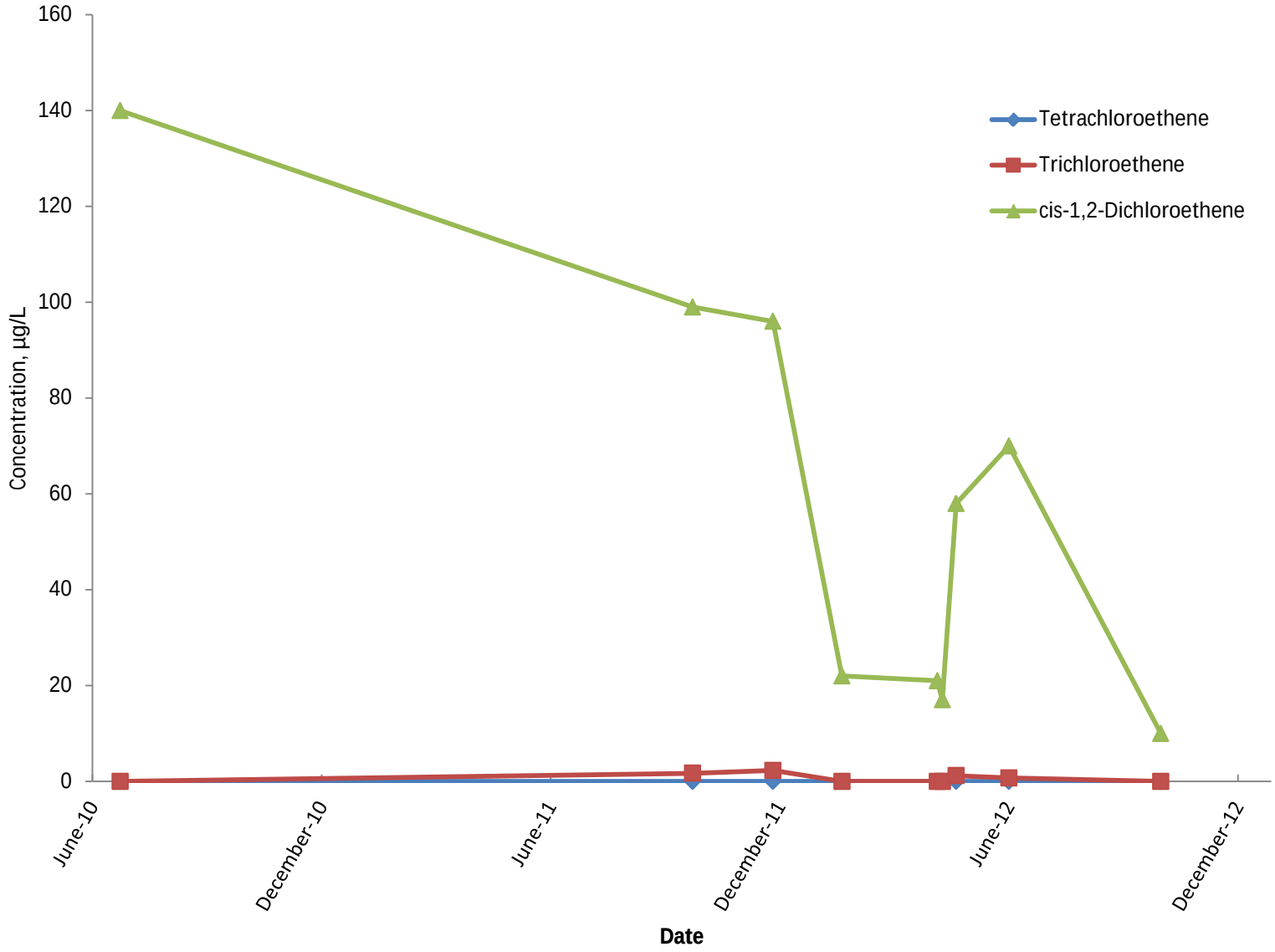


Figure 4-3h

Figure 4-3h: Volatile Organic Compound Concentrations in Well A1-PZ-2, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

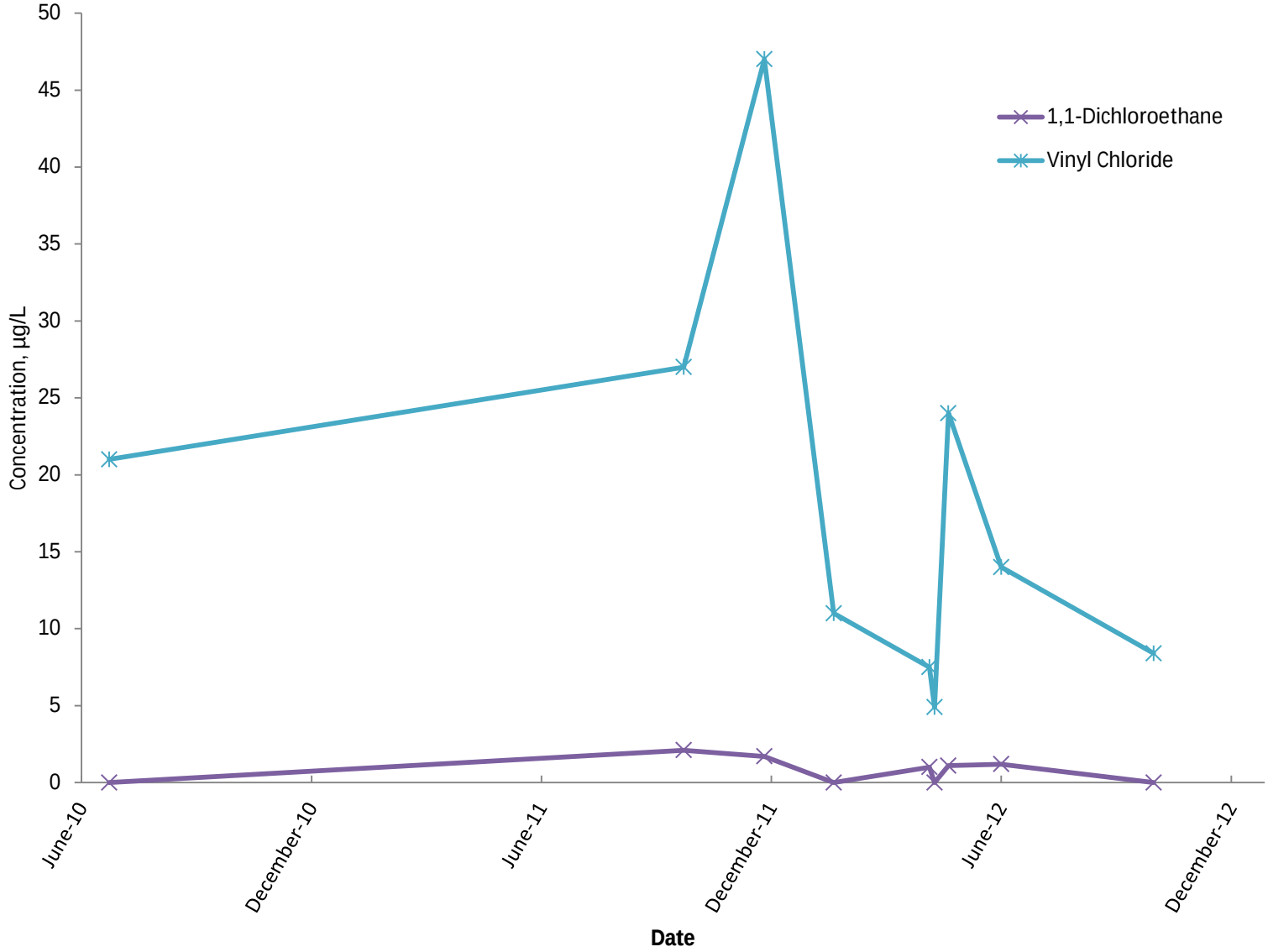


Figure 4-3i

Figure 4-3i: Volatile Organic Compound Concentrations in Well A2-PZ-1, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

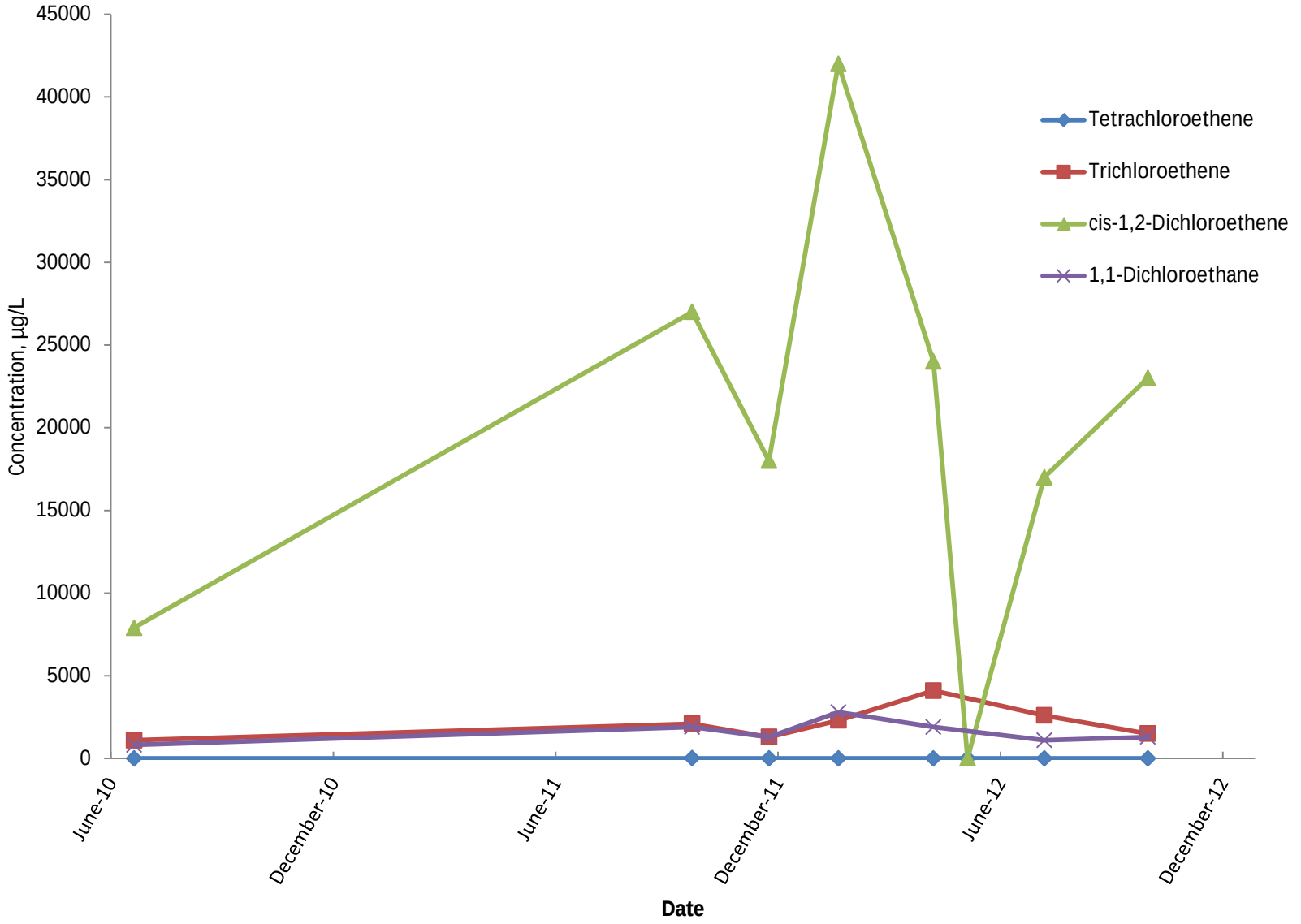


Figure 4-3j

Figure 4-3j: Volatile Organic Compound Concentrations in Well A2-PZ-1, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York.

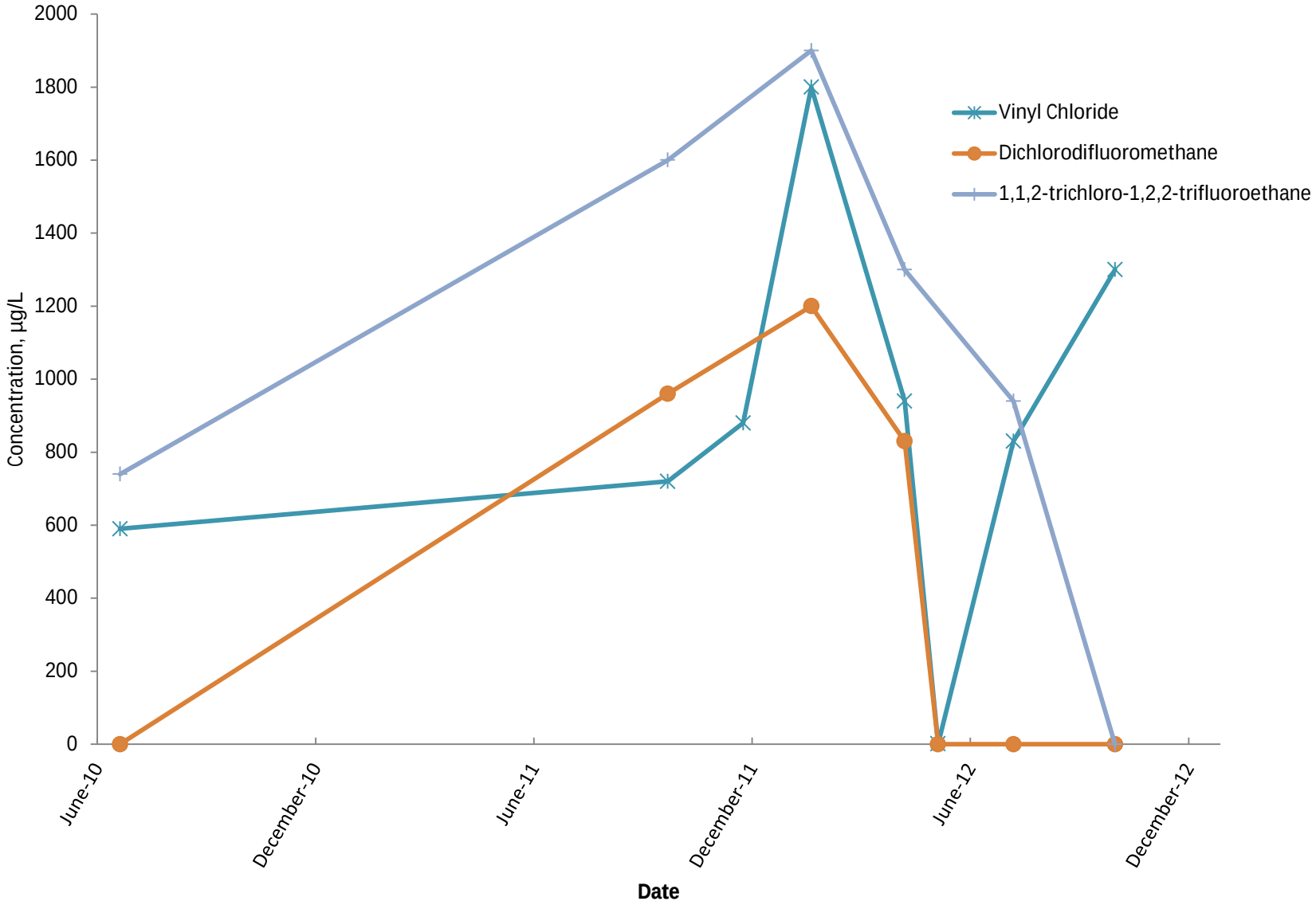


Table 4-1

Table 4-1
Groundwater Monitoring Data - 2012

Former Lockheed Martin French Road Facility
Utica, New York

		Tetrachloroethene					Trichloroethene					cis-1,2 Dichloroethene				
NYSDEC TOGS Guidance Value	**Wells ID**	**5**					**5**					**5**				
Sampling Date		**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1	MW-1	**77 [81]**	**78**	**50**	**36**	**99**	**18 [19]**	**23**	**18**	**14**	**25**	**40 [39]**	**35**	**34**	**40**	**44**
	MW-3	**9.2**	**22**	**8.2**	**12[12]**	**8.4**	**16**	**24**	**10**	**12 [11]**	**12**	**68**	**40**	**21**	**23 [23]**	**46**
	MW-18	--	--	**64 D**	**57**	**11**	--	--	**120 D**	**220**	**80**	**--**	**--**	**420 D**	**890**	**420**
	MW-20	--	--	7.2U	5.0 U	1.0 U	--	--	**170**	2.6 J	1.0 U	**--**	**--**	**1400 J**	**890 D**	1.0 U
	PZ-5	**59**	**170**	**290**	DRY	**7.2**	**91 D**	**52**	**61**	DRY	3.9 J	**53**	**41**	**41**	DRY	**160**
	PZ-6	**72**	**--**	**49**	**--**	**7.2**	**20**	**--**	**44**	**--**	**20**	**20**	**--**	**58**	**--**	**21**
	PZ-8	**350 D**	**470**	DRY	DRY	**380**	**290 D**	**410**	DRY	DRY	**320**	**77**	**91**	DRY	DRY	**56**
	PZ-11R	**5.5**	2.2	2.7	**5.2**	2.8	**9.0**	4.2	4.5	**8.7**	**6**	**5.0**	3.3	1.9	2.4	2.8
	PZ-13R	1.7	0.98 J	0.75 J	1.1	0.59 J	**5.5**	3.7	3.9	4.3	3.5	2.4	1.1	1.2	1.7	1.9
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7	1.0 U	1.2	1.0 U	1.0 U	**99**	**22**	**58**	**57**	**10**
	A2-PZ-1	4.6	250 U	250 U **[5.3]**	250 U	250 U	**2100 D**	**2300**	**4100 [4800]**	**2600**	**1500**	**27000 D**	**42000 D**	**24000 [28000 D]**	**17000**	**23000**
	A2-PZ-2	--	--	**2300 D**	**810**	**730**	**--**	**--**	**740 D**	**360**	**330**	**--**	**--**	**210 D**	**130**	**120**
	A2-PZ-7	**360 D**	**--**	--	--	--	**280 D**	**--**	--	--	--	**120 D**	**--**	--	--	--
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	0.55 J	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U
	MW-13S	1.0 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY
	MW-14BR	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
	MW-21	--	--	1.0 U	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U	**--**	**--**	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	0.41 J	1.0 U	**--**	--	--	1.0 U	0.85 J	**--**	--	--	1.0 U
	PZ-26	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
Objective 3	MW-2	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	**13**	**--**	--	--	**14**
	MW-4	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	3.3	**--**	--	--	4.6
	MW-10	1.0 U	**--**	--	--	1.0 U	2.5	**--**	--	--	1.7	53	**--**	--	--	45
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	0.58 J	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U

Table 4-1
Groundwater Monitoring Data - 2012

Former Lockheed Martin French Road Facility
Utica, New York

	Wells ID	trans 1,2-Dichloroethene					Vinyl Chloride					1,1,1-Trichloroethane				
NYSDEC TOGS Guidance Value		5					2					5				
Sampling Date		**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1	MW-1	1.0 U [1.3]	1.0 U	1.0 U	1.4	1.0 U	**3.1 [3]**	1.5	1.7	**4.3**	**3.9**	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U
	MW-3	1.0 U	1.1	1.0 U	1.1 [1]	0.91 J	**5**	**3.8**	**8.4**	**13 [13]**	**9.1**	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-18	--	--	1.0 U	2.6	5.0 U	**--**	**--**	**5.5**	**7.6**	5.0 U	--	--	1.0 U	1.0 U	5.0 U
	MW-20	--	--	**18 J**	**22**	**7.1**	**--**	**--**	**63**	**680 D**	**1.9**	--	--	16 U	5.0 U	1.0 U
	PZ-5	1.0 U	3.6 U	4.0 U	DRY	4.0 U	1.0 U	4.0 U	4.0 U	DRY	**27**	1.0 U	3.3 U	4.0 U	DRY	4.0 U
	PZ-6	1.0 U	--	1.0 U	**--**	1.0 U	1.0 U	--	**4.9**	**--**	**2.1**	1.0 U	--	1.0 U	**--**	1.0 U
	PZ-8	1.0 U	4.5 U	DRY	DRY	5.0 U	1.0 U	5.0 U	DRY	DRY	5.0 U	1.0 U	4.1 U	DRY	DRY	5.0 U
	PZ-11R	1.0 U	0.97	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**27**	**11**	**24**	**15**	**8.4**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**33**	250 U	250 U **[11]**	250 U	250 U	**720 D**	**1800**	**940 [1300 D]**	**830**	**1300**	1.0 U	250 U	250 U [1.0 U]	250 U	250 U
	A2-PZ-2	**--**	--	1.0 U	10 U	10 U	**--**	**--**	**14**	10 U	10 U	--	--	1.0 U	10 U	10 U
	A2-PZ-7	1.0 U	--	--	--	--	**6.5**	**--**	--	--	--	1.0 U	--	--	--	--
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U
	MW-13S	1.0 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY
	MW-14BR	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
	MW-21	--	--	1.0 U	1.0 U	1.0 U	**--**	**--**	**9.3**	**6.5**	**13**	--	--	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
	PZ-26	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
Objective 3	MW-2	2.0	**--**	--	--	1.7	**33**	**--**	--	--	**38**	1.0 U	**--**	--	--	1.0 U
	MW-4	1.0 U	**--**	--	--	1.0 U	1.4	**--**	--	--	**4.8**	1.0 U	**--**	--	--	1.0 U
	MW-10	3.4	**--**	--	--	3.2	23	**--**	--	--	38	1.0 U	**--**	--	--	1.0 U
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U

Table 4-1
Groundwater Monitoring Data - 2012

Former Lockheed Martin French Road Facility
Utica, New York

Wells ID		1,1-Dichloroethane					1,2-Dichloroethane					1,1-Dichloroethene				
NYSDEC TOGS Guidance Value		5					0.6					5				
Sampling Date		**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1	MW-1	**5.8 [5.5]**	3.8	4.2	**5.9**	**5.7**	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U
	MW-3	**6.8**	4.4	3.6	4.3 [4.1]	**5.4**	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	0.57 J	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-18	--	--	**20 D**	**37**	**18**	--	--	1.0 U	1.0 U	5.0 U	--	--	1.0 U	1.3	5.0 U
	MW-20	--	--	7.6 U	**7.9**	0.41 J	--	--	15 U	5.0 U	1.0 U	--	--	5.8 U	5.0 U	1.0 U
	PZ-5	1.0 U	1.5 U	4.0 U	DRY	4.0 U	1.0 U	0.76 U	4.0 U	DRY	4.0 U	1.0 U	2.0 U	4.0 U	DRY	4.0 U
	PZ-6	1.0 U	--	1.0 U	**--**	1.0 U	1.0 U	--	1.0 U	**--**	1.0 U	1.0 U	--	1.0 U	**--**	1.0 U
	PZ-8	4.8	**5.4**	DRY	DRY	4.2 J	1.0 U	5.0 U	DRY	DRY	5.0 U	1.0 U	5.0 U	DRY	DRY	5.0 U
	PZ-11R	1.0 U	0.38 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	2.1	0.48 J	1.1	1.3	0.49 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**1900 D**	**2800**	**1900 [2300 D]**	**1100**	**1300**	**5.1**	250 U	250 U [1.0 U]	250 U	250 U	**45**	250 U	250 U **[23]**	250 U	250 U
	A2-PZ-2	**--**	**--**	**12**	10 U	10 U	**--**	--	1.0 U	10 U	10 U	**--**	--	1.5	10 U	10 U
	A2-PZ-7	**9.8**	**--**	--	--	--	1.0 U	--	--	--	--	0.73 J	--	--	--	--
Objective 2	MW-5	0.69 J	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U
	MW-13S	2.4	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY
	MW-14BR	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
	MW-21	--	--	1.0 U	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
	PZ-26	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
Objective 3	MW-2	**5.9**	**--**	--	--	4.9	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
	MW-4	0.70 J	**--**	--	--	1.0	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
	MW-10	2.6	**--**	--	--	3.5	1.0 U	**--**	--	--	1.0 U	1.0 U	**--**	--	--	1.0 U
	PZ-7	0.83 J	**--**	0.69 J	--	0.58 J	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	**--**	1.0 U	--	1.0 U

Table 4-1
Groundwater Monitoring Data - 2012

Former Lockheed Martin French Road Facility
Utica, New York

	Wells ID	1,1,2,Trichloroethane					1,1,2-trichloro-1,2,2-trifluoroethane					Dichlorodifluoromethane				
NYSDEC TOGS Guidance Value		1					5					5				
Sampling Date		**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 UJ
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 UJ
	MW-18	--	--	1.0 U	1.0 U	5.0 U	--	--	1.2	1.0 U	5.0 U	--	--	1.0 U	1.0 U	5.0 UJ
	MW-20	--	--	4.6 U	5.0 U	1.0 U	--	--	6.2 U	5.0 U	1.0 U	--	--	14 UJ	5.0 J	1.0 UJ
	PZ-5	1.0 U	2.0 U	4.0 U	DRY	4.0 U	1.0 U	2.0 U	4.0 U	DRY	4.0 U	1.0 U	4.0 U	4.0 U	DRY	4.0 UJ
	PZ-6	1.0 U	--	1.0 U	**--**	1.0 U	1.0 U	--	1.0 U	**--**	1.0 U	1.0 U	--	1.0 U	**--**	1.0 UJ
	PZ-8	1.0 U	5.0 U	DRY	DRY	5.0 U	1.0 U	5.0 U	DRY	DRY	5.0 U	1.0 U	5.0 U	DRY	DRY	5.0 UJ
	PZ-11R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 J	1.0 J	1.0 UJ
	A2-PZ-1	**3.0**	250 U	250 U [**1.7**]	250 U	250 U	**1600 E J**	**1900**	**1300 [1100 D]**	**940**	250 U	**960 E**	**1200**	**830 [740 D]**	250 U	250 UJ
	A2-PZ-2	**--**	--	1.0 U	10 U	10 U	**--**	**--**	1.0 U	10 U	10 U	**--**	**--**	1.0 U	10 U	10 UJ
	A2-PZ-7	1.0 U	--	--	--	--	1.0 U	--	--	--	--	1.0 U	--	--	--	--
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	--	1.0 U	--	1.0 U	1.0 U	--	1.0 U	--	1.0 UJ
	MW-13S	1.0 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY
	MW-14BR	1.0 U	**--**	--	--	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 UJ
	MW-21	--	--	1.0 U	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 UJ
	PZ-18	1.0 U	**--**	--	--	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 U
	PZ-26	1.0 U	**--**	--	--	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 U
Objective 3	MW-2	1.0 U	**--**	--	--	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 UJ
	MW-4	1.0 U	**--**	--	--	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 UJ
	MW-10	1.0 U	**--**	--	--	1.0 U	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 UJ
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	1.0 U	--	1.0 U	--	1.0 U	1.0 U	--	1.0 U	--	1.0 U

Table 4-1
Groundwater Monitoring Data - 2012

Former Lockheed Martin French Road Facility
Utica, New York

	Wells ID	Ethylbenzene					Toluene					Xylenes, total				
NYSDEC TOGS Guidance Value		5					5					5				
Sampling Date		**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U [2.0U]	2.0 U	2.0 U	2.0 U	2.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U [2.0U]	2.0 U
	MW-18	--	--	0.91 J	1.4	5.0 U	--	--	1.9	1.4	5.0 U	--	--	1.3 J	1.0 J	10 U
	MW-20	--	--	15 U	5.0 U	1.0 U	--	--	10 U	5.0 U	1.0 U	--	--	13 U	10 U	2.0 U
	PZ-5	1.0 U	4.0 U	4.0 U	DRY	3.8 J	1.0 U	2.0 U	4.0 U	DRY	4.0 U	2.0 U	4.0 U	8.0 U	DRY	**14**
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	1.0 U	--	1.0 U	--	1.0 U	2.0 U	--	1.0 U	--	2.0 U
	PZ-8	1.0 U	3.7 U	DRY	DRY	5.0 U	1.0 U	2.6 U	DRY	DRY	5.0 U	2.0 U	5.0 U	DRY	DRY	10 U
	PZ-11R	1.0 U	0.74 U	1.0 U	1.0 U	1.0 U	1.0 U	0.51 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
	A2-PZ-1	1.0 U	250 U	250 U [1.0 U]	250 U	250 U	**5.1**	250 U	250 U [4.6]	250 U	250 U	2.0 U	500 U	500 U [2.0U]	500 U	500 U
	A2-PZ-2	--	--	**9.0**	10 U	10 U	--	--	1.0 U	10 U	10 U	--	--	2.0 U	20 U	20 U
	A2-PZ-7	1.0 U	--	--	--	--	1.0 U	--	--	--	--	2.0 U	--	--	--	--
Objective 2	MW-5	1.0 U	--	1.0 U	--	1.0 U	1.0 U	--	1.0 U	--	1.0 U	2.0 U	--	1.0 U	--	2.0 U
	MW-13S	1.0 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY	2.0 U	DRY	DRY	DRY	DRY
	MW-14BR	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 U	2.0 U	--	--	--	2.0 U
	MW-21	--	--	1.0 U	1.0 U	1.0 U	--	--	1.0 U	1.0 U	1.0 U	--	--	2.0 U	2.0 U	2.0 U
	PZ-18	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 U	2.0 U	--	--	--	2.0 U
	PZ-26	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 U	2.0 U	--	--	--	2.0 U
Objective 3	MW-2	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 U	2.0 U	--	--	--	2.0 U
	MW-4	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 U	2.0 U	--	--	--	2.0 U
	MW-10	1.0 U	--	--	--	1.0 U	1.0 U	--	--	--	1.0 U	2.0 U	--	--	--	2.0 U
	PZ-7	1.0 U	--	1.0 U	--	1.0 U	1.0 U	--	1.0 U	--	1.0 U	2.0 U	--	1.0 U	--	2.0 U

Table 4-1
Groundwater Monitoring Data - 2012

Former Lockheed Martin French Road Facility
Utica, New York

	Wells ID	Acetone					Methylene Chloride				
NYSDEC TOGS Guidance Value		50					5				
Sampling Date		**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Sep-11**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1	MW-1	10 U [10U]	10 U	10 U	8.8 J	10 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U
	MW-3	10 U	10 U	10 U	10 U [10 U]	10 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-18	--	--	10 U	9.1 J	50 U	--	--	1.0 U	1.0 U	5.0 U
	MW-20	--	--	**200**	**400**	**78**	--	--	8.8 U	5.0 U	1.0 U
	PZ-5	3.1 J	16	40 U	DRY	40 U	1.0 U	4.0 U	4.0 U	DRY	4.0 U
	PZ-6	10 U	--	3.8 J	--	10 U	1.0 U	--	1.0 U	--	1.0 U
	PZ-8	10 U	50 U	DRY	DRY	50 U	1.0 U	5.0 U	DRY	DRY	5.0 U
	PZ-11R	10 U	10 U	10 U	9.4 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	10 U	10 U	10 U	9.3 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	6.6 J	10 U	10 UB	16 UB	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	9.5 J	2500 U	2500 U [14]	2500 U	2500 U	1.0 U	250 U	250 U [14]	250 U	250 U
	A2-PZ-2	--	--	10 U	100 U	100 U	--	--	1.0 U	10 U	10 U
	A2-PZ-7	10 U	--	--	--	--	1.0 U	--	--	--	--
Objective 2	MW-5	10 U	--	10 U	--	10 U	1.0 U	--	1.0 U	--	1.0 U
	MW-13S	10 U	DRY	DRY	DRY	DRY	1.0 U	DRY	DRY	DRY	DRY
	MW-14BR	10 U	--	--	--	16	0.57 J	--	--	--	1.0 U
	MW-21	--	--	10 U	8.8 J	10 U	--	--	1.0 U	1.0 U	1.0 U
	PZ-18	10 U	--	--	--	10 U	1.0 U	--	--	--	1.0 U
	PZ-26	10 U	--	--	--	10 U	1.0 U	--	--	--	1.0 U
Objective 3	MW-2	10 U	--	--	--	10 U	1.0 U	--	--	--	1.0 U
	MW-4	10 U	--	--	--	10 U	1.0 U	--	--	--	1.0 U
	MW-10	10 U	--	--	--	10 U	1.0 U	--	--	--	1.0 U
	PZ-7	10 U	--	4.2 J	--	10 U	1.0 U	--	0.55 J	--	1.0 U

Table 4-1
Groundwater Monitoring Data - 2012

Former Lockheed Martin French Road Facility
Utica, New York

Note:
1. B = Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).
2. D = Diluted sample result within calibration range
3. E = Analyte exceeded calibration range.
4. J = Indicates an estimated value.
5. NYSDEC TOGS = New York State Department of Environmental Conservation Technical and Operational Guidance Series
6. U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

"--" indicates not measured
"DRY" indicates insufficient groundwater was available for sampling
"Green font" indicates sampled as a part of pilot test. The
Bold indicates concentrartion above NYSDEC TOGS Value
All units in micrograms per liter (ug/l).
[ ] = Duplicate samples

Table 4-2

Table 4-2
Summary of Mann-Kendall Trend Analysis of Groundwater Analytical Data

Former Lockheed Martin French Road Facility
Utica, New York

Location ID	Analyte	Cleanup Goal (µg/L)	Data Range							Mann-Kendall Analysis		Sudden Increase Evaluation				
			Start Date	End Date	Min (µg/L)	Max (µg/L)	Historic Maximum (µg/L)	Most recent result (µg/L)	Comparison of the most recent data with Historic Maxiumum	p Value	Data Trend	Total Count	Mean	Std Dev	Mean +3*STDV	October 2012 Results
A1-PZ2	cis-1,2-Dichloroethene	5	09/27/11	10/04/12	10	99	140	10	Less than	0.054	No Significant Trend	8	49.1	36.4	158.3	No Sudden Increase
A1-PZ2	Vinyl Chloride	2	09/27/11	10/04/12	4.9	47	47	8.4	Less than	0.138	No Significant Trend	8	18	14.1	60.3	No Sudden Increase
A2-PZ1	1,1-Dichloroethane	5	06/25/10	10/04/12	820	2800	2800	1300	Less than	0.452	No Significant Trend	8	1590	666	3588	No Sudden Increase
A2-PZ1	cis-1,2-Dichloroethene	5	06/25/10	10/04/12	4.6	42000	42000	23000	Less than	0.452	No Significant Trend	8	19900	12600	57700	No Sudden Increase
A2-PZ1	Trichloroethene	5	06/25/10	10/04/12	1100	4100	4100	1500	Less than	0.274	No Significant Trend	8	2140	1020	5200	No Sudden Increase
A2-PZ1	Vinyl Chloride	2	06/25/10	10/04/12	1.2	1800	1800	1300	Less than	0.199	No Significant Trend	8	883	522	2449	No Sudden Increase
MW-1	1,1-Dichloroethane	5	10/03/08	10/04/12	3.8	6	87	5.7	Less than	0.114	No Significant Trend	8	5.3	0.93	8.09	No Sudden Increase
MW-1	cis-1,2-Dichloroethene	5	10/03/08	10/04/12	34	44	390	44	Less than	0.274	No Significant Trend	8	39.9	4	51.9	No Sudden Increase
MW-1	Tetrachloroethene	5	10/03/08	10/04/12	18	99	11000	99	Less than	0.237	No Significant Trend	8	53.7	31.8	149.1	No Sudden Increase
MW-1	Trichloroethene	5	10/03/08	10/04/12	7.6	25	650	25	Less than	0.199	No Significant Trend	8	16.2	6.9	36.9	No Sudden Increase
MW-1	Vinyl Chloride	2	10/03/08	10/04/12	1.5	4.3	18	3.9	Less than	0.406	No Significant Trend	8	3.2	1.1	6.5	No Sudden Increase
MW-3	1,1-Dichloroethane	5	09/21/04	10/04/12	3.6	10	100	5.4	Less than	0.089	No Significant Trend	8	5.6	2	11.6	No Sudden Increase
MW-3	cis-1,2-Dichloroethene	5	09/21/04	10/04/12	21	140	510	46	Less than	0.031	DECREASING TREND	8	59.6	39	176.6	No Sudden Increase
MW-3	Tetrachloroethene	5	09/21/04	10/04/12	8.2	57	73	8.4	Less than	0.024	DECREASING TREND	8	21.1	18.1	75.4	No Sudden Increase
MW-3	Trichloroethene	5	09/21/04	10/04/12	10	240	430	12	Less than	0.005	DECREASING TREND	8	49.8	78.3	284.7	No Sudden Increase
MW-3	Vinyl Chloride	2	09/21/04	10/04/12	3.8	14	94	9.1	Less than	0.36	No Significant Trend	8	7.8	4	19.8	No Sudden Increase
PZ-5	cis-1,2-Dichloroethene	5	03/09/06	10/02/12	26	410	500	160	Less than	0.199	No Significant Trend	8	140	140	560	No Sudden Increase
PZ-5	Tetrachloroethene	5	03/09/06	10/02/12	4.2	290	390	7.2	Less than	0.452	No Significant Trend	8	116	110	446	No Sudden Increase
PZ-5	Trichloroethene	5	03/09/06	10/02/12	3.9	260	330	3.9	Less than	0.054	No Significant Trend	8	91.7	91.7	366.8	No Sudden Increase
PZ-5	Vinyl Chloride	2	03/09/06	10/02/12	5.9	83	100	27	Less than	0.043	DECREASING TREND	8	45.2	32.2	141.8	No Sudden Increase

Table 4-3

Table 4-3
Groundwater Sampling Field-Parameters and Geochemistry Analysis Results - 2012

Former Lockheed Martin French Road Facility
Utica, New York

	Well ID	pH (s.u.)				Specific Conductivity (mS/cm)				DO (mg/L)				ORP (mV)			
Sampling Date		**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1	MW-1	7.52	7.20	7.36	7.03	1.123	1.816	1.625	1.173	2.90	1.69	0.52	0.80	-42.7	46.9	63.1	-203.6
	MW-3	7.57	7.27	7.33	7.15	1.435	2.514	1.919	1.299	1.01	1.76	0.46	0.68	-42.9	59.3	62.4	-216.6
	MW-18	--	7.51	7.41	7.5	--	0.836	0.696	0.759	--	0.82	1.03	0.2	--	-77.4	92.8	-73.8
	MW-20	--	--	6.24	6.85	--	--	8.13	5.737	--	--	0.55	0.62	--	--	-100	-160.6
	PZ-5	8.04	7.79	--	7.59	1.193	1.527	--	1.533	2.40	2.59	--	0.68	-88.3	-84.3	--	-132
	PZ-6	--	7.62	--	7.82	--	1.445	--	1.774	--	1.55	--	0.89	--	-74	--	-58.6
	PZ-8	7.43	--	--	dry	1.021	--	--	dry	1.58	--	--	dry	-23.4	--	--	dry
	PZ-11R	7.56	7.07	6.93	7.07	1.398	4.986	3.639	2.867	4.34	7.45	5.19	2.91	-70.7	-2.1	104.2	-2.0
	PZ-13R	7.60	6.85	6.67	6.85	2.762	5.503	7.164	6.601	2.48	3.44	2.09	0.80	-28.1	201.3	-35.0	-18.5
	A1-PZ-2	7.68	7.42	2.25*	7.25	1.096	1.262	1.828	1.214	8.24	0.51	0.16	0.10	-39.2	-63.1	-78.3	-190.7
	A2-PZ-1	7.42	7.12	7.25	6.95	0.709	1.247	1.22	1.097	1.07	0.86	0.65	0.80	-87.9	-91.4	50.4	-208.2
	A2-PZ-2	--	--	7.18	6.94	--	--	1.738	1.134	--	--	1.10	1.40	--	--	-78.3	-16.8
	A2-PZ-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Objective 2	MW-5	--	6.91	--	7.17	--	8.55	--	5.004	--	1.04	--	0.22	--	-83.6	--	-97.2
	MW-13S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-14BR	--	--	--	7.64	--	--	--	11.57	--	--	--	4.17	--	--	--	-254.5
	MW-21	--	7.35	7.13	7.23	--	9.773	8.36	12.15	--	0.54	0.33	0.89	--	-98.8	90.4	-112.7
	PZ-18	--	--	--	6.9	--	--	--	3.062	--	--	--	4.34	--	--	--	-48.4
	PZ-26	--	--	--	7.66	--	--	--	0.67	--	--	--	0.2	--	--	--	-27.8
Objective 3	MW-2	--	--	--	7.3	--	--	--	2.003	--	--	--	0.2	--	--	--	-108
	MW-4	--	--	--	7.11	--	--	--	2.164	--	--	--	0.4	--	--	--	-53
	MW-10	--	--	--	7.37	--	--	--	2.722	--	--	--	0.2	--	--	--	-254.2
	PZ-7	--	7.21	--	7.13	--	1.063	--	1.22	--	1.6	--	0.75	--	-97.8	--	-88
Others	MW-19	--	--	7.63	--	--	--	0.984	--	--	--	0.26	--	--	--	-128.2	--
	PZ-2	--	--	7.15	--	--	--	2.806	--	--	--	0.86	--	--	--	-154.5	--
	PZ-27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	A1-PZ-1	--	--	7.25	--	--	--	1.362	--	--	--	0.05	--	--	--	-153.6	--

Table 4-3
Groundwater Sampling Field-Parameters and Geochemistry Analysis Results - 2012

Former Lockheed Martin French Road Facility
Utica, New York

	Well ID	Ferrous Iron (mg/L)				Methane (µg/L)				NO_3-N (mg/L)				Sulfate (mg/L)			
Sampling Date		**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**	**Jan-12**	**Apr-12**	**Jul-12**	**Oct-12**
Objective 1	MW-1	0.01	0.05	0.00	0.00	110 B	70	270	57	1.9	0.54	0.16	2	116	111 B	131	176 B
	MW-3	0.00	--	0.05	0	120 B	110	140	18	0.33	0.05 U	0.05 U	0.26	87.9	94.4 B	117	151 B
	MW-18	--	0.45	0.24	0.17	--	--	--	--	--	--	--	--	--	--	--	--
	MW-20	--	--	3.3	2.9	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-5	--	0.16	--	0.68	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-6	--	0.32	--	0.09	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-8	--	--	--	dry	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-11R	--	0.18	0.44	0.04	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-13R	--	2.56	1.09	1.01	41 B	55	150	6.6	0.13	0.19	0.36	0.050 U	115	91.1 B	119	67.6 B
	A1-PZ-2	--	0.77	0.81	0.53	2400 B	--	--	2800	0.81	--	--	0.050 U	38.8	--	--	2.4 J B
	A2-PZ-1	--	1.34	1.36	1.71	2600 B	3300	1700	800	0.05 U	0.05 U	0.05 U	0.050 U	39.8	39.3 B	25.1	75.9 B
	A2-PZ-2	--	--	0.81	0	--	--	--	--	--	--	--	--	--	--	--	--
	A2-PZ-7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Objective 2	MW-5	--	0.84	--	1.42	--	--	--	--	--	--	--	--	--	--	--	--
	MW-13S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MW-14BR	--	--	--	2.55	--	--	--	--	--	--	--	--	--	--	--	--
	MW-21	--	0.60	1.38	0.73	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-18	--	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-26	--	--	--	0.45	--	--	--		--	--	--	--	--	--	--	--
Objective 3	MW-2	--	--	--	0.28	--	--	--	--	--	--	--	--	--	--	--	--
	MW-4	--	--	--	0.08	--	--	--	--	--	--	--	--	--	--	--	--
	MW-10	--	--	--	3.01	--	--	--	300	--	--	--	0.050 U	--	--	--	203 B
	PZ-7	--	2.36	--	1.11	--	--	--	--	--	--	--	--	--	--	--	--
Others	MW-19	--	--	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-2	--	--	2.28	--	--	--	--	--	--	--	--	--	--	--	--	--
	PZ-27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	A1-PZ-1	--	--	3.3	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-3
Groundwater Sampling Field-Parameters and Geochemistry Analysis Results - 2012

Former Lockheed Martin French Road Facility
Utica, New York

	Well ID	Total Alkalinity (mg/L)				TOC (mg/L)			
Sampling Date		Jan-12	Apr-12	Jul-12	Oct-12	Jan-12	Apr-12	Jul-12	Oct-12
Objective 1	MW-1	304	280	355	376	--	1.2	0.47J	2.3
	MW-3	300	240	242	395	--	1.3	0.89J[0.8J]	2.7
	MW-18	--	--	--	--	--	--	--	--
	MW-20	--	--	--	--	--	--	--	--
	PZ-5	--	--	--	--	--	--	--	--
	PZ-6	--	--	--	--	--	--	--	--
	PZ-8	--	--	--	--	--	--	--	--
	PZ-11R	--	--	--	--	--	--	--	--
	PZ-13R	404	480	486	495	--	5	4.4	1U
	A1-PZ-2	204	--	--	299	--	4	--	4
	A2-PZ-1	456	440	476	474	--	6.1	3.3	6.9
	A2-PZ-2	--	--	--	--	--	--	--	--
	A2-PZ-7	--	--	--	--	--	--	--	--
Objective 2	MW-5	--	--	--	--	--	--	--	--
	MW-13S	--	--	--	--	--	--	--	--
	MW-14BR	--	--	--	--	--	--	--	--
	MW-21	--	--	--	--	--	--	--	--
	PZ-18	--	--	--	--	--	--	--	--
	PZ-26	--	--	--	--	--	--	--	--
Objective 3	MW-2	--	--	--	--	--	--	--	--
	MW-4	--	--	--	--	--	--	--	--
	MW-10	--	--	--	234	--	--		3.9[4.2]
	PZ-7	--	--	--	--	--	--	--	--
Others	MW-19	--	--	--	--	--	--	--	--
	PZ-2	--	--	--	--	--	--	--	--
	PZ-27	--	--	--	--	--	--	--	--
	A1-PZ-1	--	--	--	--	--	--	--	--

Table 4-3
Groundwater Sampling Field-Parameters and Geochemistry Analysis Results - 2012

Former Lockheed Martin French Road Facility
Utica, New York

Notes:

1. B = Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).
2. D = Diluted sample result within calibration range
3. DO = dissolved oxygen
4. J = Indicates an estimated value.
5. mg/L = milligrams per liter
7. mV = millivolts
6. mS/cm = milliSiemens per centimeter
8. NO^3 = nitrate
9. ORP = oxygen reduction potential
10. s.u. = standard units
11. U = The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

* Instrument error

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Section 5
Summary and Conclusions

Analysis of monitoring data collected in 2012 along with historical site data leads to the following conclusions:

- Chlorinated volatile organic compounds are the predominant constituents detected in Objective 1 wells at concentrations greater than regulatory standards and guidance values. Detected constituents are similar to those identified in earlier investigations. Concentrations at piezometer A2-PZ-1 are greater than those reported elsewhere on site, but they are consistent with previous concentrations measured at that location.

- Analytical results for Objective 1 wells show decreasing trends for selected constituents of concern in MW-3 and PZ-5 based on the Mann-Kendall analysis. No sudden increase in constituent of concern concentrations was observed, and data from the 2012 sampling event do not exceed historical maximum concentrations detected at the site.

- With the exception of vinyl chloride at MW-21, monitoring results for Objective 2 wells show that all constituents of concern are below their respective cleanup targets. No historic data are available for monitoring well MW-21. Vinyl chloride concentrations detected in this well during three 2012 monitoring events and during one monitoring event in 2011 are of similar levels that do not readily identify an increasing or decreasing trend. Therefore, the presence of one contaminant (vinyl chloride) at a relatively constant level at MW-21 does not prove/disprove spreading of contaminants. In general, the results of Objective 2 monitoring wells indicate that contamination is not spreading to uncontaminated areas of the site.

- Analytical results for Objective 3 wells show that concentrations of several constituents of concern in MW-2 (cis-1,2-DCE and vinyl chloride), MW-4 (vinyl chloride) and in MW-10 (cis-1,2-DCE and vinyl chloride) remain above the cleanup target. These data may be used as planning tools for worker protection and waste management in advance of intrusive activities at Objective 3 areas.

- Groundwater-elevation data for Objective 4 wells indicate that local groundwater flows generally to the southeast, with localized variations due to the effects of the GCTS, utility corridors, and other subsurface features. This is consistent with historical site observations. Therefore, no change has been observed in the direction of groundwater flow that might alter the basis of the assumptions used to develop the monitored natural attenuation plan.

- Geochemistry data from field sampling indicate a slightly to moderately reducing environment (though not uniform across the site) in the study area. The geochemical conditions (neutral pH, possibly reducing chemistry) in the study area may be conducive to biotic and/or abiotic degradations of chlorinated volatile organic compounds, which could contribute to natural attenuation of the COCs at the site.

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Section 6
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APPENDIX A—
HISTORICAL DATA FOR THE
LOCKHEED MARTIN UTICA SITE, 1996–2008

Appendix A
Historic Groundwater Data 1995 to 2008

Former Lockheed Martin French Road Facility
Utica, New York

Location		Tetrachloroethene	Trichloroethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	Benzene	Methylene Chloride	Chloroform	Chloroethane	Toluene	Chlorobenzene
	NYSDEC TOGS	5	5	5	5	2	5	5	1	5	7	5	5	5
MW-1	Jun-96	**4200**	0	0	0	--	--	0	0	0	0	--	--	--
	Aug-96	**4300**	0	0	**260**	--	--	0	0	0	0	--	--	--
	Nov-96	**11000**	0	0	0	--	--	0	0	0	0	--	--	--
	Feb-97	**2300**	**120**	0	110	--	--	0	0	**62**	**73**	--	--	--
	Jun-97	--	--	--	--	--	--	--	--	--	--	**5000**	--	--
	Aug-97	**7300**	**370**	--	**240**	--	--	--	--	--	--	--	--	--
	Nov-97	**1100**	**730**	--	**390**	--	--	--	--	--	--	--	--	--
	Feb-98	**1100**	**240**	**5.5**	**160**	--	--	**27**	0.24	**6.6**	0	--	--	--
	May-98	**2200**	**380**	**22**	**220**	**18**	--	**35**	0	--	--	--	--	--
	Sep-98	**2900**	**590**	0	**390**	0	--	0	0	--	--	--	--	--
	Nov-98	**820**	**290**	0	**220**	0	--	**22**	0	--	--	--	--	--
	Feb-99	**1800**	**270**	0	**110**	0	--	0	0	--	--	--	--	--
	May-99	**1600**	**360**	0	**180**	0	--	**87**	0	--	--	--	--	--
	Sep-99	**1200**	**570**	0	**290**	0	--	**20**	0.48	--	--	--	--	--
	Dec-99	**2200**	**830**	0	**360**	0	--	**21**	0.36	--	--	--	--	--
	Mar-00	**1200**	**470**	0	**180**	0	--	0	0	--	--	--	--	--
	Jun-00	**2400**	**510**	0	**180**	0	--	0	0	--	--	--	--	--
	Sep-00	**1200**	**360**	0	**200**	0	0	0	0	--	--	0	--	--
	Dec-00	**1000**	**380**	0	**210**	0	0	0	0	--	--	0	--	--
	Mar-01	**810**	**290**	0	**120**	0	0	**54**	--	--	--	0	--	--
	Jun-01	**1200**	**400**	--	**160**	--	--	**20**	--	--	--	--	--	--
	Oct-01	**600**	**360**	0	**180**	0		**17**	0	--	--	--	--	--
	Jan-02	**1000**	**650**	0	**180**	0	0	**21**	0	0	0	0	--	--
	May-02	**590**	**340**	--	**120**	--	--	**12**	--	--	--	--	--	--
	Aug-02	**470**	**310**	0	**150**	0	0	**20**	0	--	--	0	--	--
	Nov-02	**730**	**310**	0	**99**	0	0	0	0	--	--	0	--	--
	Mar-03	**260**	**150**	0	**64**	0	0	**6.1**	0	--	--	0	--	--
	Jul-03	**160**	**200**	**14**	**140**	**8.2**	0	**17**	0	--	--	0	--	--
	Oct-03	**170**	**220**	**9.6**	**170**	**10**	0	**20**	0	--	--	0	--	--
	Feb-04	**42**	**38**	1.00	**61.00**	1.10	0	3.30	0	--	--	0	--	--
	Mar-04	**230**	**55**	0	**54**	0	0	0	0	--	--	0	--	--
	Jun-04	**79**	**75**	2.6	**100**	**5.3**	0	**10**	0	--	--	0	--	--
	Sep-04	**100**	**92**	2.2	**92**	**5.2**	0	**7.2**	0	--	--	0	--	--
	Dec-04	**83**	**51**	0	**79**	**3.3**	0	**9.6**	0	--	--	0	--	--
	Mar-05	**62**	**30**	1.4	**39**	0	0	**6.6**	0	--	--	0	--	--
	Mar-06	**50**	**33**	1.1	**46**	**2.4**	0	**8.1**	0	--	--	0	--	--
	Mar-07	**56**	**23**	0.55	**25**	0	--	**3.3**	0	--	--	--	--	--
	Jul-08	**60**	**18**	2	**54**	**4.7**	0	**8.3**	--	--	--	--	--	--
	Oct-08	**18**	**7.6**	1.6	**43**	**3.9**	0	**6**	--	--	--	--	--	--
MW-2	Aug-96	0	0	17	**250**	**76**	--	**36**	--	--	--	--	--	--
	Nov-97	**25**	**47**	--	**210**	**93**	--	--	--	--	--	--	--	--
	May-98	**48**	**63**	17	**140**	**64**	2.5	**55**	0	--	--	2.1	--	--
	May-99	0	**68**	0	**170**	**84**	0	**81**	0.74	--	--	0	--	--
	Jun-00	0	0	4.3	**94**	**98**	0	**47**	0	--	--	0	--	--
	Dec-00	0	**29**	2.7	**120**	**27**	0	**20**	0	--	--	0	4.1	--
	Jul-01	--	--	5.4	**110**	**35**	--	**28**	--	--	--	--	--	--
	May-02	--	1.8	2.9	**33**	**33**	--	**16**	--	--	--	--	--	--
	Oct-03	--	0.39	5	**37**	**79**	--	**16**	--	--	--	--	--	--
	Sep-04	0	0	3.4	**36**	**78**	0	**14**	0	--	--	--	0	--
	Jul-08	0	0.62	2.1	**12**	**36**	0.57	**7**	--	--	--	--	--	--
	Oct-08	0	0	2.1	**11**	**28**	0	**5.3**	--	--	--	--	--	--
MW-3	Aug-96	0	--	0	270	**94**	--	**99**	--	--	--	--	--	--
	Nov-97	**37**	--	**19**	360	**19**	--	**35**	--	--	--	--	--	--
	May-98	**73**	**300**	**20**	430	**26**	--	**30**	0	--	--	--	--	0.36
	May-99	0	**260**	0	440	0	--	**100**	0.71	--	--	--	--	0.49
	Jun-00	0	**110**	0	510	**8.6**	--	**9.9**	0	--	--	--	--	0
	Dec-00	0	**63**	0	300	0	--	**8.2**	0	--	--	--	--	0
	Jul-01	**11**	--	--	400	**4.7**	--	**9.8**	--	--	--	--	--	--
	May-02	**48**	**430**	0	340	0	--	**6.9**	0	--	--	--	--	0
	Oct-03	**21**	**250**	**10**	200	**8.2**	--	**17**	--	--	--	--	--	--
	Sep-04	**57**	**240**	4.7	140	**14**	--	**10**	0	--	--	--	--	0
	Jul-08	**40**	**55**	1.6	53	**4.8**	--	**5.2**	--	--	--	--	--	--
	Oct-08	**12**	**29**	1.6	86	**4**	--	**5**	0	--	--	--	--	0

Appendix A
Historic Groundwater Data 1995 to 2008

Former Lockheed Martin French Road Facility
Utica, New York

Location		Tetrachloroethene	Trichloroethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	Benzene	Methylene Chloride	Chloroform	Chloroethane	Toluene	Chlorobenzene
	NYSDEC TOGS	5	5	5	5	2	5	5	1	5	7	5	5	5
MW-4	Aug-96	--	--	--	--	**4**	--	--	--	--	--	--	--	--
	Nov-97	--	--	--	--	**3.5**	--	--	--	--	--	--	--	--
	May-98	--	0	--	1	**3.5**	--	0	--	--	--	--	--	--
	May-99	--	1.1	--	3.6	**4.1**	--	1.3	--	--	--	--	--	--
	Jun-00	--	0	--	0	**2.7**	--	0	--	--	--	--	--	--
	Dec-00	--	0	--	3.2	**2.6**	--	0.55	--	--	--	--	2.6	--
	Jul-01	--	--	--	1.2	**3.5**	--	--	--	--	--	--	--	--
	May-02	--	0	--	1.1	**4**	--	0	--	--	--	--	0	--
	Oct-03	--	0	--	**5.7**	**4.4**	--	1.4	--	--	--	--	--	--
	Sep-04	--	0	--	**7.4**	**6.4**	--	1.2	--	--	--	--	0	--
	Jul-08	--	0	--	4.6	**2**	--	1.1	--	--	--	--	--	--
	Oct-08	--	0	--	**7.1**	**3.2**	--	1.9	--	--	--	--	0	--
MW-9	May-98	--	--	--	0.29	**9.8**	--	0	--	--	--	--	--	--
	May-99	--	--	--	1.1	**2.1**	--	1	--	--	--	--	--	--
	Jun-00	--	--	--	0.22	1.1	--	0	--	--	--	--	--	--
	Jul-01	--	--	--	0.29	**2.7**	--	0.32	--	--	--	--	--	--
	May-02	--	--	--	0.52	**4.4**	--	0.22	--	--	--	--	--	--
	Oct-03	--	--	0.42	1.8	0.58	--	0.92	--	--	--	1.4	--	--
	Sep-04	--	--	0	2	1.4	--	0.9	--	--	--	0.62	--	--
	Jul-08	--	--	1.2	2.5	**7.8**	--	0.88	--	--	--	--	--	--
	Oct-08	0	0	0	0	0	0	0	--	--	--	--	--	--
MW-10	Jun-96	--	0	**67**	**1100**	**260**	0	**61**	--	0	0	0	--	--
	Aug-96	--	0	0	**1700**	**300**	0	**120**	--	0	0	0	--	--
	Nov-96	--	0	**37**	**540**	**200**	0	**82**	--	0	0	0	--	--
	Feb-97	--	**12**	**42**	**500**	**110**	**16**	**250**	--	**14**	**9**	**20**	--	--
	Jun-97	--	**12**	**30**	**450**	**140**	--	**170**	--	--	--	--	--	--
	Aug-97	--	0	**27**	**430**	**320**	0	**280**	--	--	--	0	--	--
	Nov-97	--	--	**39**	**650**	**210**	--	**73**	--	--	--	--	--	--
	Feb-98	--	1.9	**20**	**260**	**67**	0	**160**	--	2.9	0	**18**	--	--
	May-98	--	3	**40**	**540**	**130**	4.5	**140**	--	--	--	**14**	--	--
	Sep-98	--	0	**20**	**300**	**99**	0	**54**	--	--	--	0	--	--
	Nov-98	--	0	**39**	**680**	**220**	0	**54**	--	--	--	0	--	--
	Feb-99	--	0	**7.1**	**140**	**18**	5	**110**	--	--	--	**14**	--	--
	May-99	--	**11**	**22**	**300**	**86**	0	**76**	--	--	--	**11**	--	--
	Sep-99	--	0	**23**	**580**	0	0	**40**	--	--	--	0	--	--
	Dec-99	--	0	**21**	**490**	**160**	0	**81**	--	--	--	0	--	--
	Mar-00	--	0	**7.8**	**110**	**24**	0	**59**	--	--	--	0	--	--
	Jun-00	--	0	0	2.1	1.5	0	**25**	--	--	--	0	--	--
	Sep-00	--	0	**24**	**540**	**180**	0	**47**	--	--	--	0	--	--
	Dec-00	--	0	**7.4**	**140**	**37**	0	**40**	--	--	--	2.3	--	--
	Mar-01	--	0	**12**	**140**	**36**	2.4	**51**	--	--	--	0	--	--
	Jun-01	--	--	**7.5**	**140**	**43**	--	**43**	--	--	--		--	--
	Oct-02	--	2.4	**14**	**220**	**63**	0	**42**	--	--	--	0	--	--
	Jan-02	--	0	**9.8**	**160**	**36**	0	**50**	--	--	--	0	--	--
	May-02	--	2.9	**10**	**210**	**44**	0	**86**	--	--	--		--	--
	Aug-02	--	**6.2**	**17**	**300**	**98**	0	**40**	--	--	--	0	--	--
	Nov-02	--	3.6	**8.2**	**140**	**30**	0	**50**	--	--	--	0	--	--
	Apr-03	--	0	0.39	3.7	**2.2**	0	**12**	--	--	--	0	--	--
	Jul-03	--	4.2	**7.5**	**130**	**30**	0	**32**	--	--	--	0	--	--
	Oct-03	--	**6.2**	11	**210**	**66**	--	**27**	--	--	--		--	--
	Feb-04	--	4.50	4.40	**82**	**21**	0	**27**	--	--	--	0	--	--
MW-10	Mar-04	--	0	0.64	**7.3**	**3**	0	**12**	--	--	--	0	--	--
	Jun-04	--	**11**	10	**140**	**34**	0	**29**	--	--	--	0	--	--
	Sep-04	--	**7.2**	**6.2**	**130**	**45**	0	**22**	--	--	--	0	--	--
	Dec-04	--	2.6	3.1	**59**	**21**	0	**18**	--	--	--	0	--	--
	Mar-05	--	3.5	3.3	**64**	**21**	0	**14**	--	--	--	0	--	--
	Mar-06	--	3.1	3.8	**57**	**29**	0	**11**	--	--	--	0	--	--
	Mar-07	--	1.9	2.8	**43**	**22**	0	**5.9**	--	--	--	0	--	--
	Jul-08	--	3.9	3.3	**41**	**38**	--	**6.9**	--	--	--	--	--	--
	Oct-08	--	1.7	1.6	**25**	**22**	--	2	--	--	--	--	--	--

Appendix A
Historic Groundwater Data 1995 to 2008

Former Lockheed Martin French Road Facility
Utica, New York

Location		Tetrachloroethene	Trichloroethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	Benzene	Methylene Chloride	Chloroform	Chloroethane	Toluene	Chlorobenzene
	NYSDEC TOGS	5	5	5	5	2	5	5	1	5	7	5	5	5
PZ-2	Jun-96	0	0	--	**28**	**14**	--	0	--	0	--	--	--	--
	Aug-96	0	0	--	0	0	--	0	--	0	--	--	--	--
	Nov-96	0	0	--	**15**	**11**	--	0	--	0	--	--	--	--
	Feb-97	0	1.2	--	**12**	**11**	--	0	--	4.1	--	--	--	--
	Jun-97	--	--	--	**16**	**17**	--	--	--	--	--	--	--	--
	Aug-97	**12**	**6**	--	**9**	**7**	--	--	--	--	--	--	--	--
	Nov-97	**6**		--	--	**4.3**	--	--	--	--	--	--	--	--
	Feb-98	**52**	**13**	--	**20**	**7.3**	--	0.44	--	0.68	--			0
	May-98	1.3	1.2	1.2	**14**	**14**	--	0.28	--	0	--	0.8	0	0
	Sep-98	0	0	0	2	0	--	0	--	0	--	0	0	1.9
	Nov-98	0.78	0.53	0	0.96	0.75	--	0	--	0	--	0	1.9	**9.2**
	Feb-99	1.3	1.2	0	2	**2.2**	--	0.21	--	0	--	0	0	2.8
	May-99	1	1.4	0.22	1.6	1.3	--	1.1	--	0	--	0	0	6
	Sep-99	0	0.28	0.2	1.8	1.7	--	0	--	0	--	0	0	4.5
	Dec-99	0.24	1.2	0	2	1.9	--	0	--	0	--	0	0	0.48
	Mar-00	0	0	0	**6**	**2**	--	0	--	0	--	0	0	1.1
	Jun-00	**13**	0.51	0	1.4	0	--	0	--	0	--	0	**7**	0
	Sep-00	0.2	0	0	2.5	1.6	--	0	--	0	--	0	0.29	2.7
	Dec-00	**8.5**	3.5	0	1.8	0.7	--	0	--	0	--	0	0	0.63
	Mar-01	0.35	1.6	0	4.6	**3.4**	--	--	--	--	--		1.5	0.77
	Jun-01	0.68	1.4	--	4.8	**2**	--	--	--	--	--		0.21	1.3
	Oct-01	0	0	0	0.47	0.77	--	0	--	--	--	0	0.2	**5.4**
	Jan-02	0	0.34	0	1.4	1.6	--	0	--	--	--	0	--	1.6
	May-02	0.27	0	0	0.3	0.51	--	0	--	--	--		0.25	0.32
	Aug-02	0.27	0.25	0	0.37	0.3	--	0	--	--	--	0	1.8	**7.4**
	Nov-02	0	0.82	0.21	18	**3.8**	--	0	--	--	--	0	0	2.6
	Mar-03	0.67	0.61	0	10	**3.6**	--	0	--	--	--	0	0.21	1.2
	Jul-03	1.7	0.55	0	**5.1**	**3**	--	0	--	--	--	0	0	1
	Oct-03	0.2	0.25	0.44	0.78	0.63	--	0	--	--	--	0	--	**9.5**
	Feb-04	0.61	1.20	0	3.80	1.40	--	0	--	--	--	0	0.00	0.86
	Mar-04	0.92	0	0	0	0.87	--	0	--	--	--	0	0	0.25
	Jun-04	0.54	0	0	1.3	1.1	--	0	--	--	--	0	0	0.5
	Sep-04	0	0.22	0	1.2	0.97	--	0	--	--	--	0	0	2.5
	Dec-04	0	0.24	0	1.5	0.89	--	0	--	--	--	0	0	0.76
	Mar-05		0.21	0	2	1.9	--	0	--	--	--	0	0	0.33
	Mar-06	1	0	0	0	0	--	0	--	--	--	0	0	0
	Jul-08	0.43	0	0	0	0	--	--	--	--	--	--	--	--
	Oct-08	0.52	0	--	0	0	--	0	--	--	--	--	--	--
PZ-4	Aug-96	--	--	--	0	--	--	--	--	--	12	--	--	--
	Nov-97	--	--	--	**8.1**	--	--	--	--	--	--	--	--	--
	May-98	4.4	0.43	--	4.9	--	0.76	1.2	--	--	--	--	--	--
	May-99	2.8	1.2	--	3.4	--	1.4	1.4	--	--	--	--	--	--
	Jun-00	1.9	0	--	3	--	0.55	1	--	--	--	--	**42**	--
	Dec-00	0	0	--	2.2	--	0	0	--	--	--	--	0	--
	Jul-01	0.69	--	--	1.6	--	--	0.52	--	--	--	--	--	--
	May-02	1.8	0	--	**9.2**	--	0.68	1.6	--	--	--	--	0.93	--
	Oct-03	0.35	0	--	1.6	--	0	1	--	--	--	--	--	--
	Sep-04	0.22	0	--	1.3	--	0	0.52	--	--	--	--	0	--
	Jul-08	0.8	0	--	2.7	--	0	0.9	--	--	--	--	--	--

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Location		Tetrachloroethene	Trichloroethene	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	Benzene	Methylene Chloride	Chloroform	Chloroethane	Toluene	Chlorobenzene
	NYSDEC TOGS	5	5	5	5	2	5	5	1	5	7	5	5	5
PZ-5	Jun-96	**200**	**150**	<10	**46**	0	--	0	--	<50	--	--	0	0
	Aug-96	**85**	**28**	<5	**5**	0	--	0	16	<25	13	--	0	0
	Nov-96	**120**	**23**	<5	**12**	0	--	0	0	<25	--	--	**8**	0
	Feb-97	**340**	**69**	--	**85**	--	--	--	0	--	6.7	--	0	--
	Jun-97	--	--	--	--	--	--	--	--	--	--	--	--	--
	Aug-97	**46**	**22**	--	**20**		--	--	--	--	--	--	--	--
	Nov-97	**5.9**	--	--	--	**3.7**	--	--	--	--	--	--	--	--
	Feb-98	**13**	--	2.1	3.3	0	--	0	0	3.1	--	--	0	**8.7**
	May-98	--	--	--	--	--	--	--	--	--	--	--	--	--
	Sep-98	**110**	**46**	0	**100**	**100**	--	0	0	--	--	--	0	0
	Nov-98	**200**	**28**	0	**130**	**50**	--	2.2	0	--	--	--	0	0
	Feb-99	**300**	**46**	0	**110**	**26**	--	0	0	--	--	--	0	0
	May-99	--	--	--	--	--	--	--	--	--	--	--	--	--
	Sep-99	**42**	**32**	0.82	**32**	0	--	0	0	--	--	--	0	0
	Dec-99	--	--	--	--	--	--	--	--	--	--	--	--	--
	Mar-00	--	--	--	--	--	--	--	--	--	--	--	--	--
	Jun-00	--	--	--	--	--	--	--	--	--	--	--	--	--
	Sep-00	--	--	--	--	--	--	--	--	--	--	--	--	--
	Dec-00	--	--	--	--	--	--	--	--	--	--	--	--	--
	Mar-01	--	--	--	--	--	--	--	--	--	--	--	--	--
	Jul-01	**81**	**38**	2	**280**	**29**	--	1.3	0	--	--	--	0	0
	Oct-01	**160**	**130**	2.4	**140**	**17**	--	0	0	--	--	--	0	0
	Jan-02	--	--	--	--	--	--	--	--	--	--	--	--	--
	May-02	**250**	**200**	0	**190**	**16**	--	0	0	--	--	--	0	0
	Aug-02	**35**	**26**	1.8	**76**	**12**	--	0	0	--	--	--	0	0
	Nov-02	**350**	**280**	4.7	**260**	**42**	--	0	0	--	--	--	0	0
	Mar-03	**180**	**88**	0	**280**	**53**	--	0	0	--	--	--	0	0
	Jul-03	**200**	**100**	4.4	**350**	**60**	--	0	0	--	--	--	0	0
	Oct-03	**220**	**110**	6	**180**	**100**	--	**6**	0	--	--	--	0	0
	Feb-04	**200**	**330**	5.40	**430**	**41**	--	0	0	--	--	--	0	0
	Mar-04	**240**	**260**	5.4	**500**	**65**	--	0	0	--	--	--	0	0
	Jun-04	**290**	**150**	11	**420**	**57**	--	**8.2**	0	--	--	--	**15**	**9.3**
	Sep-04	**150**	**220**	6.6	**380**	**61**	--	0	0	--	--	--	0	0
	Dec-04	**220**	**160**	0	**340**	**40**	--	0	0	--	--	--	0	0
	Mar-05	**87**	**80**	5.5	**390**	**100**	--	0	0	--	--	--	0	0
	Mar-06	**180**	**260**	6.6	**290**	**83**	--	0	0	--	--	--	0	0
	Mar-07	**210**	**200**	6.8	**410**	**73**	--	0	0	--	--	--	0	0
	Aug-08	**8.6**	**9.5**	--	**26**	**5.9**	--	0	--	--	--	--	--	--
	Oct-08	4.2	**37**	--	**87**	**37**	--	0	--	--	--	--	--	--
PZ-6	Feb-95	**350**	**20**	--	**25**	--	--	--	--	--	24	--	--	--
	Dec-04	**330**	**140**	--	**97**	--	--	--	--	--	--	--	--	--
	Aug-08	**14**	**19**	--	**19**	**9.6**	--	--	--	--	--	--	--	--
	Oct-08	0	**14**	--	**62**	**25**	--	--	--	--	--	--	--	--

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Location		Ethylbenzene	1,1-Dichloroethene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	m-Xylene	o-Xylene	Trichloroflouromethane	Bromodichloromethane	Dibromochloromethane	1,1,2,2-Tetrachloroethane
	NYSDEC TOGS	5	0.7	3	3			5	50		5
MW-1	Jun-96	--	--	--	--	--	--	--	--	--	--
	Aug-96	--	--	--	--	--	--	--	--	--	--
	Nov-96	--	--	--	--	--	--	--	--	--	--
	Feb-97	--	--	--	--	--	--	--	--	--	--
	Jun-97	--	--	--	--	--	--	--	--	--	--
	Aug-97	--	--	--	--	--	--	--	--	--	--
	Nov-97	--	--	--	--	--	--	--	--	--	--
	Feb-98	--	--	--	--	--	--	--	--	--	--
	May-98	--	--	--	--	--	--	--	--	--	--
	Sep-98	--	--	--	--	--	--	--	--	--	--
	Nov-98	--	--	--	--	--	--	--	--	--	--
	Feb-99	--	--	--	--	--	--	--	--	--	--
	May-99	--	--	--	--	--	--	--	--	--	--
	Sep-99	--	--	--	--	--	--	--	--	--	--
	Dec-99	--	--	--	--	--	--	--	--	--	--
	Mar-00	--	--	--	--	--	--	--	--	--	--
	Jun-00	--	--	--	--	--	--	--	--	--	--
	Sep-00	--	--	--	--	--	--	--	--	--	--
	Dec-00	--	--	--	--	--	--	--	--	--	--
	Mar-01	--	--	--	--	--	--	--	--	--	--
	Jun-01	--	--	--	--	--	--	--	--	--	--
	Oct-01	--	--	--	--	--	--	--	--	--	--
	Jan-02	--	--	--	--	--	--	--	--	--	--
	May-02	--	--	--	--	--	--	--	--	--	--
	Aug-02	--	--	--	--	--	--	--	--	--	--
	Nov-02	--	--	--	--	--	--	--	--	--	--
	Mar-03	--	--	--	--	--	--	--	--	--	--
	Jul-03	--	--	--	--	--	--	--	--	--	--
	Oct-03	--	--	--	--	--	--	--	--	--	--
	Feb-04	--	--	--	--	--	--	--	--	--	--
	Mar-04	--	--	--	--	--	--	--	--	--	--
	Jun-04	--	--	--	--	--	--	--	--	--	--
	Sep-04	--	--	--	--	--	--	--	--	--	--
	Dec-04	--	--	--	--	--	--	--	--	--	--
	Mar-05	--	--	--	--	--	--	--	--	--	--
	Mar-06	--	--	--	--	--	--	--	--	--	--
	Mar-07	--	--	--	--	--	--	--	--	--	--
	Jul-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--
MW-2	Aug-96	--	--	--	--	--	--	--	--	--	--
	Nov-97	--	--	--	--	--	--	--	--	--	--
	May-98	--	--	--	--	--	--	--	--	--	--
	May-99	--	--	--	--	--	--	--	--	--	--
	Jun-00	--	--	--	--	--	--	--	--	--	--
	Dec-00	--	--	--	--	--	--	--	--	--	--
	Jul-01	--	--	--	--	--	--	--	--	--	--
	May-02	--	--	--	--	--	--	--	--	--	--
	Oct-03	--	--	--	--	--	--	--	--	--	--
	Sep-04	--	--	--	--	--	--	--	--	--	--
	Jul-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--
MW-3	Aug-96	--	--	--	--	--	--	--	--	--	--
	Nov-97	--	--	--	--	--	--	--	--	--	--
	May-98	--	--	--	--	--	--	--	--	--	--
	May-99	--	--	--	--	--	--	--	--	--	--
	Jun-00	--	--	--	--	--	--	--	--	--	--
	Dec-00	--	--	--	--	--	--	--	--	--	--
	Jul-01	--	--	--	--	--	--	--	--	--	--
	May-02	--	--	--	--	--	--	--	--	--	--
	Oct-03	--	--	--	--	--	--	--	--	--	--
	Sep-04	--	--	--	--	--	--	--	--	--	--
	Jul-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--

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Location		Ethylbenzene	1,1-Dichloroethene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	m-Xylene	o-Xylene	Trichloroflouromethane	Bromodichloromethane	Dibromochloromethane	1,1,2,2-Tetrachloroethane
	NYSDEC TOGS	5	0.7	3	3			5	50		5
MW-4	Aug-96	--	--	--	--	--	--	--	--	--	--
	Nov-97	--	--	--	--	--	--	--	--	--	--
	May-98	--	--	--	--	--	--	--	--	--	--
	May-99	--	--	--	--	--	--	--	--	--	--
	Jun-00	--	--	--	--	--	--	--	--	--	--
	Dec-00	--	--	--	--	--	--	--	--	--	--
	Jul-01	--	--	--	--	--	--	--	--	--	--
	May-02	--	--	--	--	--	--	--	--	--	--
	Oct-03	--	--	--	--	--	--	--	--	--	--
	Sep-04	--	--	--	--	--	--	--	--	--	--
	Jul-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--
MW-9	May-98	--	--	--	--	--	--	--	--	--	--
	May-99	--	--	--	--	--	--	--	--	--	--
	Jun-00	--	--	--	--	--	--	--	--	--	--
	Jul-01	--	--	--	--	--	--	--	--	--	--
	May-02	--	--	--	--	--	--	--	--	--	--
	Oct-03	--	--	--	--	--	--	--	--	--	--
	Sep-04	--	--	--	--	--	--	--	--	--	--
	Jul-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--
MW-10	Jun-96	0	0	--	--	--	--	--	--	--	--
	Aug-96	0	0	--	--	--	--	--	--	--	--
	Nov-96	0	0	--	--	--	--	--	--	--	--
	Feb-97	0	**4**	--	--	--	--	--	--	--	--
	Jun-97	--	--	--	--	--	--	--	--	--	--
	Aug-97	--	--	--	--	--	--	--	--	--	--
	Nov-97	--	--	--	--	--	--	--	--	--	--
	Feb-98	1.2	**2.8**	--	--	--	--	--	--	--	--
	May-98	0	--	--	--	--	--	--	--	--	--
	Sep-98	0	--	--	--	--	--	--	--	--	--
	Nov-98	0	--	--	--	--	--	--	--	--	--
	Feb-99	0	--	--	--	--	--	--	--	--	--
	May-99	0	--	--	--	--	--	--	--	--	--
	Sep-99	0.69	--	--	--	--	--	--	--	--	--
	Dec-99	0.59	--	--	--	--	--	--	--	--	--
	Mar-00	0	--	--	--	--	--	--	--	--	--
	Jun-00	0	--	--	--	--	--	--	--	--	--
	Sep-00	0	--	--	--	--	--	--	--	--	--
	Dec-00	0	--	--	--	--	--	--	--	--	--
	Mar-01	--	--	--	--	--	--	--	--	--	--
	Jun-01	--	--	--	--	--	--	--	--	--	--
	Oct-02	0	--	--	--	--	--	--	--	--	--
	Jan-02	--	--	--	--	--	--	--	--	--	--
	May-02	0	--	--	--	--	--	--	--	--	--
	Aug-02	0	--	--	--	--	--	--	--	--	--
	Nov-02	0	--	--	--	--	--	--	--	--	--
	Apr-03	0	--	--	--	--	--	--	--	--	--
	Jul-03	0	--	--	--	--	--	--	--	--	--
	Oct-03	--	--	--	--	--	--	--	--	--	--
	Feb-04	0	--	--	--	--	--	--	--	--	--
MW-10	Mar-04	--	--	--	--	--	--	--	--	--	--
	Jun-04	0	--	--	--	--	--	--	--	--	--
	Sep-04	0	--	--	--	--	--	--	--	--	--
	Dec-04	0	--	--	--	--	--	--	--	--	--
	Mar-05	0	--	--	--	--	--	--	--	--	--
	Mar-06	0	--	--	--	--	--	--	--	--	--
	Mar-07	0.7	--	--	--	--	--	--	--	--	--
	Jul-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--

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Location		Ethylbenzene	1,1-Dichloroethene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	m-Xylene	o-Xylene	Trichloroflouromethane	Bromodichloromethane	Dibromochloromethane	1,1,2,2-Tetrachloroethane
	NYSDEC TOGS	5	0.7	3	3			5	50		5
PZ-2	Jun-96	--	--	--	--	--	--	--	--	--	--
	Aug-96	--	--	--	--	--	--	--	--	--	--
	Nov-96	--	--	--	--	--	--	--	--	--	--
	Feb-97	--	--	--	--	--	--	--	--	--	--
	Jun-97	--	--	--	--	--	--	--	--	--	--
	Aug-97	--	--	--	--	--	--	--	--	--	--
	Nov-97	--	--	--	--	--	--	--	--	--	--
	Feb-98	--	--	0	--	--	--	--	--	--	--
	May-98	--	--	**22**	0	0	0	--	--	--	--
	Sep-98	--	--	**36**	0	0	0	--	--	--	--
	Nov-98	--	--	**7.6**	0	2.4	9	--	--	--	--
	Feb-99	--	--	**11**	0.43	0.61	0.51	--	--	--	--
	May-99	--	--	**15**	0.22	1.3	0	--	--	--	--
	Sep-99	--	--	**20**	0.31	0	0	--	--	--	--
	Dec-99	--	--	**6.7**	0	0	0	--	--	--	--
	Mar-00	--	--	**4.9**	0	0	0	--	--	--	--
	Jun-00	--	--	0.98	0	0	0	--	--	--	--
	Sep-00	--	--	7	0	0	0	--	--	--	--
	Dec-00	--	--	2.6	0	0	0	--	--	--	--
	Mar-01	--	--	**3.1**	--	--	--	--	--	--	--
	Jun-01	--	--	**5.3**	--	--	--	--	--	--	--
	Oct-01	--	--	**5.8**	0	0	0	--	--	--	--
	Jan-02	--	--	**3.8**	--	--	--	--	--	--	--
	May-02	--	--	1.2	0	0	0	--	--	--	--
	Aug-02	--	--	**8.7**	0.22	1.2	4.8	--	--	--	--
	Nov-02	--	--	**3.1**	0	0.35	0.38	--	--	--	--
	Mar-03	--	--	1.7	0	0.25	0.24	--	--	--	--
	Jul-03	--	--	2.2	0	0	0	--	--	--	--
	Oct-03	--	--	**3.7**	--	--	0.22	--	--	--	--
	Feb-04	--	--	1.60	0.00	0.00	0.00	--	--	--	--
	Mar-04	--	--	0.78	0	0	0	--	--	--	--
	Jun-04	--	--	1.1	0	0	0	--	--	--	--
	Sep-04	--	--	1.2	0	0	0	--	--	--	--
	Dec-04	--	--	1.6	0	0	0	--	--	--	--
	Mar-05	--	--	0.79	0	0	0	--	--	--	--
	Mar-06	--	--	0	0	0	0	--	--	--	--
	Jul-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--
PZ-4	Aug-96	--	--	--	--	--	--	2	5	3	--
	Nov-97	--	--	--	--	--	--	--	--	--	--
	May-98	--	--	--	--	--	--	--	--	--	--
	May-99	--	--	--	--	--	--	--	--	--	--
	Jun-00	--	--	--	--	--	--	--	--	--	--
	Dec-00	--	--	--	--	--	--	--	--	--	--
	Jul-01	--	--	--	--	--	--	--	--	--	--
	May-02	--	--	--	--	--	--	--	--	--	--
	Oct-03	--	--	--	--	--	--	--	--	--	--
	Sep-04	--	--	--	--	--	--	--	--	--	--
	Jul-08	--	--	--	--	--	--	--	--	--	--

Appendix A
Historic Groundwater Data 1995 to 2008

Former Lockheed Martin French Road Facility
Utica, New York

Location		Ethylbenzene	1,1-Dichloroethene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	m-Xylene	o-Xylene	Trichloroflouromethane	Bromodichloromethane	Dibromochloromethane	1,1,2,2-Tetrachloroethane
	NYSDEC TOGS	5	0.7	3	3			5	50		5
PZ-5	Jun-96	--	--	0	--	--	--	--	--	--	--
	Aug-96	--	--	0	--	--	--	--	--	--	--
	Nov-96	--	--	0	--	--	--	--	--	--	--
	Feb-97	--	--	--	--	--	--	--	--	--	--
	Jun-97	--	--	--	--	--	--	--	--	--	--
	Aug-97	--	--	--	--	--	--	--	--	--	--
	Nov-97	--	--	--	--	--	--	--	--	--	--
	Feb-98	--	--	**260**	--	--	--	--	--	--	--
	May-98	--	--	--	--	--	--	--	--	--	--
	Sep-98	--	--	**11**	--	--	--	--	--	--	--
	Nov-98	--	--	0	--	--	--	--	--	--	--
	Feb-99	--	--	0	--	--	--	--	--	--	--
	May-99	--	--	--	--	--	--	--	--	--	--
	Sep-99	--	--	0	--	--	--	--	--	--	--
	Dec-99	--	--	--	--	--	--	--	--	--	--
	Mar-00	--	--	--	--	--	--	--	--	--	--
	Jun-00	--	--	--	--	--	--	--	--	--	--
	Sep-00	--	--	--	--	--	--	--	--	--	--
	Dec-00	--	--	--	--	--	--	--	--	--	--
	Mar-01	--	--	--	--	--	--	--	--	--	--
	Jul-01	--	--	0	--	--	--	--	--	--	--
	Oct-01	--	--	0	--	--	--	--	--	--	--
	Jan-02	--	--	--	--	--	--	--	--	--	--
	May-02	--	--	0	--	--	--	--	--	--	--
	Aug-02	--	--	0	--	--	--	--	--	--	--
	Nov-02	--	--	0	--	--	--	--	--	--	--
	Mar-03	--	--	0	--	--	--	--	--	--	--
	Jul-03	--	--	0	--	--	--	--	--	--	--
	Oct-03	--	--	--	--	--	--	--	--	--	--
	Feb-04	--	--	0	--	--	--	--	--	--	--
	Mar-04	--	--	0	--	--	--	--	--	--	--
	Jun-04	--	--	**7.2**	--	--	--	--	--	--	--
	Sep-04	--	--	0	--	--	--	--	--	--	--
	Dec-04	--	--	0	--	--	--	--	--	--	--
	Mar-05	--	--	0	--	--	--	--	--	--	--
	Mar-06	--	--	0	--	--	--	--	--	--	--
	Mar-07	--	--	0	--	--	--	--	--	--	--
	Aug-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--
PZ-6	Feb-95	--	--	--	--	--	--	--	--	--	--
	Dec-04	--	--	--	--	--	--	--	--	--	--
	Aug-08	--	--	--	--	--	--	--	--	--	--
	Oct-08	--	--	--	--	--	--	--	--	--	--

APPENDIX B—
HISTORICAL DATA FOR THE
LOCKHEED MARTIN UTICA SITE, 2008–2009

Appendix B
Historic Groundwater Data 2008-2009

Former Lockheed Martin, French Road Facility
Utica, New York

CONSTITUENT	NYSDEC GW STANDARDS	PZ-2		PZ-4	PZ-5		PZ-6		PZ-7		PZ-8		PZ-9			PZ-10		MW-1	
		7/29/2008	10/2/2008	7/30/2008	8/6/2008	10/2/2008	8/6/2008	10/2/2008	8/6/2008	10/2/2008	8/6/2008	10/2/2008	8/6/2008	10/2/2008	2/5/2009	8/6/2008	10/2/2008	7/30/2008	10/3/2008
1,1,1-TRICHLOROETHANE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	1.1 J	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,1,2,2-TETRACHLOROETHANE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 5 J	< 1	1.7 J	< 20 J	< 4	< 20 J	< 4	< 5 J	< 1	< 20 J	< 4	< 5 J	< 1	<1	< 5 J	< 1	< 5	< 1
1,1,2-TRICHLOROETHANE	1	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,1-DICHLOROETHANE	5	< 5 J	< 1	0.90 J	< 20 J	< 4	< 20 J	< 4	0.91 J	< 1	< 20 J	< 4	3.0 J	1.9	1.3	1.3	< 1	**8.3**	**6.0**
1,1-DICHLOROETHENE	0.7	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	0.57 J	< 1
1,2,4-TRICHLOROBENZENE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,2-DIBROMO-3-CHLOROPROPANE	0.04	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,2-DIBROMOETHANE	NS	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,2-DICHLOROBENZENE	3	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,2-DICHLOROETHANE	0.6	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,2-DICHLOROPROPANE	1	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,3-DICHLOROBENZENE	3	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
1,4-DICHLOROBENZENE	3	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
2-BUTANONE	50	2.6 J	< 5	< 25	< 100 J	< 20	< 100 J	< 20	< 25	< 5	< 100 J	< 20	2.6 J	< 5	<5	2.7 J	< 5	< 25	< 5
2-HEXANONE	50	< 25 J	< 5	< 25	< 100 J	< 20	< 100 J	< 20	< 25	< 5	< 100 J	< 20	< 25	< 5	<5	< 25	< 5	< 25	< 5
4-METHYL-2-PENTANONE	NS	< 25 J	< 5	< 25	< 100 J	< 20	< 100 J	< 20	< 25	< 5	< 100 J	< 20	< 25	< 5	<5	< 25	< 5	< 25	< 5
ACETONE	50	17 J	11	< 25	41 J	< 20	45 J	< 20	33	13	**770 J**	37	**150**	6.9	6.3	26	7.2	< 25	< 5
BENZENE	1	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
BROMODICHLOROMETHANE	50	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
BROMOFORM	50	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
BROMOMETHANE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
CARBON DISULFIDE	NS	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	3.2	0.45 J	< 5	2.6	< 5	< 1
CARBON TETRACHLORIDE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
CHLOROBENZENE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
CHLOROETHANE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
CHLOROFORM	7	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	**20 J**	**8.2**	0.40 J	< 1	<1	< 5	< 1	< 5	< 1
CHLOROMETHANE	NS	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
CIS-1,2-DICHLOROETHENE	5	< 5 J	< 1	2.7 J	**26 J**	**87**	**19 J**	**62**	< 5	< 1	1.8 J	5.0	< 5	< 1	<1	< 5	< 1	**54**	**43**
CIS-1,3-DICHLOROPROPENE	0.4	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
CYCLOHEXANE	NS	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
DIBROMOCHLOROMETHANE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
DICHLORODIFLUOROMETHANE	5	< 5 J	< 1	3.0 J	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
ETHYLBENZENE	5	< 5 J	< 1	< 5	**10 J**	1.7 J	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
ISOPROPYLBENZENE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
METHYL ACETATE	NS	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
METHYL-T-BUTYL ETHER (MTBE)	NS	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
METHYLCYCLOHEXANE	NS	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
METHYLENE CHLORIDE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	4.8	1.5 J	< 1	**8.6**	< 5	< 1	< 5	< 1
STYRENE (MONOMER)	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
TETRACHLOROETHENE	5	0.43 J	0.52 J	0.80 J	**8.6 J**	4.2	**14 J**	< 4	< 5	< 1	**14 J**	**41**	< 5	< 1	<1	< 5	< 1	**60**	**18**
TOLUENE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
XYLENE (TOTAL)	5	< 15 J	< 3	< 15	**34 J**	3.9 J	< 20 J	< 12	< 15	< 3	< 60 J	< 12	< 15	< 3	<3	< 15	< 3	< 15	< 3
TRANS-1,2-DICHLOROETHENE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	2.0 J	1.6
TRANS-1,3-DICHLOROPROPENE	0.4	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
TRICHLOROETHENE	5	< 5 J	< 1	< 5	**9.5 J**	**37**	**19 J**	**14**	0.94 J	< 1	4.1 J	**9.4**	< 5	< 1	0.27 J	< 5	0.54 J	**18**	**7.6**
TRICHLOROFLUOROMETHANE	5	< 5 J	< 1	< 5	< 20 J	< 4	< 20 J	< 4	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	< 5	< 1
VINYL CHLORIDE	2	< 5 J	< 1	< 5	**5.9 J**	**37**	**9.6 J**	**25**	< 5	< 1	< 20 J	< 4	< 5	< 1	<1	< 5	< 1	**4.7 J**	**3.9**

Notes:
Data compared to TOGS 1.1.1 Ambient
Water Quality Standards and Guidance Values
NS - No Standard
All units are ug/L unless otherwise noted
Exceedences noted in **bold**.
J - Estimated Value

Appendix B
Historic Groundwater Data 2008-2009

Former Lockheed Martin, French Road Facility
Utica, New York

CONSTITUENT	NYSDEC GW STANDARDS	MW-2		MW-3		MW-4		MW-5		MW-7		MW-9		MW-10		MW-11		MW-13S
		7/30/2008	10/2/2008	7/30/2008	10/2/2008	7/30/2008	10/2/2008	7/30/2008	10/3/2008	7/29/2008	10/1/2008	7/30/2008	10/2/2008	7/30/2008	10/3/2008	7/29/2008	10/1/2008	7/30/2008
1,1,1-TRICHLOROETHANE	5	0.57 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	1.2 J
1,1,2,2-TETRACHLOROETHANE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,1,2-TRICHLOROETHANE	1	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,1-DICHLOROETHANE	5	**7.0**	**5.3**	**5.2**	5.0	1.1 J	1.9	< 5	< 1	< 5 J	< 1	0.88 J	< 1	6.9	2.0	< 5	< 1	4.6 J
1,1-DICHLOROETHENE	0.7	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,2,4-TRICHLOROBENZENE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,2-DIBROMO-3-CHLOROPROPANE	0.04	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,2-DIBROMOETHANE	NS	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,2-DICHLOROBENZENE	3	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,2-DICHLOROETHANE	0.6	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,2-DICHLOROPROPANE	1	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,3-DICHLOROBENZENE	3	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
1,4-DICHLOROBENZENE	3	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
2-BUTANONE	50	< 25	< 5	< 25	< 5	< 25	< 5	< 25	< 5	< 25 J	< 5	< 25	< 5	< 25	< 5	< 25	< 5	< 25
2-HEXANONE	50	< 25	< 5	< 25	< 5	< 25	< 5	< 25	< 5	< 25 J	< 5	< 25	< 5	< 25	< 5	< 25	< 5	< 25
4-METHYL-2-PENTANONE	NS	< 25	< 5	< 25	< 5	< 25	< 5	< 25	< 5	< 25 J	< 5	< 25	< 5	< 25	< 5	< 25	< 5	< 25
ACETONE	50	< 25	< 5	< 25	< 5	< 25	< 5	< 25	14	4.4 J	6.1	< 25	12	< 25	< 5	< 25	< 5	< 25
BENZENE	1	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
BROMODICHLOROMETHANE	50	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
BROMOFORM	50	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
BROMOMETHANE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
CARBON DISULFIDE	NS	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	2.8	< 5
CARBON TETRACHLORIDE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
CHLOROBENZENE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
CHLOROETHANE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
CHLOROFORM	7	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
CHLOROMETHANE	NS	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
CIS-1,2-DICHLOROETHENE	5	**12**	**11**	**53**	**86**	4.6 J	**7.1**	< 5	< 1	< 5 J	< 1	2.5 J	< 1	**41**	**25**	< 5	< 1	< 5
CIS-1,3-DICHLOROPROPENE	0.4	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
CYCLOHEXANE	NS	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
DIBROMOCHLOROMETHANE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
DICHLORODIFLUOROMETHANE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
ETHYLBENZENE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
ISOPROPYLBENZENE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
METHYL ACETATE	NS	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
METHYL-T-BUTYL ETHER (MTBE)	NS	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
METHYLCYCLOHEXANE	NS	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
METHYLENE CHLORIDE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
STYRENE (MONOMER)	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
TETRACHLOROETHENE	5	< 5	< 1	**40**	**12**	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
TOLUENE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
XYLENE (TOTAL)	5	< 15	< 3	< 15	< 3	< 15	< 3	< 15	< 3	< 15 J	< 3	< 15	< 3	< 5	< 3	< 15	< 3	< 15
TRANS-1,2-DICHLOROETHENE	5	2.1 J	2.1	1.6 J	1.6	< 5	< 1	< 5	< 1	< 5 J	< 1	1.2 J	< 1	3.3 J	1.6	< 5	< 1	< 5
TRANS-1,3-DICHLOROPROPENE	0.4	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
TRICHLOROETHENE	5	0.62 J	< 1	**55**	**29**	< 5	< 1	< 5	< 1	0.68 J	0.98 J	< 5	< 1	3.9 J	1.7	< 5	< 1	0.53 J
TRICHLOROFLUOROMETHANE	5	< 5	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5 J	< 1	< 5	< 1	< 5	< 1	< 5	< 1	< 5
VINYL CHLORIDE	2	**36**	**28**	**4.8 J**	**4.0**	2.0 J	**3.2**	< 5	< 1	< 5 J	< 1	**7.8**	< 1	**38**	**22**	< 5	< 1	< 5

Notes:
Data compared to TOGS 1.1.1 Ambient
Water Quality Standards and Guidance Values
NS - No Standard
All units are ug/L unless otherwise noted
Exceedences noted in **bold**.
J - Estimated Value

Appendix B
Historic Groundwater Data 2008-2009

Former Lockheed Martin, French Road Facility
Utica, New York

CONSTITUENT	NYSDEC GW STANDARDS	MW-13T		MW-13BR			MW-14S		MW-14BR			MW-15S		MW-15BR		
		7/30/2008	10/3/2008	7/30/2008	10/3/2008	2/5/2009	7/29/2008	10/1/2008	7/29/2008	10/1/2008	2/5/2009	7/29/2008	10/3/2008	7/29/2008	10/1/2008	2/5/2009
1,1,1-TRICHLOROETHANE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,1,2,2-TETRACHLOROETHANE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,1,2-TRICHLOROETHANE	1	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,1-DICHLOROETHANE	5	**6.2**	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,1-DICHLOROETHENE	0.7	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,2,4-TRICHLOROBENZENE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,2-DIBROMO-3-CHLOROPROPANE	0.04	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,2-DIBROMOETHANE	NS	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,2-DICHLOROBENZENE	3	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,2-DICHLOROETHANE	0.6	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,2-DICHLOROPROPANE	1	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,3-DICHLOROBENZENE	3	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
1,4-DICHLOROBENZENE	3	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
2-BUTANONE	50	< 25	< 5	< 25	< 5	<5	< 25	< 5	< 200	< 5	<5	< 25	< 5	< 25	< 5	1.4 J
2-HEXANONE	50	< 25	< 5	< 25	< 5	<5	< 25	< 5	< 200	< 5	<5	< 25	< 5	< 25	< 5	<5
4-METHYL-2-PENTANONE	NS	< 25	< 5	< 25	< 5	<5	< 25	< 5	< 200	< 5	<5	< 25	< 5	< 25	< 5	<5
ACETONE	50	< 25	10	< 25	< 5	3.8 J	2.3 J	< 5	**2100**	**380**	25	1.3 J	5.0	6.0 J	5.8	7.2
BENZENE	1	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
BROMODICHLOROMETHANE	50	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
BROMOFORM	50	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
BROMOMETHANE	5	< 5	< 1	< 5	< 1	<1	< 5 J	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
CARBON DISULFIDE	NS	< 5	< 1	< 5	< 1	<1	0.26 J	2.8	< 40	3.0	<1	< 5	2.8	0.30 J	2.6	<1
CARBON TETRACHLORIDE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
CHLOROBENZENE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
CHLOROETHANE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
CHLOROFORM	7	< 5	< 1	< 5	< 1	<1	2.2 J	2.1	**14 J**	**7.5**	3.3	4.3 J	4.5	**11**	5.4	1.1
CHLOROMETHANE	NS	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
CIS-1,2-DICHLOROETHENE	5	2.5 J	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
CIS-1,3-DICHLOROPROPENE	0.4	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
CYCLOHEXANE	NS	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
DIBROMOCHLOROMETHANE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
DICHLORODIFLUOROMETHANE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
ETHYLBENZENE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
ISOPROPYLBENZENE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
METHYL ACETATE	NS	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
METHYL-T-BUTYL ETHER (MTBE)	NS	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
METHYLCYCLOHEXANE	NS	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
METHYLENE CHLORIDE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	1.4	<1	< 5	< 1	< 5	0.73 J	<1
STYRENE (MONOMER)	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
TETRACHLOROETHENE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
TOLUENE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
XYLENE (TOTAL)	5	< 15	< 3	< 15	< 3	<3	< 15	< 3	< 120	< 3	<3	< 15	< 3	< 15	< 3	<3
TRANS-1,2-DICHLOROETHENE	5	0.71 J	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
TRANS-1,3-DICHLOROPROPENE	0.4	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
TRICHLOROETHENE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
TRICHLOROFLUOROMETHANE	5	< 5	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1
VINYL CHLORIDE	2	**26**	< 1	< 5	< 1	<1	< 5	< 1	< 40	< 1	<1	< 5	< 1	< 5	< 1	<1

Notes:
Data compared to TOGS 1.1.1 Ambient
Water Quality Standards and Guidance Values
NS - No Standard
All units are ug/L unless otherwise noted
Exceedences noted in **bold**.
J - Estimated Value

APPENDIX C—
HISTORICAL DATA FOR
THE LOCKHEED MARTIN UTICA SITE, JUNE 2010

Appendix C
Analytical results of June 25-28, 2010 Sampling

Former Lockheed Martin, French Road Facility
Utica, New York

CONSTITUENT	NYSDEC GW STANDARDS	A1-PZ1 6/28/2010	A1-PZ2 6/28/2010	A2-PZ1 6/25/2010	A2-PZ2 6/25/2010	A2-PZ3 6/25/2010	A2-PZ4 6/25/2010	A2-PZ5 6/25/2010	A2-PZ6 6/25/2010	A2-PZ7 6/25/2010	A2-PZ8 6/25/2010	PZ-2 6/24/2010
1,1,2-Trichlorotrifluoroethane	NS	ND J	ND J	740 DJ	ND	ND	ND	ND	6.0 J	ND	ND	ND
Bromodichloromethane	50	ND J	ND J	ND	ND J	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	NS	ND J	ND J	0.6 J	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorodibromomethane	NS	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	0.64 J	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	**820 D**	**9.5 J**	ND	ND	ND	**88**	**66**	ND	ND
Chloromethane	NS	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	**32**	**140**	**7900 D**	**140**	0.89 J	ND	ND	**670 D**	**870 D**	6.6	1.7
cis-1,3-Dichloropropene	0.4	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NS	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.7	ND	ND	**14**	ND	ND	ND	ND	ND	**6.5**	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	**7.1**	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	NS	ND J	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND J
Methyl tert-Butyl Ether	NS	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	NS	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	4.6	ND	ND	ND	ND	2.2	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	0.69 J	**740**	1.1	ND	ND	2.1	**2400 D**	ND	ND
Toluene	5	ND J	ND J	0.89 J	ND	ND	ND	ND	ND	2.2	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	**7.5**	ND	ND	ND	ND	1.1	**5.4**	ND	ND
trans-1,3-Dichloropropene	0.4	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	**1100 D**	**300**	1.7	ND	ND	**79**	**2700 D**	ND	ND
Trichlorofluoromethane	5	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	**21**	**590 D**	**12**	ND	ND	ND	**37**	**42**	ND	1.1
Xylenes, total	5	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND
1,2,4-Trichlorobenzene	5	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ND J	ND J	ND J	ND	ND	ND J	ND J	ND J	ND J	ND J	ND J
1,2-Dibromoethane (EDB)	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.87 J
1,2-Dichloroethane	0.6	ND	ND	**1.8**	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	5	**32**	**140**	**7900 D**	**140**	0.89 J	ND	ND	**670 D**	**870 D**	6.6	1.7 J
1,1,1-Trichloroethane	5	ND J	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	ND	7.0 J	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	0.78 J	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NS	ND	ND	3.9 J	ND	ND	ND	ND	2.7 J	ND	ND	ND
Acetone	50	ND J	ND J	7.5 J	ND	ND	3.2 J	ND J	26 J	ND J	ND J	5.1 J
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
Data compared to TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values
NS - No Standard
All units are ug/L unless otherwise noted
bgs - below ground surface
Exceedences noted in **bold** and highlighted.
J - Estimated Value
D -Diluted Value

Appendix C
Analytical results of June 25-28, 2010 Sampling

Former Lockheed Martin, French Road Facility
Utica, New York

CONSTITUENT	NYSDEC GW STANDARDS	PZ-4 6/28/2010	PZ-22 6/28/2010	PZ-23 6/28/2010	PZ-24 6/25/410	PZ-25 6/25/2010	PZ-26 6/25/2010	PZ-27 6/25/2010	PZ-28 6/25/2010	PZ-29 6/28/2010	PZ-30 6/25/2010	PZ-31 6/25/2010
1,1,2-Trichlorotrifluoroethane	NS	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Bromodichloromethane	50	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Bromoform	50	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	NS	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Carbon Tetrachloride	5	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorodibromomethane	NS	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8
Chloromethane	NS	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	**6.6**	4.8	ND	ND
cis-1,3-Dichloropropene	0.4	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Cyclohexane	NS	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Dichlorodifluoromethane	5	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
1,1-Dichloroethene	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	NS	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Methyl tert-Butyl Ether	NS	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Methylcyclohexane	NS	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	**5.8**	ND	ND
Toluene	5	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	0.84 J	ND	ND
Trichlorofluoromethane	5	ND J	ND J	ND J	ND	ND	ND J	ND J	ND	ND J	ND	ND J
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	**12 J**	ND	ND
Xylenes, total	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND J	ND J	ND J	ND	ND	ND	ND	ND	ND J	ND	ND J
1,2-Dibromo-3-chloropropane	0.04	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J
1,2-Dibromoethane (EDB)	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	5	ND	ND	ND	ND	ND	ND	ND	**6.6**	4.8	ND	ND
1,1,1-Trichloroethane	5	ND J	ND J	ND J	ND	ND	ND	ND	ND	ND J	ND	ND J
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND J	8.5 J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J
Benzene	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
Data compared to TOGS 1.1.1 Ambient Water Quality
NS - No Standard
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bgs - below ground surface
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Appendix C
Analytical results of June 25-28, 2010 Sampling

Former Lockheed Martin, French Road Facility
Utica, New York

CONSTITUENT	NYSDEC GW STANDARDS	PZ-32 6/25/2010	PZ-34 6/24/2010	PZ-35 6/24/2010	PZ-36 6/24/2010	PZ-39 6/24/2010	PZ-40 6/24/2010	PZ-41 6/24/2010	PZ-42 6/24/2010	MW-6 6/30/2010	MW-9 6/24/2010
1,1,2-Trichlorotrifluoroethane	NS	34 J	ND	ND	ND	ND	ND	ND	ND	ND J	ND J
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	NS	ND	ND	ND	ND	ND	0.62 J	ND	ND	ND J	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorodibromomethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	**16**	ND	2.0 J	1.9	1.0	ND	ND	**21**	ND	0.62
Chloromethane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
cis-1,2-Dichloroethene	5	**8.5**	**370**	**10 J**	**6.3**	3.0	ND	ND	**31**	ND	ND
cis-1,3-Dichloropropene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Cyclohexane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
1,1-Dichloroethene	0.7	**6.9**	ND	0.73 J	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	NS	ND	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J
Methyl tert-Butyl Ether	NS	1.4	ND	ND	ND	ND	ND	ND	ND	ND J	ND J
Methylcyclohexane	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	**43**	ND	0.77	ND	**7.4**	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Trichloroethene	5	**49**	**12**	**7.1 J**	1.2	**6.5**	ND	ND	**18**	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
Vinyl chloride	2	ND	**130**	**2.9**	ND	**3.6**	ND	ND	ND	ND	ND
Xylenes, total	5	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
1,2-Dibromo-3-chloropropane	0.04	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND
1,2-Dibromoethane (EDB)	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	5	**8.5**	**370**	**11**	**6.3**	3.0	ND	ND	**31**	ND	ND
1,1,1-Trichloroethane	5	**11**	ND	ND	ND	ND	ND	ND	ND	ND J	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND	ND	ND	ND	3.2 J	ND
2-Hexanone	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND J	ND	ND	4.2 J	3.3 J	7.5 J	ND	ND	5.5 J	26
Benzene	1	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND

Notes:
Data compared to TOGS 1.1.1 Ambient Water Quality
NS - No Standard
All units are ug/L unless otherwise noted
bgs - below ground surface
Exceedences noted in **bold** and highlighted.
J - Estimated Value
D -Diluted Value

APPENDIX D—
ANNUAL GROUNDWATER SAMPLING DATA, SEPTEMBER 2011

Appendix D
Annual Groundwater Sampling Data (September 2011)

Former Lockheed Martin, French Road Facility
Utica, New York

Location ID: / Date Collected:	Water Guidance Values	Units	A1-PZ-2 09/27/11	A2-PZ-1 09/26/11	A2-PZ-7 09/26/11	MW-1 09/28/11	MW-2 09/27/11	MW-3 09/28/11	MW-4 09/27/11	MW-5 09/28/11	MW-10 09/29/11	MW-13S 09/27/11	MW-14BR 09/29/11	PZ-5 09/28/11	PZ-6 09/28/11	PZ-7 09/28/11	PZ-8 09/28/11	PZ-11R 09/29/11	PZ-13R 09/27/11	PZ-18 09/27/11	PZ-26 09/26/11	PZ-27 09/27/11
Volatile Organics																						
1,1,1-Trichloroethane	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane	5	ug/L	1.0 U	**1600 EJ**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	ug/L	1.0 U	**3.0**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	ug/L	2.1	**1,900 D**	**9.8**	**5.8**	**5.9**	**6.8**	0.70 J	0.69 J	2.6	2.4	1.0 U	1.0 U	1.0 U	0.83 J	4.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	ug/L	1.0 U	**45**	0.73 J	1.0 U	1.0 U	0.57 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane	0.04	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	0.0006	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	ug/L	1.0 U	**5.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	ug/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	- -	ug/L	5.0 U	6.2	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50	ug/L	6.6 J	9.5 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	16	3.1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	1	ug/L	1.0 U	0.52 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	ug/L	1.0 U	1.0 U	1.0 U	1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide	60	ug/L	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	ug/L	**99**	**27,000 D**	**120 D**	**40**	**13**	**68**	3.3	1.0 U	**53**	1.0 U	1.0 U	**53**	**20**	1.0 U	**77**	5.0	2.4	0.85 J	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	- -	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane	5	ug/L	1.0 U	960 EJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	- -	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-butyl ether	10	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	- -	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.57 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	ug/L	1.0 U	4.6	**360 D**	**77**	1.0 U	**9.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**59**	**72**	1.0 U	**350 D**	**5.5**	1.7	1.0 U	1.0 U	1.0 U
Toluene	5	ug/L	1.0 U	**5.1**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	ug/L	1.0 U	**33**	1.0 U	1.0 U	2.0	1.0 U	1.0 U	1.0 U	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	ug/L	1.7	**2,100 D**	**280 D**	**18**	1.0 U	**16**	1.0 U	1.0 U	2.5	1.0 U	1.0 U	**91 D**	**20**	0.58 J	**290 D**	**9.0**	**5.5**	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	ug/L	**27**	**720 D**	**6.5**	**3.1**	**33**	**5.0**	1.4	1.0 U	**23**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	5	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.70 J	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Miscellaneous																						
Alkalinity	- -	mg/L	425	482	NA	338	NA	356	NA	NA	211	NA	NA	NA	NA	NA	NA	NA	390	NA	NA	NA
Nitrate	10	mg/L	0.05 UJ	0.05 UJ	NA	0.73 [0.76]	NA	0.091	NA	NA	0.05 U	NA	NA	NA	NA	NA	NA	NA	0.063	NA	NA	NA
Sulfate	250	mg/L	2.4 UB	36.2 UB	NA	166 [167]	NA	160	NA	NA	108	NA	NA	NA	NA	NA	NA	NA	42.1	NA	NA	NA
Dissolved Gases (GC)																						
Methane	- -	ug/L	710 D	1,200 D	NA	130 [66]	NA	57	NA	NA	97 D	NA	NA	NA	NA	NA	NA	NA	120 D	NA	NA	NA

Notes:
NA: Not Analyzed.
U: The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
J: Indicates an estimated value.
B: Indicates an estimated value between the instrument detection limit and the Reporting Limit (RL).

APPENDIX E—
2012 GROUNDWATER LAB ANALYSIS REPORTS
(ON ATTACHED CD)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
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TestAmerica Job ID: 480-18456-1
Client Project/Site: Lockheed Martin Corporation

For:
ARCADIS U.S., Inc.
855 route 146
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Clifton Park, New York 12065

Attn: Mr. Jeffrey Bonsteel

Candace L. Fox

Authorized for release by:
5/1/2012 3:51:51 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-18456-1	TRIP BLANK	Water	04/10/12 00:00	04/12/12 07:40
480-18456-2	DUP-041112	Water	04/11/12 00:00	04/12/12 07:40
480-18456-3	MW-1	Water	04/11/12 15:45	04/12/12 07:40
480-18456-4	MW-3	Water	04/11/12 17:05	04/12/12 07:40
480-18456-5	AZ-PZ-1	Water	04/11/12 12:55	04/12/12 07:40
480-18456-6	PZ-13R	Water	04/10/12 15:20	04/12/12 07:40
480-18456-7	MW-18	Water	04/11/12 11:55	04/12/12 07:40
480-18456-8	PZ-7	Water	04/10/12 13:35	04/12/12 07:40
480-18456-9	PZ-6	Water	04/10/12 13:20	04/12/12 07:40
480-18456-10	PZ-5	Water	04/10/12 13:05	04/12/12 07:40
480-18456-11	AZ-PZ-2	Water	04/10/12 17:55	04/12/12 07:40
480-18456-12	MW-21	Water	04/10/12 16:45	04/12/12 07:40
480-18456-13	PZ-11R	Water	04/10/12 14:55	04/12/12 07:40
480-18456-14	MW-5	Water	04/10/12 14:30	04/12/12 07:40
480-18456-15	PZ-13R	Water	04/11/12 13:55	04/12/12 07:40

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Job ID: 480-18456-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-18456-1

Comments
No additional comments.

Receipt
The samples were received on 4/12/2012 7:40 AM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.70 C.

GC/MS VOA
Method(s) 8260B: The following sample(s) was diluted due to the abundance of target analytes: PZ-5 (480-18456-10). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample(s) was diluted due to the abundance of target analytes: MW-18 DL (480-18456-7 DL). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample(s) was diluted due to the abundance of target analytes: AZ-PZ-2 DL (480-18456-11 DL), DUP-041112 DL (480-18456-2 DL). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample(s) submitted for volatiles analysis was received with insufficient preservation (pH >2): MW-5 (480-18456-14).

Method(s) 8260B: The following sample(s) was diluted due to the abundance of target analytes: AZ-PZ-1 (480-18456-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA
Method(s) RSK-175: The following samples were diluted due to the abundance of target analytes: AZ-PZ-1 (480-18456-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry
Method(s) 353.2: The results reported for the following sample(s) do not concur with results previously reported for this site: MW-1 (480-18456-3), MW-3 (480-18456-4), PZ-13R (480-18456-15). Reanalysis was performed, and the result(s) confirmed.

Method(s) 9038, D516-90, 02: The method blank for batch 60469 contained sulfate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.AZ-PZ-1 (480-18456-5), MW-1 (480-18456-3), MW-3 (480-18456-4)

No other analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-18456-1

No Detections

Client Sample ID: DUP-041112 — Lab Sample ID: 480-18456-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	1.7		1.0	0.23	ug/L	1		8260B	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	810	E	1.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	900	E	1.0	0.38	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	23		1.0	0.29	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	3.0		1.0	0.21	ug/L	1		8260B	Total/NA
4-Methyl-2-pentanone (MIBK)	5.0		5.0	2.1	ug/L	1		8260B	Total/NA
Acetone	14		10	3.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2800	E	1.0	0.81	ug/L	1		8260B	Total/NA
Dichlorodifluoromethane	510	E	1.0	0.68	ug/L	1		8260B	Total/NA
Methylene Chloride	14		1.0	0.44	ug/L	1		8260B	Total/NA
Tetrachloroethene	5.3		1.0	0.36	ug/L	1		8260B	Total/NA
Toluene	4.6		1.0	0.51	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	11		1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	1500	E	1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	820	E	1.0	0.90	ug/L	1		8260B	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	1100		400	120	ug/L	400		8260B	Total/NA
1,1-Dichloroethane - DL	2300		400	150	ug/L	400		8260B	Total/NA
cis-1,2-Dichloroethene - DL	28000		400	320	ug/L	400		8260B	Total/NA
Dichlorodifluoromethane - DL	740		400	270	ug/L	400		8260B	Total/NA
Trichloroethene - DL	4800		400	180	ug/L	400		8260B	Total/NA
Vinyl chloride - DL	1300		400	360	ug/L	400		8260B	Total/NA

Client Sample ID: MW-1 — Lab Sample ID: 480-18456-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.2		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	34		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	50		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	18		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.7		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	70		1.0	0.22	ug/L	1		RSK-175	Total/NA
Nitrate as N	0.54		0.050	0.011	mg/L	1		353.2	Total/NA
Sulfate	111	B	25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	280		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	280		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	1.2		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 480-18456-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.6		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	21		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	8.2		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	10		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	8.4		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	110		1.0	0.22	ug/L	1		RSK-175	Total/NA
Sulfate	94.4	B	25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	240		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	240		5.0	0.79	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-3 (Continued) — Lab Sample ID: 480-18456-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	1.3		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: AZ-PZ-1 — Lab Sample ID: 480-18456-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	1300		250	78	ug/L	250		8260B	Total/NA
1,1-Dichloroethane	1900		250	95	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	24000		250	200	ug/L	250		8260B	Total/NA
Dichlorodifluoromethane	830		250	170	ug/L	250		8260B	Total/NA
Trichloroethene	4100		250	120	ug/L	250		8260B	Total/NA
Vinyl chloride	940		250	230	ug/L	250		8260B	Total/NA
Methane	3300		100	22	ug/L	100		RSK-175	Total/NA
Sulfate	39.3	B	10.0	3.0	mg/L	2		D516-90, 02	Total/NA
Alkalinity, Total	440		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	440		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	6.1		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: PZ-13R — Lab Sample ID: 480-18456-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.2		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.75	J	1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	3.9		1.0	0.46	ug/L	1		8260B	Total/NA
Methane	55		1.0	0.22	ug/L	1		RSK-175	Total/NA
Sulfate	91.1	B	25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	480		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	480		5.0	0.79	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-18 — Lab Sample ID: 480-18456-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	1.2		1.0	0.31	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	23		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	420	E	1.0	0.81	ug/L	1		8260B	Total/NA
Ethylbenzene	0.91	J	1.0	0.74	ug/L	1		8260B	Total/NA
Tetrachloroethene	87		1.0	0.36	ug/L	1		8260B	Total/NA
Toluene	1.9		1.0	0.51	ug/L	1		8260B	Total/NA
Trichloroethene	150	E	1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	5.5		1.0	0.90	ug/L	1		8260B	Total/NA
Xylenes, Total	1.3	J	2.0	0.66	ug/L	1		8260B	Total/NA
1,1-Dichloroethane - DL	20		5.0	1.9	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene - DL	420		5.0	4.1	ug/L	5		8260B	Total/NA
Tetrachloroethene - DL	64		5.0	1.8	ug/L	5		8260B	Total/NA
Trichloroethene - DL	120		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: PZ-7 — Lab Sample ID: 480-18456-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.69	J	1.0	0.38	ug/L	1		8260B	Total/NA
Acetone	4.2	J	10	3.0	ug/L	1		8260B	Total/NA
Methylene Chloride	0.55	J	1.0	0.44	ug/L	1		8260B	Total/NA

Client Sample ID: PZ-6 — Lab Sample ID: 480-18456-9

Client Sample ID: PZ-6 (Continued) — Lab Sample ID: 480-18456-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.8	J	10	3.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	58		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	49		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	44		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	4.9		1.0	0.90	ug/L	1		8260B	Total/NA

Client Sample ID: PZ-5 — Lab Sample ID: 480-18456-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	41		4.0	3.2	ug/L	4		8260B	Total/NA
Tetrachloroethene	290		4.0	1.4	ug/L	4		8260B	Total/NA
Trichloroethene	61		4.0	1.8	ug/L	4		8260B	Total/NA

Client Sample ID: AZ-PZ-2 — Lab Sample ID: 480-18456-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	12		1.0	0.38	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	1.5		1.0	0.29	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	190	E	1.0	0.81	ug/L	1		8260B	Total/NA
Ethylbenzene	9.0		1.0	0.74	ug/L	1		8260B	Total/NA
Tetrachloroethene	1200	E	1.0	0.36	ug/L	1		8260B	Total/NA
Toluene	0.84	J	1.0	0.51	ug/L	1		8260B	Total/NA
Trichloroethene	590	E	1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	14		1.0	0.90	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene - DL	210		40	32	ug/L	40		8260B	Total/NA
Tetrachloroethene - DL	2300		40	14	ug/L	40		8260B	Total/NA
Trichloroethene - DL	740		40	18	ug/L	40		8260B	Total/NA

Client Sample ID: MW-21 — Lab Sample ID: 480-18456-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	9.3		1.0	0.90	ug/L	1		8260B	Total/NA

Client Sample ID: PZ-11R — Lab Sample ID: 480-18456-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.9		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	2.7		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	4.5		1.0	0.46	ug/L	1		8260B	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 480-18456-14

No Detections

Client Sample ID: PZ-13R — Lab Sample ID: 480-18456-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.19		0.050	0.011	mg/L	1		353.2	Total/NA
Total Organic Carbon	5.0		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: TRIP BLANK
Date Collected: 04/10/12 00:00
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 02:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 02:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/12 02:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/13/12 02:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/13/12 02:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/13/12 02:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 02:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 02:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 02:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 02:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/12 02:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 02:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 02:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 02:40	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 02:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 02:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/12 02:40	1
Acetone	ND		10	3.0	ug/L			04/13/12 02:40	1
Benzene	ND		1.0	0.41	ug/L			04/13/12 02:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 02:40	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 02:40	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 02:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 02:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 02:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 02:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 02:40	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 02:40	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 02:40	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 02:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/13/12 02:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 02:40	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 02:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/12 02:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/13/12 02:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 02:40	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 02:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 02:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 02:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/12 02:40	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 02:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/13/12 02:40	1
Toluene	ND		1.0	0.51	ug/L			04/13/12 02:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/12 02:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 02:40	1
Trichloroethene	ND		1.0	0.46	ug/L			04/13/12 02:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 02:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/13/12 02:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/12 02:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*66 - 137*		*04/13/12 02:40*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-18456-1

Date Collected: 04/10/12 00:00

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*		*71 - 126*		*04/13/12 02:40*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*04/13/12 02:40*	*1*

Client Sample ID: DUP-041112

Lab Sample ID: 480-18456-2

Date Collected: 04/11/12 00:00

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 03:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 03:05	1
1,1,2-Trichloroethane	**1.7**		1.0	0.23	ug/L			04/13/12 03:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**810**	**E**	1.0	0.31	ug/L			04/13/12 03:05	1
1,1-Dichloroethane	**900**	**E**	1.0	0.38	ug/L			04/13/12 03:05	1
1,1-Dichloroethene	**23**		1.0	0.29	ug/L			04/13/12 03:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 03:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 03:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 03:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 03:05	1
1,2-Dichloroethane	**3.0**		1.0	0.21	ug/L			04/13/12 03:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 03:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 03:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 03:05	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 03:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 03:05	1
4-Methyl-2-pentanone (MIBK)	**5.0**		5.0	2.1	ug/L			04/13/12 03:05	1
Acetone	**14**		10	3.0	ug/L			04/13/12 03:05	1
Benzene	ND		1.0	0.41	ug/L			04/13/12 03:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 03:05	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 03:05	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 03:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 03:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 03:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 03:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 03:05	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 03:05	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 03:05	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 03:05	1
cis-1,2-Dichloroethene	**2800**	**E**	1.0	0.81	ug/L			04/13/12 03:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 03:05	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 03:05	1
Dichlorodifluoromethane	**510**	**E**	1.0	0.68	ug/L			04/13/12 03:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/13/12 03:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 03:05	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 03:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 03:05	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 03:05	1
Methylene Chloride	**14**		1.0	0.44	ug/L			04/13/12 03:05	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 03:05	1
Tetrachloroethene	**5.3**		1.0	0.36	ug/L			04/13/12 03:05	1

Client Sample ID: DUP-041112
Date Collected: 04/11/12 00:00
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**4.6**		1.0	0.51	ug/L			04/13/12 03:05	1
trans-1,2-Dichloroethene	**11**		1.0	0.90	ug/L			04/13/12 03:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 03:05	1
Trichloroethene	**1500**	**E**	1.0	0.46	ug/L			04/13/12 03:05	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 03:05	1
Vinyl chloride	**820**	**E**	1.0	0.90	ug/L			04/13/12 03:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/12 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*04/13/12 03:05*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*04/13/12 03:05*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*04/13/12 03:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		400	330	ug/L			04/16/12 15:20	400
1,1,2,2-Tetrachloroethane	ND		400	84	ug/L			04/16/12 15:20	400
1,1,2-Trichloroethane	ND		400	92	ug/L			04/16/12 15:20	400
1,1,2-Trichloro-1,2,2-trifluoroethane	**1100**		400	120	ug/L			04/16/12 15:20	400
1,1-Dichloroethane	**2300**		400	150	ug/L			04/16/12 15:20	400
1,1-Dichloroethene	ND		400	120	ug/L			04/16/12 15:20	400
1,2,4-Trichlorobenzene	ND		400	160	ug/L			04/16/12 15:20	400
1,2-Dibromo-3-Chloropropane	ND		400	160	ug/L			04/16/12 15:20	400
1,2-Dibromoethane	ND		400	290	ug/L			04/16/12 15:20	400
1,2-Dichlorobenzene	ND		400	320	ug/L			04/16/12 15:20	400
1,2-Dichloroethane	ND		400	84	ug/L			04/16/12 15:20	400
1,2-Dichloropropane	ND		400	290	ug/L			04/16/12 15:20	400
1,3-Dichlorobenzene	ND		400	310	ug/L			04/16/12 15:20	400
1,4-Dichlorobenzene	ND		400	340	ug/L			04/16/12 15:20	400
2-Hexanone	ND		2000	500	ug/L			04/16/12 15:20	400
2-Butanone (MEK)	ND		4000	530	ug/L			04/16/12 15:20	400
4-Methyl-2-pentanone (MIBK)	ND		2000	840	ug/L			04/16/12 15:20	400
Acetone	ND		4000	1200	ug/L			04/16/12 15:20	400
Benzene	ND		400	160	ug/L			04/16/12 15:20	400
Bromodichloromethane	ND		400	160	ug/L			04/16/12 15:20	400
Bromoform	ND		400	100	ug/L			04/16/12 15:20	400
Bromomethane	ND		400	280	ug/L			04/16/12 15:20	400
Carbon disulfide	ND		400	76	ug/L			04/16/12 15:20	400
Carbon tetrachloride	ND		400	110	ug/L			04/16/12 15:20	400
Chlorobenzene	ND		400	300	ug/L			04/16/12 15:20	400
Dibromochloromethane	ND		400	130	ug/L			04/16/12 15:20	400
Chloroethane	ND		400	130	ug/L			04/16/12 15:20	400
Chloroform	ND		400	140	ug/L			04/16/12 15:20	400
Chloromethane	ND		400	140	ug/L			04/16/12 15:20	400
cis-1,2-Dichloroethene	**28000**		400	320	ug/L			04/16/12 15:20	400
cis-1,3-Dichloropropene	ND		400	140	ug/L			04/16/12 15:20	400
Cyclohexane	ND		400	72	ug/L			04/16/12 15:20	400
Dichlorodifluoromethane	**740**		400	270	ug/L			04/16/12 15:20	400
Ethylbenzene	ND		400	300	ug/L			04/16/12 15:20	400
Isopropylbenzene	ND		400	320	ug/L			04/16/12 15:20	400
Methyl acetate	ND		400	200	ug/L			04/16/12 15:20	400

Client Sample ID: DUP-041112

Date Collected: 04/11/12 00:00
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		400	64	ug/L			04/16/12 15:20	400
Methylcyclohexane	ND		400	64	ug/L			04/16/12 15:20	400
Methylene Chloride	ND		400	180	ug/L			04/16/12 15:20	400
Styrene	ND		400	290	ug/L			04/16/12 15:20	400
Tetrachloroethene	ND		400	140	ug/L			04/16/12 15:20	400
Toluene	ND		400	200	ug/L			04/16/12 15:20	400
trans-1,2-Dichloroethene	ND		400	360	ug/L			04/16/12 15:20	400
trans-1,3-Dichloropropene	ND		400	150	ug/L			04/16/12 15:20	400
Trichloroethene	**4800**		400	180	ug/L			04/16/12 15:20	400
Trichlorofluoromethane	ND		400	350	ug/L			04/16/12 15:20	400
Vinyl chloride	**1300**		400	360	ug/L			04/16/12 15:20	400
Xylenes, Total	ND		800	260	ug/L			04/16/12 15:20	400

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*66 - 137*		*04/16/12 15:20*	*400*
Toluene-d8 (Surr)	*118*		*71 - 126*		*04/16/12 15:20*	*400*
4-Bromofluorobenzene (Surr)	*111*		*73 - 120*		*04/16/12 15:20*	*400*

Client Sample ID: MW-1

Date Collected: 04/11/12 15:45
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/16/12 15:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/16/12 15:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/16/12 15:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/16/12 15:41	1
1,1-Dichloroethane	**4.2**		1.0	0.38	ug/L			04/16/12 15:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/16/12 15:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/16/12 15:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/16/12 15:41	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/16/12 15:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/16/12 15:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/16/12 15:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/16/12 15:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/16/12 15:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/16/12 15:41	1
2-Hexanone	ND		5.0	1.2	ug/L			04/16/12 15:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/16/12 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/16/12 15:41	1
Acetone	ND		10	3.0	ug/L			04/16/12 15:41	1
Benzene	ND		1.0	0.41	ug/L			04/16/12 15:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/16/12 15:41	1
Bromoform	ND		1.0	0.26	ug/L			04/16/12 15:41	1
Bromomethane	ND		1.0	0.69	ug/L			04/16/12 15:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/16/12 15:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/16/12 15:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/16/12 15:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/16/12 15:41	1
Chloroethane	ND		1.0	0.32	ug/L			04/16/12 15:41	1

Client Sample ID: MW-1

Lab Sample ID: 480-18456-3

Date Collected: 04/11/12 15:45

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.34	ug/L			04/16/12 15:41	1
Chloromethane	ND		1.0	0.35	ug/L			04/16/12 15:41	1
cis-1,2-Dichloroethene	**34**		1.0	0.81	ug/L			04/16/12 15:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/16/12 15:41	1
Cyclohexane	ND		1.0	0.18	ug/L			04/16/12 15:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/16/12 15:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/16/12 15:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/16/12 15:41	1
Methyl acetate	ND		1.0	0.50	ug/L			04/16/12 15:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/16/12 15:41	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/16/12 15:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/16/12 15:41	1
Styrene	ND		1.0	0.73	ug/L			04/16/12 15:41	1
Tetrachloroethene	**50**		1.0	0.36	ug/L			04/16/12 15:41	1
Toluene	ND		1.0	0.51	ug/L			04/16/12 15:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/16/12 15:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/16/12 15:41	1
Trichloroethene	**18**		1.0	0.46	ug/L			04/16/12 15:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/16/12 15:41	1
Vinyl chloride	**1.7**		1.0	0.90	ug/L			04/16/12 15:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/16/12 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*		*04/16/12 15:41*	*1*
Toluene-d8 (Surr)	*117*		*71 - 126*		*04/16/12 15:41*	*1*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*04/16/12 15:41*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**70**		1.0	0.22	ug/L			04/12/12 23:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.54**		0.050	0.011	mg/L			04/13/12 00:17	1
Sulfate	**111**	**B**	25.0	7.5	mg/L			04/18/12 15:36	5
Alkalinity, Total	**280**		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Bicarbonate	**280**		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Total Organic Carbon	**1.2**		1.0	0.43	mg/L			04/14/12 05:24	1

Client Sample ID: MW-3

Lab Sample ID: 480-18456-4

Date Collected: 04/11/12 17:05

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/16/12 16:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/16/12 16:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/16/12 16:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/16/12 16:03	1
1,1-Dichloroethane	**3.6**		1.0	0.38	ug/L			04/16/12 16:03	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: MW-3
Date Collected: 04/11/12 17:05
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/16/12 16:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/16/12 16:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/16/12 16:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/16/12 16:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/16/12 16:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/16/12 16:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/16/12 16:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/16/12 16:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/16/12 16:03	1
2-Hexanone	ND		5.0	1.2	ug/L			04/16/12 16:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/16/12 16:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/16/12 16:03	1
Acetone	ND		10	3.0	ug/L			04/16/12 16:03	1
Benzene	ND		1.0	0.41	ug/L			04/16/12 16:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/16/12 16:03	1
Bromoform	ND		1.0	0.26	ug/L			04/16/12 16:03	1
Bromomethane	ND		1.0	0.69	ug/L			04/16/12 16:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/16/12 16:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/16/12 16:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/16/12 16:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/16/12 16:03	1
Chloroethane	ND		1.0	0.32	ug/L			04/16/12 16:03	1
Chloroform	ND		1.0	0.34	ug/L			04/16/12 16:03	1
Chloromethane	ND		1.0	0.35	ug/L			04/16/12 16:03	1
cis-1,2-Dichloroethene	**21**		1.0	0.81	ug/L			04/16/12 16:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/16/12 16:03	1
Cyclohexane	ND		1.0	0.18	ug/L			04/16/12 16:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/16/12 16:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/16/12 16:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/16/12 16:03	1
Methyl acetate	ND		1.0	0.50	ug/L			04/16/12 16:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/16/12 16:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/16/12 16:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/16/12 16:03	1
Styrene	ND		1.0	0.73	ug/L			04/16/12 16:03	1
Tetrachloroethene	**8.2**		1.0	0.36	ug/L			04/16/12 16:03	1
Toluene	ND		1.0	0.51	ug/L			04/16/12 16:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/16/12 16:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/16/12 16:03	1
Trichloroethene	**10**		1.0	0.46	ug/L			04/16/12 16:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/16/12 16:03	1
Vinyl chloride	**8.4**		1.0	0.90	ug/L			04/16/12 16:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/16/12 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*		*04/16/12 16:03*	*1*
Toluene-d8 (Surr)	*116*		*71 - 126*		*04/16/12 16:03*	*1*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*04/16/12 16:03*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: MW-3

Lab Sample ID: 480-18456-4

Date Collected: 04/11/12 17:05

Matrix: Water

Date Received: 04/12/12 07:40

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**110**		1.0	0.22	ug/L			04/12/12 23:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			04/12/12 21:31	1
Sulfate	**94.4**	**B**	25.0	7.5	mg/L			04/18/12 15:37	5
Alkalinity, Total	**240**		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Bicarbonate	**240**		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Total Organic Carbon	**1.3**		1.0	0.43	mg/L			04/14/12 05:41	1

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-18456-5

Date Collected: 04/11/12 12:55

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250	210	ug/L			04/18/12 23:07	250
1,1,2,2-Tetrachloroethane	ND		250	53	ug/L			04/18/12 23:07	250
1,1,2-Trichloroethane	ND		250	58	ug/L			04/18/12 23:07	250
1,1,2-Trichloro-1,2,2-trifluoroethane	**1300**		250	78	ug/L			04/18/12 23:07	250
1,1-Dichloroethane	**1900**		250	95	ug/L			04/18/12 23:07	250
1,1-Dichloroethene	ND		250	73	ug/L			04/18/12 23:07	250
1,2,4-Trichlorobenzene	ND		250	100	ug/L			04/18/12 23:07	250
1,2-Dibromo-3-Chloropropane	ND		250	98	ug/L			04/18/12 23:07	250
1,2-Dibromoethane	ND		250	180	ug/L			04/18/12 23:07	250
1,2-Dichlorobenzene	ND		250	200	ug/L			04/18/12 23:07	250
1,2-Dichloroethane	ND		250	53	ug/L			04/18/12 23:07	250
1,2-Dichloropropane	ND		250	180	ug/L			04/18/12 23:07	250
1,3-Dichlorobenzene	ND		250	200	ug/L			04/18/12 23:07	250
1,4-Dichlorobenzene	ND		250	210	ug/L			04/18/12 23:07	250
2-Hexanone	ND		1300	310	ug/L			04/18/12 23:07	250
2-Butanone (MEK)	ND		2500	330	ug/L			04/18/12 23:07	250
4-Methyl-2-pentanone (MIBK)	ND		1300	530	ug/L			04/18/12 23:07	250
Acetone	ND		2500	750	ug/L			04/18/12 23:07	250
Benzene	ND		250	100	ug/L			04/18/12 23:07	250
Bromodichloromethane	ND		250	98	ug/L			04/18/12 23:07	250
Bromoform	ND		250	65	ug/L			04/18/12 23:07	250
Bromomethane	ND		250	170	ug/L			04/18/12 23:07	250
Carbon disulfide	ND		250	48	ug/L			04/18/12 23:07	250
Carbon tetrachloride	ND		250	68	ug/L			04/18/12 23:07	250
Chlorobenzene	ND		250	190	ug/L			04/18/12 23:07	250
Dibromochloromethane	ND		250	80	ug/L			04/18/12 23:07	250
Chloroethane	ND		250	80	ug/L			04/18/12 23:07	250
Chloroform	ND		250	85	ug/L			04/18/12 23:07	250
Chloromethane	ND		250	88	ug/L			04/18/12 23:07	250
cis-1,2-Dichloroethene	**24000**		250	200	ug/L			04/18/12 23:07	250
cis-1,3-Dichloropropene	ND		250	90	ug/L			04/18/12 23:07	250
Cyclohexane	ND		250	45	ug/L			04/18/12 23:07	250
Dichlorodifluoromethane	**830**		250	170	ug/L			04/18/12 23:07	250

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-18456-5

Date Collected: 04/11/12 12:55

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		250	190	ug/L			04/18/12 23:07	250
Isopropylbenzene	ND		250	200	ug/L			04/18/12 23:07	250
Methyl acetate	ND		250	130	ug/L			04/18/12 23:07	250
Methyl tert-butyl ether	ND		250	40	ug/L			04/18/12 23:07	250
Methylcyclohexane	ND		250	40	ug/L			04/18/12 23:07	250
Methylene Chloride	ND		250	110	ug/L			04/18/12 23:07	250
Styrene	ND		250	180	ug/L			04/18/12 23:07	250
Tetrachloroethene	ND		250	90	ug/L			04/18/12 23:07	250
Toluene	ND		250	130	ug/L			04/18/12 23:07	250
trans-1,2-Dichloroethene	ND		250	230	ug/L			04/18/12 23:07	250
trans-1,3-Dichloropropene	ND		250	93	ug/L			04/18/12 23:07	250
Trichloroethene	**4100**		250	120	ug/L			04/18/12 23:07	250
Trichlorofluoromethane	ND		250	220	ug/L			04/18/12 23:07	250
Vinyl chloride	**940**		250	230	ug/L			04/18/12 23:07	250
Xylenes, Total	ND		500	170	ug/L			04/18/12 23:07	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*66 - 137*		*04/18/12 23:07*	*250*
Toluene-d8 (Surr)	*97*		*71 - 126*		*04/18/12 23:07*	*250*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*04/18/12 23:07*	*250*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**3300**		100	22	ug/L			04/12/12 21:16	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			04/12/12 21:34	1
Sulfate	**39.3**	**B**	10.0	3.0	mg/L			04/18/12 15:37	2
Alkalinity, Total	**440**		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Bicarbonate	**440**		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Total Organic Carbon	**6.1**		1.0	0.43	mg/L			04/14/12 05:57	1

Client Sample ID: PZ-13R

Lab Sample ID: 480-18456-6

Date Collected: 04/10/12 15:20

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/18/12 11:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/18/12 11:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/18/12 11:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/18/12 11:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/18/12 11:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/18/12 11:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/18/12 11:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/18/12 11:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/18/12 11:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/18/12 11:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/18/12 11:27	1

Client Sample ID: PZ-13R
Date Collected: 04/10/12 15:20
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/18/12 11:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/18/12 11:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/18/12 11:27	1
2-Hexanone	ND		5.0	1.2	ug/L			04/18/12 11:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/18/12 11:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/18/12 11:27	1
Acetone	ND		10	3.0	ug/L			04/18/12 11:27	1
Benzene	ND		1.0	0.41	ug/L			04/18/12 11:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/18/12 11:27	1
Bromoform	ND		1.0	0.26	ug/L			04/18/12 11:27	1
Bromomethane	ND		1.0	0.69	ug/L			04/18/12 11:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/18/12 11:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/18/12 11:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/18/12 11:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/18/12 11:27	1
Chloroethane	ND		1.0	0.32	ug/L			04/18/12 11:27	1
Chloroform	ND		1.0	0.34	ug/L			04/18/12 11:27	1
Chloromethane	ND		1.0	0.35	ug/L			04/18/12 11:27	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.81	ug/L			04/18/12 11:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/18/12 11:27	1
Cyclohexane	ND		1.0	0.18	ug/L			04/18/12 11:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/18/12 11:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/18/12 11:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/18/12 11:27	1
Methyl acetate	ND		1.0	0.50	ug/L			04/18/12 11:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/18/12 11:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/18/12 11:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/18/12 11:27	1
Styrene	ND		1.0	0.73	ug/L			04/18/12 11:27	1
Tetrachloroethene	**0.75**	**J**	1.0	0.36	ug/L			04/18/12 11:27	1
Toluene	ND		1.0	0.51	ug/L			04/18/12 11:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/18/12 11:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/18/12 11:27	1
Trichloroethene	**3.9**		1.0	0.46	ug/L			04/18/12 11:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/18/12 11:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/18/12 11:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/18/12 11:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*66 - 137*		*04/18/12 11:27*	*1*
Toluene-d8 (Surr)	*90*		*71 - 126*		*04/18/12 11:27*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*04/18/12 11:27*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**55**		1.0	0.22	ug/L			04/12/12 23:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**91.1**	**B**	25.0	7.5	mg/L			04/30/12 10:31	5
Alkalinity, Total	**480**		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Bicarbonate	**480**		5.0	0.79	mg/L			04/13/12 11:02	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: PZ-13R

Lab Sample ID: 480-18456-6

Date Collected: 04/10/12 15:20

Matrix: Water

Date Received: 04/12/12 07:40

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			04/13/12 11:02	1

Client Sample ID: MW-18

Lab Sample ID: 480-18456-7

Date Collected: 04/11/12 11:55

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 05:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 05:09	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/12 05:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.2**		1.0	0.31	ug/L			04/13/12 05:09	1
1,1-Dichloroethane	**23**		1.0	0.38	ug/L			04/13/12 05:09	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/13/12 05:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 05:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 05:09	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 05:09	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 05:09	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/12 05:09	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 05:09	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 05:09	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 05:09	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 05:09	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 05:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/12 05:09	1
Acetone	ND		10	3.0	ug/L			04/13/12 05:09	1
Benzene	ND		1.0	0.41	ug/L			04/13/12 05:09	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 05:09	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 05:09	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 05:09	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 05:09	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 05:09	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 05:09	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 05:09	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 05:09	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 05:09	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 05:09	1
cis-1,2-Dichloroethene	**420**	**E**	1.0	0.81	ug/L			04/13/12 05:09	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 05:09	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 05:09	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/12 05:09	1
Ethylbenzene	**0.91**	**J**	1.0	0.74	ug/L			04/13/12 05:09	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 05:09	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 05:09	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 05:09	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 05:09	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/12 05:09	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 05:09	1
Tetrachloroethene	**87**		1.0	0.36	ug/L			04/13/12 05:09	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: MW-18
Date Collected: 04/11/12 11:55
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**1.9**		1.0	0.51	ug/L			04/13/12 05:09	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/12 05:09	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 05:09	1
Trichloroethene	**150**	**E**	1.0	0.46	ug/L			04/13/12 05:09	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 05:09	1
Vinyl chloride	**5.5**		1.0	0.90	ug/L			04/13/12 05:09	1
Xylenes, Total	**1.3**	**J**	2.0	0.66	ug/L			04/13/12 05:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*04/13/12 05:09*	*1*
Toluene-d8 (Surr)	*96*		*71 - 126*		*04/13/12 05:09*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*04/13/12 05:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			04/13/12 13:43	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			04/13/12 13:43	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			04/13/12 13:43	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			04/13/12 13:43	5
1,1-Dichloroethane	**20**		5.0	1.9	ug/L			04/13/12 13:43	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			04/13/12 13:43	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			04/13/12 13:43	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			04/13/12 13:43	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			04/13/12 13:43	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			04/13/12 13:43	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			04/13/12 13:43	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			04/13/12 13:43	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			04/13/12 13:43	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			04/13/12 13:43	5
2-Hexanone	ND		25	6.2	ug/L			04/13/12 13:43	5
2-Butanone (MEK)	ND		50	6.6	ug/L			04/13/12 13:43	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			04/13/12 13:43	5
Acetone	ND		50	15	ug/L			04/13/12 13:43	5
Benzene	ND		5.0	2.1	ug/L			04/13/12 13:43	5
Bromodichloromethane	ND		5.0	2.0	ug/L			04/13/12 13:43	5
Bromoform	ND		5.0	1.3	ug/L			04/13/12 13:43	5
Bromomethane	ND		5.0	3.5	ug/L			04/13/12 13:43	5
Carbon disulfide	ND		5.0	0.95	ug/L			04/13/12 13:43	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			04/13/12 13:43	5
Chlorobenzene	ND		5.0	3.8	ug/L			04/13/12 13:43	5
Dibromochloromethane	ND		5.0	1.6	ug/L			04/13/12 13:43	5
Chloroethane	ND		5.0	1.6	ug/L			04/13/12 13:43	5
Chloroform	ND		5.0	1.7	ug/L			04/13/12 13:43	5
Chloromethane	ND		5.0	1.8	ug/L			04/13/12 13:43	5
cis-1,2-Dichloroethene	**420**		5.0	4.1	ug/L			04/13/12 13:43	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			04/13/12 13:43	5
Cyclohexane	ND		5.0	0.90	ug/L			04/13/12 13:43	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			04/13/12 13:43	5
Ethylbenzene	ND		5.0	3.7	ug/L			04/13/12 13:43	5
Isopropylbenzene	ND		5.0	4.0	ug/L			04/13/12 13:43	5
Methyl acetate	ND		5.0	2.5	ug/L			04/13/12 13:43	5

Client Sample ID: MW-18

Lab Sample ID: 480-18456-7

Date Collected: 04/11/12 11:55

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			04/13/12 13:43	5
Methylcyclohexane	ND		5.0	0.80	ug/L			04/13/12 13:43	5
Methylene Chloride	ND		5.0	2.2	ug/L			04/13/12 13:43	5
Styrene	ND		5.0	3.7	ug/L			04/13/12 13:43	5
Tetrachloroethene	**64**		5.0	1.8	ug/L			04/13/12 13:43	5
Toluene	ND		5.0	2.6	ug/L			04/13/12 13:43	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			04/13/12 13:43	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			04/13/12 13:43	5
Trichloroethene	**120**		5.0	2.3	ug/L			04/13/12 13:43	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			04/13/12 13:43	5
Vinyl chloride	ND		5.0	4.5	ug/L			04/13/12 13:43	5
Xylenes, Total	ND		10	3.3	ug/L			04/13/12 13:43	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*66 - 137*		*04/13/12 13:43*	*5*
Toluene-d8 (Surr)	*95*		*71 - 126*		*04/13/12 13:43*	*5*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*04/13/12 13:43*	*5*

Client Sample ID: PZ-7

Lab Sample ID: 480-18456-8

Date Collected: 04/10/12 13:35

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/18/12 11:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/18/12 11:51	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/18/12 11:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/18/12 11:51	1
1,1-Dichloroethane	**0.69**	**J**	1.0	0.38	ug/L			04/18/12 11:51	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/18/12 11:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/18/12 11:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/18/12 11:51	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/18/12 11:51	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/18/12 11:51	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/18/12 11:51	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/18/12 11:51	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/18/12 11:51	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/18/12 11:51	1
2-Hexanone	ND		5.0	1.2	ug/L			04/18/12 11:51	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/18/12 11:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/18/12 11:51	1
Acetone	**4.2**	**J**	10	3.0	ug/L			04/18/12 11:51	1
Benzene	ND		1.0	0.41	ug/L			04/18/12 11:51	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/18/12 11:51	1
Bromoform	ND		1.0	0.26	ug/L			04/18/12 11:51	1
Bromomethane	ND		1.0	0.69	ug/L			04/18/12 11:51	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/18/12 11:51	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/18/12 11:51	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/18/12 11:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/18/12 11:51	1
Chloroethane	ND		1.0	0.32	ug/L			04/18/12 11:51	1

Client Sample ID: PZ-7

Date Collected: 04/10/12 13:35
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.34	ug/L			04/18/12 11:51	1
Chloromethane	ND		1.0	0.35	ug/L			04/18/12 11:51	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/18/12 11:51	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/18/12 11:51	1
Cyclohexane	ND		1.0	0.18	ug/L			04/18/12 11:51	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/18/12 11:51	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/18/12 11:51	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/18/12 11:51	1
Methyl acetate	ND		1.0	0.50	ug/L			04/18/12 11:51	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/18/12 11:51	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/18/12 11:51	1
Methylene Chloride	**0.55**	**J**	1.0	0.44	ug/L			04/18/12 11:51	1
Styrene	ND		1.0	0.73	ug/L			04/18/12 11:51	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/18/12 11:51	1
Toluene	ND		1.0	0.51	ug/L			04/18/12 11:51	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/18/12 11:51	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/18/12 11:51	1
Trichloroethene	ND		1.0	0.46	ug/L			04/18/12 11:51	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/18/12 11:51	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/18/12 11:51	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/18/12 11:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*66 - 137*		*04/18/12 11:51*	*1*
Toluene-d8 (Surr)	*92*		*71 - 126*		*04/18/12 11:51*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*04/18/12 11:51*	*1*

Client Sample ID: PZ-6

Date Collected: 04/10/12 13:20
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 05:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 05:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/12 05:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/13/12 05:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/13/12 05:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/13/12 05:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 05:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 05:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 05:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 05:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/12 05:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 05:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 05:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 05:59	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 05:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 05:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/12 05:59	1
Acetone	**3.8**	**J**	10	3.0	ug/L			04/13/12 05:59	1

Client Sample ID: PZ-6

Date Collected: 04/10/12 13:20
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			04/13/12 05:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 05:59	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 05:59	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 05:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 05:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 05:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 05:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 05:59	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 05:59	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 05:59	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 05:59	1
cis-1,2-Dichloroethene	**58**		1.0	0.81	ug/L			04/13/12 05:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 05:59	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 05:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/12 05:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/13/12 05:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 05:59	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 05:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 05:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 05:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/12 05:59	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 05:59	1
Tetrachloroethene	**49**		1.0	0.36	ug/L			04/13/12 05:59	1
Toluene	ND		1.0	0.51	ug/L			04/13/12 05:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/12 05:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 05:59	1
Trichloroethene	**44**		1.0	0.46	ug/L			04/13/12 05:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 05:59	1
Vinyl chloride	**4.9**		1.0	0.90	ug/L			04/13/12 05:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/12 05:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*04/13/12 05:59*	*1*
Toluene-d8 (Surr)	*94*		*71 - 126*		*04/13/12 05:59*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*04/13/12 05:59*	*1*

Client Sample ID: PZ-5

Date Collected: 04/10/12 13:05
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			04/13/12 06:23	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			04/13/12 06:23	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			04/13/12 06:23	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			04/13/12 06:23	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			04/13/12 06:23	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			04/13/12 06:23	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			04/13/12 06:23	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			04/13/12 06:23	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			04/13/12 06:23	4

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: PZ-5
Date Collected: 04/10/12 13:05
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			04/13/12 06:23	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			04/13/12 06:23	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			04/13/12 06:23	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			04/13/12 06:23	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			04/13/12 06:23	4
2-Hexanone	ND		20	5.0	ug/L			04/13/12 06:23	4
2-Butanone (MEK)	ND		40	5.3	ug/L			04/13/12 06:23	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			04/13/12 06:23	4
Acetone	ND		40	12	ug/L			04/13/12 06:23	4
Benzene	ND		4.0	1.6	ug/L			04/13/12 06:23	4
Bromodichloromethane	ND		4.0	1.6	ug/L			04/13/12 06:23	4
Bromoform	ND		4.0	1.0	ug/L			04/13/12 06:23	4
Bromomethane	ND		4.0	2.8	ug/L			04/13/12 06:23	4
Carbon disulfide	ND		4.0	0.76	ug/L			04/13/12 06:23	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			04/13/12 06:23	4
Chlorobenzene	ND		4.0	3.0	ug/L			04/13/12 06:23	4
Dibromochloromethane	ND		4.0	1.3	ug/L			04/13/12 06:23	4
Chloroethane	ND		4.0	1.3	ug/L			04/13/12 06:23	4
Chloroform	ND		4.0	1.4	ug/L			04/13/12 06:23	4
Chloromethane	ND		4.0	1.4	ug/L			04/13/12 06:23	4
cis-1,2-Dichloroethene	**41**		4.0	3.2	ug/L			04/13/12 06:23	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			04/13/12 06:23	4
Cyclohexane	ND		4.0	0.72	ug/L			04/13/12 06:23	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			04/13/12 06:23	4
Ethylbenzene	ND		4.0	3.0	ug/L			04/13/12 06:23	4
Isopropylbenzene	ND		4.0	3.2	ug/L			04/13/12 06:23	4
Methyl acetate	ND		4.0	2.0	ug/L			04/13/12 06:23	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			04/13/12 06:23	4
Methylcyclohexane	ND		4.0	0.64	ug/L			04/13/12 06:23	4
Methylene Chloride	ND		4.0	1.8	ug/L			04/13/12 06:23	4
Styrene	ND		4.0	2.9	ug/L			04/13/12 06:23	4
Tetrachloroethene	**290**		4.0	1.4	ug/L			04/13/12 06:23	4
Toluene	ND		4.0	2.0	ug/L			04/13/12 06:23	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			04/13/12 06:23	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			04/13/12 06:23	4
Trichloroethene	**61**		4.0	1.8	ug/L			04/13/12 06:23	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			04/13/12 06:23	4
Vinyl chloride	ND		4.0	3.6	ug/L			04/13/12 06:23	4
Xylenes, Total	ND		8.0	2.6	ug/L			04/13/12 06:23	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*04/13/12 06:23*	*4*
Toluene-d8 (Surr)	*94*		*71 - 126*		*04/13/12 06:23*	*4*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*04/13/12 06:23*	*4*

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: AZ-PZ-2
Date Collected: 04/10/12 17:55
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 06:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 06:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/12 06:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/13/12 06:48	1
1,1-Dichloroethane	**12**		1.0	0.38	ug/L			04/13/12 06:48	1
1,1-Dichloroethene	**1.5**		1.0	0.29	ug/L			04/13/12 06:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 06:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 06:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 06:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 06:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/12 06:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 06:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 06:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 06:48	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 06:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 06:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/12 06:48	1
Acetone	ND		10	3.0	ug/L			04/13/12 06:48	1
Benzene	ND		1.0	0.41	ug/L			04/13/12 06:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 06:48	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 06:48	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 06:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 06:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 06:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 06:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 06:48	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 06:48	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 06:48	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 06:48	1
cis-1,2-Dichloroethene	**190**	**E**	1.0	0.81	ug/L			04/13/12 06:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 06:48	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 06:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/12 06:48	1
Ethylbenzene	**9.0**		1.0	0.74	ug/L			04/13/12 06:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 06:48	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 06:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 06:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 06:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/12 06:48	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 06:48	1
Tetrachloroethene	**1200**	**E**	1.0	0.36	ug/L			04/13/12 06:48	1
Toluene	**0.84**	**J**	1.0	0.51	ug/L			04/13/12 06:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/12 06:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 06:48	1
Trichloroethene	**590**	**E**	1.0	0.46	ug/L			04/13/12 06:48	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 06:48	1
Vinyl chloride	**14**		1.0	0.90	ug/L			04/13/12 06:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/12 06:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*04/13/12 06:48*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: AZ-PZ-2
Date Collected: 04/10/12 17:55
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*94*		*71 - 126*		*04/13/12 06:48*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*04/13/12 06:48*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		40	33	ug/L			04/16/12 16:24	40
1,1,2,2-Tetrachloroethane	ND		40	8.4	ug/L			04/16/12 16:24	40
1,1,2-Trichloroethane	ND		40	9.2	ug/L			04/16/12 16:24	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		40	12	ug/L			04/16/12 16:24	40
1,1-Dichloroethane	ND		40	15	ug/L			04/16/12 16:24	40
1,1-Dichloroethene	ND		40	12	ug/L			04/16/12 16:24	40
1,2,4-Trichlorobenzene	ND		40	16	ug/L			04/16/12 16:24	40
1,2-Dibromo-3-Chloropropane	ND		40	16	ug/L			04/16/12 16:24	40
1,2-Dibromoethane	ND		40	29	ug/L			04/16/12 16:24	40
1,2-Dichlorobenzene	ND		40	32	ug/L			04/16/12 16:24	40
1,2-Dichloroethane	ND		40	8.4	ug/L			04/16/12 16:24	40
1,2-Dichloropropane	ND		40	29	ug/L			04/16/12 16:24	40
1,3-Dichlorobenzene	ND		40	31	ug/L			04/16/12 16:24	40
1,4-Dichlorobenzene	ND		40	34	ug/L			04/16/12 16:24	40
2-Hexanone	ND		200	50	ug/L			04/16/12 16:24	40
2-Butanone (MEK)	ND		400	53	ug/L			04/16/12 16:24	40
4-Methyl-2-pentanone (MIBK)	ND		200	84	ug/L			04/16/12 16:24	40
Acetone	ND		400	120	ug/L			04/16/12 16:24	40
Benzene	ND		40	16	ug/L			04/16/12 16:24	40
Bromodichloromethane	ND		40	16	ug/L			04/16/12 16:24	40
Bromoform	ND		40	10	ug/L			04/16/12 16:24	40
Bromomethane	ND		40	28	ug/L			04/16/12 16:24	40
Carbon disulfide	ND		40	7.6	ug/L			04/16/12 16:24	40
Carbon tetrachloride	ND		40	11	ug/L			04/16/12 16:24	40
Chlorobenzene	ND		40	30	ug/L			04/16/12 16:24	40
Dibromochloromethane	ND		40	13	ug/L			04/16/12 16:24	40
Chloroethane	ND		40	13	ug/L			04/16/12 16:24	40
Chloroform	ND		40	14	ug/L			04/16/12 16:24	40
Chloromethane	ND		40	14	ug/L			04/16/12 16:24	40
cis-1,2-Dichloroethene	**210**		40	32	ug/L			04/16/12 16:24	40
cis-1,3-Dichloropropene	ND		40	14	ug/L			04/16/12 16:24	40
Cyclohexane	ND		40	7.2	ug/L			04/16/12 16:24	40
Dichlorodifluoromethane	ND		40	27	ug/L			04/16/12 16:24	40
Ethylbenzene	ND		40	30	ug/L			04/16/12 16:24	40
Isopropylbenzene	ND		40	32	ug/L			04/16/12 16:24	40
Methyl acetate	ND		40	20	ug/L			04/16/12 16:24	40
Methyl tert-butyl ether	ND		40	6.4	ug/L			04/16/12 16:24	40
Methylcyclohexane	ND		40	6.4	ug/L			04/16/12 16:24	40
Methylene Chloride	ND		40	18	ug/L			04/16/12 16:24	40
Styrene	ND		40	29	ug/L			04/16/12 16:24	40
Tetrachloroethene	**2300**		40	14	ug/L			04/16/12 16:24	40
Toluene	ND		40	20	ug/L			04/16/12 16:24	40
trans-1,2-Dichloroethene	ND		40	36	ug/L			04/16/12 16:24	40
trans-1,3-Dichloropropene	ND		40	15	ug/L			04/16/12 16:24	40
Trichloroethene	**740**		40	18	ug/L			04/16/12 16:24	40
Trichlorofluoromethane	ND		40	35	ug/L			04/16/12 16:24	40

Client Sample ID: AZ-PZ-2

Lab Sample ID: 480-18456-11

Date Collected: 04/10/12 17:55

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		40	36	ug/L			04/16/12 16:24	40
Xylenes, Total	ND		80	26	ug/L			04/16/12 16:24	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*		*04/16/12 16:24*	*40*
Toluene-d8 (Surr)	*117*		*71 - 126*		*04/16/12 16:24*	*40*
4-Bromofluorobenzene (Surr)	*112*		*73 - 120*		*04/16/12 16:24*	*40*

Client Sample ID: MW-21

Lab Sample ID: 480-18456-12

Date Collected: 04/10/12 16:45

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 14:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 14:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/12 14:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/13/12 14:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/13/12 14:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/13/12 14:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 14:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 14:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 14:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 14:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/12 14:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 14:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 14:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 14:33	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 14:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 14:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/12 14:33	1
Acetone	ND		10	3.0	ug/L			04/13/12 14:33	1
Benzene	ND		1.0	0.41	ug/L			04/13/12 14:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 14:33	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 14:33	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 14:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 14:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 14:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 14:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 14:33	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 14:33	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 14:33	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 14:33	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/13/12 14:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 14:33	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 14:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/12 14:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/13/12 14:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 14:33	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 14:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 14:33	1

Client Sample ID: MW-21

Date Collected: 04/10/12 16:45
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 14:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/12 14:33	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 14:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/13/12 14:33	1
Toluene	ND		1.0	0.51	ug/L			04/13/12 14:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/12 14:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 14:33	1
Trichloroethene	ND		1.0	0.46	ug/L			04/13/12 14:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 14:33	1
Vinyl chloride	**9.3**		1.0	0.90	ug/L			04/13/12 14:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/12 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*04/13/12 14:33*	*1*
Toluene-d8 (Surr)	*98*		*71 - 126*		*04/13/12 14:33*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*04/13/12 14:33*	*1*

Client Sample ID: PZ-11R

Date Collected: 04/10/12 14:55
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 14:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 14:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/12 14:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/13/12 14:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/13/12 14:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/13/12 14:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 14:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 14:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 14:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 14:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/12 14:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 14:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 14:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 14:57	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 14:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 14:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/12 14:57	1
Acetone	ND		10	3.0	ug/L			04/13/12 14:57	1
Benzene	ND		1.0	0.41	ug/L			04/13/12 14:57	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 14:57	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 14:57	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 14:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 14:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 14:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 14:57	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 14:57	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 14:57	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 14:57	1

Client Sample ID: PZ-11R

Date Collected: 04/10/12 14:55
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 14:57	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.81	ug/L			04/13/12 14:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 14:57	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 14:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/12 14:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/13/12 14:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 14:57	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 14:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 14:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 14:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/12 14:57	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 14:57	1
Tetrachloroethene	**2.7**		1.0	0.36	ug/L			04/13/12 14:57	1
Toluene	ND		1.0	0.51	ug/L			04/13/12 14:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/12 14:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 14:57	1
Trichloroethene	**4.5**		1.0	0.46	ug/L			04/13/12 14:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 14:57	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/13/12 14:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/12 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*66 - 137*		*04/13/12 14:57*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*04/13/12 14:57*	*1*
4-Bromofluorobenzene (Surr)	*75*		*73 - 120*		*04/13/12 14:57*	*1*

Client Sample ID: MW-5

Date Collected: 04/10/12 14:30
Date Received: 04/12/12 07:40

Lab Sample ID: 480-18456-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 15:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 15:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/12 15:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/13/12 15:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/13/12 15:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/13/12 15:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 15:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 15:22	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 15:22	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 15:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/12 15:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 15:22	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 15:22	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 15:22	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 15:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 15:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/12 15:22	1
Acetone	ND		10	3.0	ug/L			04/13/12 15:22	1
Benzene	ND		1.0	0.41	ug/L			04/13/12 15:22	1

Client Sample ID: MW-5

Lab Sample ID: 480-18456-14

Date Collected: 04/10/12 14:30

Matrix: Water

Date Received: 04/12/12 07:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 15:22	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 15:22	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 15:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 15:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 15:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 15:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 15:22	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 15:22	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 15:22	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 15:22	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/13/12 15:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 15:22	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 15:22	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/12 15:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/13/12 15:22	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 15:22	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 15:22	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 15:22	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 15:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/12 15:22	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 15:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/13/12 15:22	1
Toluene	ND		1.0	0.51	ug/L			04/13/12 15:22	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/12 15:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 15:22	1
Trichloroethene	ND		1.0	0.46	ug/L			04/13/12 15:22	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 15:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/13/12 15:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/12 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*04/13/12 15:22*	*1*
Toluene-d8 (Surr)	*93*		*71 - 126*		*04/13/12 15:22*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*04/13/12 15:22*	*1*

Client Sample ID: PZ-13R

Lab Sample ID: 480-18456-15

Date Collected: 04/11/12 13:55

Matrix: Water

Date Received: 04/12/12 07:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.19**		0.050	0.011	mg/L			04/13/12 00:18	1
Total Organic Carbon	**5.0**		1.0	0.43	mg/L			04/14/12 06:14	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-59350/4
Matrix: Water
Analysis Batch: 59350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/12/12 22:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/12/12 22:40	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/12/12 22:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/12/12 22:40	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/12/12 22:40	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/12/12 22:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/12/12 22:40	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/12/12 22:40	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/12/12 22:40	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/12/12 22:40	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/12/12 22:40	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/12/12 22:40	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/12/12 22:40	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/12/12 22:40	1
2-Hexanone	ND		5.0	1.2	ug/L			04/12/12 22:40	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/12/12 22:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/12/12 22:40	1
Acetone	ND		10	3.0	ug/L			04/12/12 22:40	1
Benzene	ND		1.0	0.41	ug/L			04/12/12 22:40	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/12/12 22:40	1
Bromoform	ND		1.0	0.26	ug/L			04/12/12 22:40	1
Bromomethane	ND		1.0	0.69	ug/L			04/12/12 22:40	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/12/12 22:40	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/12/12 22:40	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/12/12 22:40	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/12/12 22:40	1
Chloroethane	ND		1.0	0.32	ug/L			04/12/12 22:40	1
Chloroform	ND		1.0	0.34	ug/L			04/12/12 22:40	1
Chloromethane	ND		1.0	0.35	ug/L			04/12/12 22:40	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/12/12 22:40	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/12/12 22:40	1
Cyclohexane	ND		1.0	0.18	ug/L			04/12/12 22:40	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/12/12 22:40	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/12/12 22:40	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/12/12 22:40	1
Methyl acetate	ND		1.0	0.50	ug/L			04/12/12 22:40	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/12/12 22:40	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/12/12 22:40	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/12/12 22:40	1
Styrene	ND		1.0	0.73	ug/L			04/12/12 22:40	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/12/12 22:40	1
Toluene	ND		1.0	0.51	ug/L			04/12/12 22:40	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/12/12 22:40	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/12/12 22:40	1
Trichloroethene	ND		1.0	0.46	ug/L			04/12/12 22:40	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/12/12 22:40	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/12/12 22:40	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/12/12 22:40	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-59350/4
Matrix: Water
Analysis Batch: 59350

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 137*		*04/12/12 22:40*	*1*
Toluene-d8 (Surr)	*100*		*71 - 126*		*04/12/12 22:40*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*04/12/12 22:40*	*1*

Lab Sample ID: LCS 480-59350/28
Matrix: Water
Analysis Batch: 59350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.8		ug/L		103	71 - 129
1,1-Dichloroethene	25.0	20.8		ug/L		83	65 - 138
1,2-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 120
1,2-Dichloroethane	25.0	25.8		ug/L		103	75 - 127
Benzene	25.0	26.5		ug/L		106	71 - 124
Chlorobenzene	25.0	27.2		ug/L		109	72 - 120
cis-1,2-Dichloroethene	25.0	25.7		ug/L		103	74 - 124
Ethylbenzene	25.0	28.0		ug/L		112	77 - 123
Methyl tert-butyl ether	25.0	24.6		ug/L		98	64 - 127
Tetrachloroethene	25.0	25.4		ug/L		102	74 - 122
Toluene	25.0	27.4		ug/L		110	70 - 122
trans-1,2-Dichloroethene	25.0	27.6		ug/L		110	73 - 127
Trichloroethene	25.0	25.4		ug/L		102	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*96*		*66 - 137*
Toluene-d8 (Surr)	*97*		*71 - 126*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*

Lab Sample ID: MB 480-59413/4
Matrix: Water
Analysis Batch: 59413

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/13/12 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/13/12 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/13/12 10:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/13/12 10:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/13/12 10:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/13/12 10:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/13/12 10:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/13/12 10:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/13/12 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/13/12 10:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/13/12 10:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/13/12 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/13/12 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/13/12 10:59	1
2-Hexanone	ND		5.0	1.2	ug/L			04/13/12 10:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/13/12 10:59	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-59413/4
Matrix: Water
Analysis Batch: 59413

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/13/12 10:59	1
Acetone	ND		10	3.0	ug/L			04/13/12 10:59	1
Benzene	ND		1.0	0.41	ug/L			04/13/12 10:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/13/12 10:59	1
Bromoform	ND		1.0	0.26	ug/L			04/13/12 10:59	1
Bromomethane	ND		1.0	0.69	ug/L			04/13/12 10:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/13/12 10:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/13/12 10:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/13/12 10:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/13/12 10:59	1
Chloroethane	ND		1.0	0.32	ug/L			04/13/12 10:59	1
Chloroform	ND		1.0	0.34	ug/L			04/13/12 10:59	1
Chloromethane	ND		1.0	0.35	ug/L			04/13/12 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/13/12 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/13/12 10:59	1
Cyclohexane	ND		1.0	0.18	ug/L			04/13/12 10:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/13/12 10:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/13/12 10:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/13/12 10:59	1
Methyl acetate	ND		1.0	0.50	ug/L			04/13/12 10:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/13/12 10:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/13/12 10:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/13/12 10:59	1
Styrene	ND		1.0	0.73	ug/L			04/13/12 10:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/13/12 10:59	1
Toluene	ND		1.0	0.51	ug/L			04/13/12 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/13/12 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/13/12 10:59	1
Trichloroethene	ND		1.0	0.46	ug/L			04/13/12 10:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/13/12 10:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/13/12 10:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/13/12 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*		*04/13/12 10:59*	*1*
Toluene-d8 (Surr)	*99*		*71 - 126*		*04/13/12 10:59*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*04/13/12 10:59*	*1*

Lab Sample ID: LCS 480-59413/3
Matrix: Water
Analysis Batch: 59413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.1		ug/L		96	71 - 129
1,1-Dichloroethene	25.0	18.9		ug/L		76	65 - 138
1,2-Dichlorobenzene	25.0	26.7		ug/L		107	77 - 120
1,2-Dichloroethane	25.0	26.9		ug/L		108	75 - 127
Benzene	25.0	24.6		ug/L		98	71 - 124
Chlorobenzene	25.0	25.6		ug/L		102	72 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-59413/3
Matrix: Water
Analysis Batch: 59413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	25.0	24.7		ug/L		99	74 - 124
Ethylbenzene	25.0	26.5		ug/L		106	77 - 123
Methyl tert-butyl ether	25.0	25.6		ug/L		102	64 - 127
Tetrachloroethene	25.0	25.1		ug/L		100	74 - 122
Toluene	25.0	26.1		ug/L		104	70 - 122
trans-1,2-Dichloroethene	25.0	25.6		ug/L		102	73 - 127
Trichloroethene	25.0	25.2		ug/L		101	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*66 - 137*
Toluene-d8 (Surr)	*95*		*71 - 126*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*

Lab Sample ID: MB 480-59736/5
Matrix: Water
Analysis Batch: 59736

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/16/12 11:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/16/12 11:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/16/12 11:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/16/12 11:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/16/12 11:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/16/12 11:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/16/12 11:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/16/12 11:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/16/12 11:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/16/12 11:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/16/12 11:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/16/12 11:10	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/16/12 11:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/16/12 11:10	1
2-Hexanone	ND		5.0	1.2	ug/L			04/16/12 11:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/16/12 11:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/16/12 11:10	1
Acetone	ND		10	3.0	ug/L			04/16/12 11:10	1
Benzene	ND		1.0	0.41	ug/L			04/16/12 11:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/16/12 11:10	1
Bromoform	ND		1.0	0.26	ug/L			04/16/12 11:10	1
Bromomethane	ND		1.0	0.69	ug/L			04/16/12 11:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/16/12 11:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/16/12 11:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/16/12 11:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/16/12 11:10	1
Chloroethane	ND		1.0	0.32	ug/L			04/16/12 11:10	1
Chloroform	ND		1.0	0.34	ug/L			04/16/12 11:10	1
Chloromethane	ND		1.0	0.35	ug/L			04/16/12 11:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/16/12 11:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/16/12 11:10	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-59736/5
Matrix: Water
Analysis Batch: 59736

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			04/16/12 11:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/16/12 11:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/16/12 11:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/16/12 11:10	1
Methyl acetate	ND		1.0	0.50	ug/L			04/16/12 11:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/16/12 11:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/16/12 11:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/16/12 11:10	1
Styrene	ND		1.0	0.73	ug/L			04/16/12 11:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/16/12 11:10	1
Toluene	ND		1.0	0.51	ug/L			04/16/12 11:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/16/12 11:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/16/12 11:10	1
Trichloroethene	ND		1.0	0.46	ug/L			04/16/12 11:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/16/12 11:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/16/12 11:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/16/12 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*04/16/12 11:10*	*1*
Toluene-d8 (Surr)	*118*		*71 - 126*		*04/16/12 11:10*	*1*
4-Bromofluorobenzene (Surr)	*112*		*73 - 120*		*04/16/12 11:10*	*1*

Lab Sample ID: LCS 480-59736/4
Matrix: Water
Analysis Batch: 59736

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.5		ug/L		98	71 - 129
1,1-Dichloroethene	25.0	19.4		ug/L		78	65 - 138
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	77 - 120
1,2-Dichloroethane	25.0	25.5		ug/L		102	75 - 127
Benzene	25.0	25.3		ug/L		101	71 - 124
Chlorobenzene	25.0	26.6		ug/L		106	72 - 120
cis-1,2-Dichloroethene	25.0	25.8		ug/L		103	74 - 124
Ethylbenzene	25.0	26.4		ug/L		106	77 - 123
Methyl tert-butyl ether	25.0	25.6		ug/L		102	64 - 127
Tetrachloroethene	25.0	26.5		ug/L		106	74 - 122
Toluene	25.0	26.5		ug/L		106	70 - 122
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	73 - 127
Trichloroethene	25.0	25.3		ug/L		101	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*
Toluene-d8 (Surr)	*118*		*71 - 126*
4-Bromofluorobenzene (Surr)	*114*		*73 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-60138/5
Matrix: Water
Analysis Batch: 60138

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/18/12 10:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/18/12 10:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/18/12 10:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/18/12 10:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/18/12 10:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/18/12 10:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/18/12 10:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/18/12 10:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/18/12 10:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/18/12 10:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/18/12 10:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/18/12 10:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/18/12 10:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/18/12 10:24	1
2-Hexanone	ND		5.0	1.2	ug/L			04/18/12 10:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/18/12 10:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/18/12 10:24	1
Acetone	ND		10	3.0	ug/L			04/18/12 10:24	1
Benzene	ND		1.0	0.41	ug/L			04/18/12 10:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/18/12 10:24	1
Bromoform	ND		1.0	0.26	ug/L			04/18/12 10:24	1
Bromomethane	ND		1.0	0.69	ug/L			04/18/12 10:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/18/12 10:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/18/12 10:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/18/12 10:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/18/12 10:24	1
Chloroethane	ND		1.0	0.32	ug/L			04/18/12 10:24	1
Chloroform	ND		1.0	0.34	ug/L			04/18/12 10:24	1
Chloromethane	ND		1.0	0.35	ug/L			04/18/12 10:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/18/12 10:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/18/12 10:24	1
Cyclohexane	ND		1.0	0.18	ug/L			04/18/12 10:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/18/12 10:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/18/12 10:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/18/12 10:24	1
Methyl acetate	ND		1.0	0.50	ug/L			04/18/12 10:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/18/12 10:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/18/12 10:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/18/12 10:24	1
Styrene	ND		1.0	0.73	ug/L			04/18/12 10:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/18/12 10:24	1
Toluene	ND		1.0	0.51	ug/L			04/18/12 10:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/18/12 10:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/18/12 10:24	1
Trichloroethene	ND		1.0	0.46	ug/L			04/18/12 10:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/18/12 10:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/18/12 10:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/18/12 10:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-60138/5
Matrix: Water
Analysis Batch: 60138

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*93*		*66 - 137*		*04/18/12 10:24*	*1*
Toluene-d8 (Surr)	*93*		*71 - 126*		*04/18/12 10:24*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*04/18/12 10:24*	*1*

Lab Sample ID: LCS 480-60138/4
Matrix: Water
Analysis Batch: 60138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.3		ug/L		101	71 - 129
1,1-Dichloroethene	25.0	21.1		ug/L		84	65 - 138
1,2-Dichlorobenzene	25.0	26.4		ug/L		106	77 - 120
1,2-Dichloroethane	25.0	25.4		ug/L		102	75 - 127
Benzene	25.0	25.4		ug/L		102	71 - 124
Chlorobenzene	25.0	26.3		ug/L		105	72 - 120
cis-1,2-Dichloroethene	25.0	25.9		ug/L		104	74 - 124
Ethylbenzene	25.0	25.6		ug/L		102	77 - 123
Methyl tert-butyl ether	25.0	25.3		ug/L		101	64 - 127
Tetrachloroethene	25.0	26.8		ug/L		107	74 - 122
Toluene	25.0	25.6		ug/L		102	70 - 122
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	73 - 127
Trichloroethene	25.0	26.0		ug/L		104	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 137*
Toluene-d8 (Surr)	*94*		*71 - 126*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*

Lab Sample ID: MB 480-60309/5
Matrix: Water
Analysis Batch: 60309

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			04/18/12 22:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			04/18/12 22:38	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			04/18/12 22:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			04/18/12 22:38	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			04/18/12 22:38	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			04/18/12 22:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			04/18/12 22:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			04/18/12 22:38	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			04/18/12 22:38	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			04/18/12 22:38	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			04/18/12 22:38	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			04/18/12 22:38	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			04/18/12 22:38	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			04/18/12 22:38	1
2-Hexanone	ND		5.0	1.2	ug/L			04/18/12 22:38	1
2-Butanone (MEK)	ND		10	1.3	ug/L			04/18/12 22:38	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-60309/5
Matrix: Water
Analysis Batch: 60309

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			04/18/12 22:38	1
Acetone	ND		10	3.0	ug/L			04/18/12 22:38	1
Benzene	ND		1.0	0.41	ug/L			04/18/12 22:38	1
Bromodichloromethane	ND		1.0	0.39	ug/L			04/18/12 22:38	1
Bromoform	ND		1.0	0.26	ug/L			04/18/12 22:38	1
Bromomethane	ND		1.0	0.69	ug/L			04/18/12 22:38	1
Carbon disulfide	ND		1.0	0.19	ug/L			04/18/12 22:38	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			04/18/12 22:38	1
Chlorobenzene	ND		1.0	0.75	ug/L			04/18/12 22:38	1
Dibromochloromethane	ND		1.0	0.32	ug/L			04/18/12 22:38	1
Chloroethane	ND		1.0	0.32	ug/L			04/18/12 22:38	1
Chloroform	ND		1.0	0.34	ug/L			04/18/12 22:38	1
Chloromethane	ND		1.0	0.35	ug/L			04/18/12 22:38	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			04/18/12 22:38	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			04/18/12 22:38	1
Cyclohexane	ND		1.0	0.18	ug/L			04/18/12 22:38	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			04/18/12 22:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/18/12 22:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			04/18/12 22:38	1
Methyl acetate	ND		1.0	0.50	ug/L			04/18/12 22:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			04/18/12 22:38	1
Methylcyclohexane	ND		1.0	0.16	ug/L			04/18/12 22:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			04/18/12 22:38	1
Styrene	ND		1.0	0.73	ug/L			04/18/12 22:38	1
Tetrachloroethene	ND		1.0	0.36	ug/L			04/18/12 22:38	1
Toluene	ND		1.0	0.51	ug/L			04/18/12 22:38	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			04/18/12 22:38	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			04/18/12 22:38	1
Trichloroethene	ND		1.0	0.46	ug/L			04/18/12 22:38	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			04/18/12 22:38	1
Vinyl chloride	ND		1.0	0.90	ug/L			04/18/12 22:38	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/18/12 22:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*66 - 137*		*04/18/12 22:38*	*1*
Toluene-d8 (Surr)	*93*		*71 - 126*		*04/18/12 22:38*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*04/18/12 22:38*	*1*

Lab Sample ID: LCS 480-60309/4
Matrix: Water
Analysis Batch: 60309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	23.5		ug/L		94	71 - 129
1,1-Dichloroethene	25.0	19.7		ug/L		79	65 - 138
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	77 - 120
1,2-Dichloroethane	25.0	24.0		ug/L		96	75 - 127
Benzene	25.0	23.7		ug/L		95	71 - 124
Chlorobenzene	25.0	24.8		ug/L		99	72 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-60309/4
Matrix: Water
Analysis Batch: 60309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	25.0	24.5		ug/L		98	74 - 124
Ethylbenzene	25.0	24.7		ug/L		99	77 - 123
Methyl tert-butyl ether	25.0	23.9		ug/L		96	64 - 127
Tetrachloroethene	25.0	25.8		ug/L		103	74 - 122
Toluene	25.0	24.4		ug/L		98	70 - 122
trans-1,2-Dichloroethene	25.0	24.1		ug/L		96	73 - 127
Trichloroethene	25.0	24.6		ug/L		98	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*66 - 137*
Toluene-d8 (Surr)	*95*		*71 - 126*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-59353/2
Matrix: Water
Analysis Batch: 59353

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		1.0	0.22	ug/L			04/12/12 18:07	1

Lab Sample ID: LCS 480-59353/3
Matrix: Water
Analysis Batch: 59353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	7.76	7.03		ug/L		91	48 - 174

Lab Sample ID: LCSD 480-59353/4
Matrix: Water
Analysis Batch: 59353

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	7.76	7.16		ug/L		92	48 - 174	2	50

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 480-60469/21
Matrix: Water
Analysis Batch: 60469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.5	mg/L			04/18/12 16:01	1

Method: D516-90, 02 - Sulfate (Continued)

Lab Sample ID: MB 480-60469/5
Matrix: Water
Analysis Batch: 60469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.35	J	5.0	1.5	mg/L			04/18/12 15:33	1

Lab Sample ID: LCS 480-60469/20
Matrix: Water
Analysis Batch: 60469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	31.16		mg/L		104	90 - 110

Lab Sample ID: LCS 480-60469/4
Matrix: Water
Analysis Batch: 60469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	28.73		mg/L		96	90 - 110

Lab Sample ID: MB 480-62258/4
Matrix: Water
Analysis Batch: 62258

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.94	J	5.0	1.5	mg/L			04/30/12 10:28	1

Lab Sample ID: LCS 480-62258/3
Matrix: Water
Analysis Batch: 62258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	31.74		mg/L		106	90 - 110

Lab Sample ID: 480-18456-6 MS
Matrix: Water
Analysis Batch: 62258

Client Sample ID: PZ-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	91.1	B	20.0	114.6	4	mg/L		118	60 - 128

Lab Sample ID: 480-18456-6 DU
Matrix: Water
Analysis Batch: 62258

Client Sample ID: PZ-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	91.1	B	98.73		mg/L		8	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-59552/27
Matrix: Water
Analysis Batch: 59552

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Bicarbonate	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			04/13/12 11:02	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			04/13/12 11:02	1

Lab Sample ID: LCS 480-59552/28
Matrix: Water
Analysis Batch: 59552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	1000	920.0		mg/L		92	90 - 110

Method: SM 5310D - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-59776/27
Matrix: Water
Analysis Batch: 59776

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.43	mg/L			04/14/12 01:18	1

Lab Sample ID: MB 480-59776/3
Matrix: Water
Analysis Batch: 59776

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.43	mg/L			04/13/12 18:42	1

Lab Sample ID: LCS 480-59776/28
Matrix: Water
Analysis Batch: 59776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	60.10		mg/L		100	90 - 110

Lab Sample ID: LCS 480-59776/4
Matrix: Water
Analysis Batch: 59776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	59.09		mg/L		98	90 - 110

Lab Sample ID: 480-18456-15 DU
Matrix: Water
Analysis Batch: 59776

Client Sample ID: PZ-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	5.0		4.83		mg/L		4	20

GC/MS VOA

Analysis Batch: 59350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-1	TRIP BLANK	Total/NA	Water	8260B	
480-18456-2	DUP-041112	Total/NA	Water	8260B	
480-18456-7	MW-18	Total/NA	Water	8260B	
480-18456-9	PZ-6	Total/NA	Water	8260B	
480-18456-10	PZ-5	Total/NA	Water	8260B	
480-18456-11	AZ-PZ-2	Total/NA	Water	8260B	
LCS 480-59350/28	Lab Control Sample	Total/NA	Water	8260B	
MB 480-59350/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 59413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-7 - DL	MW-18	Total/NA	Water	8260B	
480-18456-12	MW-21	Total/NA	Water	8260B	
480-18456-13	PZ-11R	Total/NA	Water	8260B	
480-18456-14	MW-5	Total/NA	Water	8260B	
LCS 480-59413/3	Lab Control Sample	Total/NA	Water	8260B	
MB 480-59413/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 59736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-2 - DL	DUP-041112	Total/NA	Water	8260B	
480-18456-3	MW-1	Total/NA	Water	8260B	
480-18456-4	MW-3	Total/NA	Water	8260B	
480-18456-11 - DL	AZ-PZ-2	Total/NA	Water	8260B	
LCS 480-59736/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-59736/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 60138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-6	PZ-13R	Total/NA	Water	8260B	
480-18456-8	PZ-7	Total/NA	Water	8260B	
LCS 480-60138/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-60138/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 60309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-5	AZ-PZ-1	Total/NA	Water	8260B	
LCS 480-60309/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-60309/5	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 59353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-3	MW-1	Total/NA	Water	RSK-175	
480-18456-4	MW-3	Total/NA	Water	RSK-175	
480-18456-5	AZ-PZ-1	Total/NA	Water	RSK-175	
480-18456-6	PZ-13R	Total/NA	Water	RSK-175	
LCS 480-59353/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-59353/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 480-59353/2	Method Blank	Total/NA	Water	RSK-175	

General Chemistry

Analysis Batch: 59395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-3	MW-1	Total/NA	Water	353.2	
480-18456-4	MW-3	Total/NA	Water	353.2	
480-18456-5	AZ-PZ-1	Total/NA	Water	353.2	
480-18456-15	PZ-13R	Total/NA	Water	353.2	

Analysis Batch: 59552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-3	MW-1	Total/NA	Water	SM 2320B	
480-18456-4	MW-3	Total/NA	Water	SM 2320B	
480-18456-5	AZ-PZ-1	Total/NA	Water	SM 2320B	
480-18456-6	PZ-13R	Total/NA	Water	SM 2320B	
LCS 480-59552/28	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-59552/27	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 59776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-3	MW-1	Total/NA	Water	SM 5310D	
480-18456-4	MW-3	Total/NA	Water	SM 5310D	
480-18456-5	AZ-PZ-1	Total/NA	Water	SM 5310D	
480-18456-15	PZ-13R	Total/NA	Water	SM 5310D	
480-18456-15 DU	PZ-13R	Total/NA	Water	SM 5310D	
LCS 480-59776/28	Lab Control Sample	Total/NA	Water	SM 5310D	
LCS 480-59776/4	Lab Control Sample	Total/NA	Water	SM 5310D	
MB 480-59776/27	Method Blank	Total/NA	Water	SM 5310D	
MB 480-59776/3	Method Blank	Total/NA	Water	SM 5310D	

Analysis Batch: 60469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-3	MW-1	Total/NA	Water	D516-90, 02	
480-18456-4	MW-3	Total/NA	Water	D516-90, 02	
480-18456-5	AZ-PZ-1	Total/NA	Water	D516-90, 02	
LCS 480-60469/20	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-60469/4	Lab Control Sample	Total/NA	Water	D516-90, 02	
MB 480-60469/21	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-60469/5	Method Blank	Total/NA	Water	D516-90, 02	

Analysis Batch: 62258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-18456-6	PZ-13R	Total/NA	Water	D516-90, 02	
480-18456-6 DU	PZ-13R	Total/NA	Water	D516-90, 02	
480-18456-6 MS	PZ-13R	Total/NA	Water	D516-90, 02	
LCS 480-62258/3	Lab Control Sample	Total/NA	Water	D516-90, 02	
MB 480-62258/4	Method Blank	Total/NA	Water	D516-90, 02	

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-18456-1

Date Collected: 04/10/12 00:00

Matrix: Water

Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59350	04/13/12 02:40	JMB	TAL BUF

Client Sample ID: DUP-041112

Lab Sample ID: 480-18456-2

Date Collected: 04/11/12 00:00

Matrix: Water

Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59350	04/13/12 03:05	JMB	TAL BUF
Total/NA	Analysis	8260B	DL	400	59736	04/16/12 15:20	LH	TAL BUF

Client Sample ID: MW-1

Lab Sample ID: 480-18456-3

Date Collected: 04/11/12 15:45

Matrix: Water

Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59736	04/16/12 15:41	LH	TAL BUF
Total/NA	Analysis	RSK-175		1	59353	04/12/12 23:20	JM	TAL BUF
Total/NA	Analysis	353.2		1	59395	04/13/12 00:17	EGN	TAL BUF
Total/NA	Analysis	SM 2320B		1	59552	04/13/12 11:02	LYW	TAL BUF
Total/NA	Analysis	SM 5310D		1	59776	04/14/12 05:24	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		5	60469	04/18/12 15:36	LRM	TAL BUF

Client Sample ID: MW-3

Lab Sample ID: 480-18456-4

Date Collected: 04/11/12 17:05

Matrix: Water

Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59736	04/16/12 16:03	LH	TAL BUF
Total/NA	Analysis	RSK-175		1	59353	04/12/12 23:37	JM	TAL BUF
Total/NA	Analysis	353.2		1	59395	04/12/12 21:31	EGN	TAL BUF
Total/NA	Analysis	SM 2320B		1	59552	04/13/12 11:02	LYW	TAL BUF
Total/NA	Analysis	SM 5310D		1	59776	04/14/12 05:41	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		5	60469	04/18/12 15:37	LRM	TAL BUF

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-18456-5

Date Collected: 04/11/12 12:55

Matrix: Water

Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	60309	04/18/12 23:07	DC	TAL BUF
Total/NA	Analysis	RSK-175		100	59353	04/12/12 21:16	JM	TAL BUF
Total/NA	Analysis	353.2		1	59395	04/12/12 21:34	EGN	TAL BUF

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-18456-5

Date Collected: 04/11/12 12:55
Date Received: 04/12/12 07:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	59552	04/13/12 11:02	LYW	TAL BUF
Total/NA	Analysis	SM 5310D		1	59776	04/14/12 05:57	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		2	60469	04/18/12 15:37	LRM	TAL BUF

Client Sample ID: PZ-13R

Lab Sample ID: 480-18456-6

Date Collected: 04/10/12 15:20
Date Received: 04/12/12 07:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	60138	04/18/12 11:27	RL	TAL BUF
Total/NA	Analysis	RSK-175		1	59353	04/12/12 23:54	JM	TAL BUF
Total/NA	Analysis	SM 2320B		1	59552	04/13/12 11:02	LYW	TAL BUF
Total/NA	Analysis	D516-90, 02		5	62258	04/30/12 10:31	LRM	TAL BUF

Client Sample ID: MW-18

Lab Sample ID: 480-18456-7

Date Collected: 04/11/12 11:55
Date Received: 04/12/12 07:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59350	04/13/12 05:09	JMB	TAL BUF
Total/NA	Analysis	8260B	DL	5	59413	04/13/12 13:43	CDC	TAL BUF

Client Sample ID: PZ-7

Lab Sample ID: 480-18456-8

Date Collected: 04/10/12 13:35
Date Received: 04/12/12 07:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	60138	04/18/12 11:51	RL	TAL BUF

Client Sample ID: PZ-6

Lab Sample ID: 480-18456-9

Date Collected: 04/10/12 13:20
Date Received: 04/12/12 07:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59350	04/13/12 05:59	JMB	TAL BUF

Client Sample ID: PZ-5

Lab Sample ID: 480-18456-10

Date Collected: 04/10/12 13:05
Date Received: 04/12/12 07:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	59350	04/13/12 06:23	JMB	TAL BUF

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Client Sample ID: AZ-PZ-2

Lab Sample ID: 480-18456-11

Date Collected: 04/10/12 17:55
Matrix: Water
Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59350	04/13/12 06:48	JMB	TAL BUF
Total/NA	Analysis	8260B	DL	40	59736	04/16/12 16:24	LH	TAL BUF

Client Sample ID: MW-21

Lab Sample ID: 480-18456-12

Date Collected: 04/10/12 16:45
Matrix: Water
Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59413	04/13/12 14:33	CDC	TAL BUF

Client Sample ID: PZ-11R

Lab Sample ID: 480-18456-13

Date Collected: 04/10/12 14:55
Matrix: Water
Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59413	04/13/12 14:57	CDC	TAL BUF

Client Sample ID: MW-5

Lab Sample ID: 480-18456-14

Date Collected: 04/10/12 14:30
Matrix: Water
Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	59413	04/13/12 15:22	CDC	TAL BUF

Client Sample ID: PZ-13R

Lab Sample ID: 480-18456-15

Date Collected: 04/11/12 13:55
Matrix: Water
Date Received: 04/12/12 07:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	59395	04/13/12 00:18	EGN	TAL BUF
Total/NA	Analysis	SM 5310D		1	59776	04/14/12 06:14	KAC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas DEQ	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Georgia	State Program	4	N/A
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Kentucky (UST)	State Program	4	30
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	Federal		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	West Virginia DEP	State Program	3	252
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-18456-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
RSK-175	Dissolved Gases (GC)	RSK	TAL BUF
353.2	Nitrate	EPA	TAL BUF
D516-90, 02	Sulfate	ASTM	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 5310D	Organic Carbon, Total (TOC)	SM	TAL BUF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-23596-4020.1
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 1 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 week			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: NJ0010~~10.0001~~ 40.1.101			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516, Nitrate_Calc	TOC (SM-5310B)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	A	N	N	A	X	
Trip Blank	—	—	—	Water			X					2	
DUP-041112	4/11/12	—	G	Water			X					3	
MW-1	4/11/12	1545	G	Water			3	2	1	2	2	10	
MW-3	4/11/12	1705	G	Water			3	2	1	2	2	10	
AZ-PZ-1	4/11/12	1255	G	Water			3	2	1	2	2	10	
PZ-13R	4/10/12	1520	G	Water			3	2	1	2#	2	10	# Note: TOC + Nitrate-Nitrate collected on 4/11/12 1355.
MW-18	4/11/12	1155	G	Water			3					3	
PZ-7	4/10/12	1335	G	Water			3					3	
PZ-6	4/10/12	1320	G	Water			1					1	Low Volume
PZ-5	4/10/12	1305	G	Water			1					1	Low Volume
AZ-PZ-2	4/10/12	1755	G	Water			3					3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Please Report Results to J. Bonstead

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D. Zuck	4/11/12 1730	Arcadis	[signature]	4/12/12 740	[signature]

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.7 #1

5/1/2012

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-23596-4020.2
Client Contact: Mr. Dan Zuck	Phone: 516-368-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 2 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 week			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: NJ0010~~16.0001~~ 40.1.101			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516, Nitrate_Calc	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	A	N	N	X	
MW-21	4/10/12	1645	G	Water			3				3	
PZ-11R	4/10/12	1455	G	Water			3				3	
MW-5	4/10/12	1430	G	Water			3					
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D. Zuck	4/11/12 1730	Arcadis	D. Zuck-ARCS		
			[signature]	4/12/12 740	[signature]

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.7 #1

5/1/2012

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Login Number: 18456

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-23596-4020.1
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 1 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 week			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: NJ0010~~10.0001~~ 40.1.101			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
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Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516, Nitrate_Calc	TOC (SM-5310B)	Total Number of containers	Special Instructions/Note:
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DUP-041112	4/11/12	—	G	Water			X					3	
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Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Please Report Results to J. Bonstead

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D. Zuck	4/11/12 1730	Arcadis	[signature]	4/12/12 740	[signature]

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.7 #1

5/1/2012

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

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Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 week			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: NJ0010~~16.0001~~ 40.1.101			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

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				Preservation Code:	X	X	A	A	N	N									X	
MW-21	4/10/12	1645	G	Water			3												3	
PZ-11R	4/10/12	1455	G	Water			3												3	
MW-5	4/10/12	1430	G	Water			3													
				Water																
				Water																
				Water																
				Water																
				Water																
				Water																
				Water																
				Water																

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

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Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D. Zuck	4/11/12 1730	Arcadis	D. Zuck-Arcadis		
			[signature]	4/12/12 740	[signature]

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.7 #1

5/1/2012

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT



TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-15487-1
Client Project/Site: Lockheed Martin Corporation

For:
ARCADIS U.S., Inc.
465 New Karner Road
First Floor
Albany, New York 12205

Attn: Mr. Jeffrey Bonsteel

Candace L. Fox

Authorized for release by:
2/9/2012 11:10:54 AM

Candace Fox
Project Manager II
candace.fox@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-15487-1	MW-1	Water	01/25/12 16:20	01/28/12 09:00
480-15487-2	MW-3	Water	01/25/12 14:25	01/28/12 09:00
480-15487-3	PZ-5	Water	01/25/12 17:45	01/28/12 09:00
480-15487-4	PZ-8	Water	01/25/12 17:32	01/28/12 09:00
480-15487-5	PZ-11R	Water	01/25/12 16:45	01/28/12 09:00
480-15487-6	PZ-13R	Water	01/25/12 12:00	01/28/12 09:00
480-15487-7	AI-PZ-2	Water	01/24/12 15:40	01/28/12 09:00
480-15487-8	AZ-PZ-1	Water	01/24/12 13:00	01/28/12 09:00
480-15487-9	TB	Water	01/24/12 00:00	01/28/12 09:00

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS or MSD exceeds the control limits

GC VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-15487-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-15487-1

Comments
No additional comments.

Receipt
All samples received were out of hold time for Nitrate-Nitrite analyses.

All other samples were received in good condition within temperature requirements.

GC/MS VOA
Method(s) 8260B: The following samples were diluted due to the abundance of target analytes: AZ-PZ-1 (480-15487-8), PZ-5 (480-15487-3), PZ-8 (480-15487-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample submitted for volatiles analysis was received with insufficient preservation (pH >2): PZ-11R (480-15487-5).

Method(s) 8260B: The following samples were diluted due to the abundance of target analytes: (480-15487-8 MS), (480-15487-8 MSD), AZ-PZ-1 DL (480-15487-8 DL), PZ-5 DL (480-15487-3 DL). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample was analyzed with headspace in the sample vial due to limited sample volume: PZ-5 (480-15487-3).

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 49783 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA
Method(s) RSK-175: The following samples were diluted due to the abundance of target analytes: AI-PZ-2 (480-15487-7), AZ-PZ-1 (480-15487-8). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: The method blank (MB 480-49929/2) contained Methane above the method detection limits. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.

No other analytical or quality issues were noted.

General Chemistry
Method(s) D516-90, 02: For Batch 50470 the runlog indicates that the LCS and Method Blank were analyzed prior to the CCV/CCB. The standard reagent used for the LCS and CCV are the same reagent and are interchangeable. All QC met the CCV criteria.

Method(s) Nitrate by calc: The following sample(s) was received outside of holding time: AI-PZ-2 (480-15487-7), AZ-PZ-1 (480-15487-8), MW-1 (480-15487-1), MW-3 (480-15487-2), PZ-13R (480-15487-6).

No other analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: MW-1 — Lab Sample ID: 480-15487-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.8		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	35		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	78		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	23		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	1.5		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	110	B	1.0	0.22	ug/L	1		RSK-175	Total/NA
Nitrate as N	1.9	H	0.050	0.011	mg/L	1		353.2	Total/NA
Sulfate	116		25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	304		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	304		5.0	0.79	mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 480-15487-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.4		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	40		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	22		1.0	0.36	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.1		1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	24		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	3.8		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	120	B	1.0	0.22	ug/L	1		RSK-175	Total/NA
Nitrate as N	0.33	H	0.050	0.011	mg/L	1		353.2	Total/NA
Sulfate	87.9		25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	300		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	300		5.0	0.79	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PZ-5 — Lab Sample ID: 480-15487-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	50		1.6	1.6	ug/L	2		8260B	Total/NA
Tetrachloroethene	230	E	0.72	0.72	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	1.8		1.8	1.8	ug/L	2		8260B	Total/NA
Trichloroethene	71		0.92	0.92	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene - DL	41		3.2	3.2	ug/L	4		8260B	Total/NA
Tetrachloroethene - DL	170		1.4	1.4	ug/L	4		8260B	Total/NA
Trichloroethene - DL	52		1.8	1.8	ug/L	4		8260B	Total/NA

Client Sample ID: PZ-8 — Lab Sample ID: 480-15487-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.4		1.9	1.9	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	91		4.1	4.1	ug/L	5		8260B	Total/NA
Tetrachloroethene	470		1.8	1.8	ug/L	5		8260B	Total/NA
Trichloroethene	410		2.3	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: PZ-11R — Lab Sample ID: 480-15487-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.3		0.81	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	2.2		0.36	0.36	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.97		0.90	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	4.2		0.46	0.46	ug/L	1		8260B	Total/NA

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: PZ-13R — Lab Sample ID: 480-15487-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.1		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.98	J	1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	3.7		1.0	0.46	ug/L	1		8260B	Total/NA
Methane	41	B	1.0	0.22	ug/L	1		RSK-175	Total/NA
Nitrate as N	0.13	H	0.050	0.011	mg/L	1		353.2	Total/NA
Sulfate	115		25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	404		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	404		5.0	0.79	mg/L	1		SM 2320B	Total/NA

Client Sample ID: AI-PZ-2 — Lab Sample ID: 480-15487-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.48	J	1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	22		1.0	0.81	ug/L	1		8260B	Total/NA
Vinyl chloride	11		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	2400	B	100	22	ug/L	100		RSK-175	Total/NA
Nitrate as N	0.81	H	0.050	0.011	mg/L	1		353.2	Total/NA
Sulfate	38.8		25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	204		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	204		5.0	0.79	mg/L	1		SM 2320B	Total/NA

Client Sample ID: AZ-PZ-1 — Lab Sample ID: 480-15487-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	1900		250	78	ug/L	250		8260B	Total/NA
1,1-Dichloroethane	2800		250	95	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	37000	E	250	200	ug/L	250		8260B	Total/NA
Dichlorodifluoromethane	1200		250	170	ug/L	250		8260B	Total/NA
Trichloroethene	2300		250	120	ug/L	250		8260B	Total/NA
Vinyl chloride	1800		250	230	ug/L	250		8260B	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	7600		500	160	ug/L	500		8260B	Total/NA
1,1-Dichloroethane - DL	2700		500	190	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene - DL	42000		500	410	ug/L	500		8260B	Total/NA
Dichlorodifluoromethane - DL	6300		500	340	ug/L	500		8260B	Total/NA
Trichloroethene - DL	6100		500	230	ug/L	500		8260B	Total/NA
Vinyl chloride - DL	2100		500	450	ug/L	500		8260B	Total/NA
Methane	2600	B	100	22	ug/L	100		RSK-175	Total/NA
Sulfate	39.8		5.0	1.5	mg/L	1		D516-90, 02	Total/NA
Alkalinity, Total	456		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	456		5.0	0.79	mg/L	1		SM 2320B	Total/NA

Client Sample ID: TB — Lab Sample ID: 480-15487-9

No Detections

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: MW-1
Date Collected: 01/25/12 16:20
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/30/12 15:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/30/12 15:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/30/12 15:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/30/12 15:59	1
1,1-Dichloroethane	**3.8**		1.0	0.38	ug/L			01/30/12 15:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/30/12 15:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/30/12 15:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/30/12 15:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/30/12 15:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/30/12 15:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/30/12 15:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/30/12 15:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/30/12 15:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/30/12 15:59	1
2-Hexanone	ND		5.0	1.2	ug/L			01/30/12 15:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/30/12 15:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/30/12 15:59	1
Acetone	ND		10	3.0	ug/L			01/30/12 15:59	1
Benzene	ND		1.0	0.41	ug/L			01/30/12 15:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/30/12 15:59	1
Bromoform	ND		1.0	0.26	ug/L			01/30/12 15:59	1
Bromomethane	ND		1.0	0.69	ug/L			01/30/12 15:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/30/12 15:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/30/12 15:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/30/12 15:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/30/12 15:59	1
Chloroethane	ND		1.0	0.32	ug/L			01/30/12 15:59	1
Chloroform	ND		1.0	0.34	ug/L			01/30/12 15:59	1
Chloromethane	ND		1.0	0.35	ug/L			01/30/12 15:59	1
cis-1,2-Dichloroethene	**35**		1.0	0.81	ug/L			01/30/12 15:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/30/12 15:59	1
Cyclohexane	ND		1.0	0.18	ug/L			01/30/12 15:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/30/12 15:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/30/12 15:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/30/12 15:59	1
Methyl acetate	ND		1.0	0.50	ug/L			01/30/12 15:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/30/12 15:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/30/12 15:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/30/12 15:59	1
Styrene	ND		1.0	0.73	ug/L			01/30/12 15:59	1
Tetrachloroethene	**78**		1.0	0.36	ug/L			01/30/12 15:59	1
Toluene	ND		1.0	0.51	ug/L			01/30/12 15:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/30/12 15:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/30/12 15:59	1
Trichloroethene	**23**		1.0	0.46	ug/L			01/30/12 15:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/30/12 15:59	1
Vinyl chloride	**1.5**		1.0	0.90	ug/L			01/30/12 15:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/30/12 15:59	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: MW-1

Lab Sample ID: 480-15487-1

Date Collected: 01/25/12 16:20
Date Received: 01/28/12 09:00

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*01/30/12 15:59*	*1*
Toluene-d8 (Surr)	*108*		*71 - 126*		*01/30/12 15:59*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*01/30/12 15:59*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**110**	**B**	1.0	0.22	ug/L			02/01/12 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**1.9**	**H**	0.050	0.011	mg/L			01/28/12 15:06	1
Sulfate	**116**		25.0	7.5	mg/L			02/04/12 09:09	5
Alkalinity, Total	**304**		5.0	0.79	mg/L			02/01/12 14:55	1
Alkalinity, Bicarbonate	**304**		5.0	0.79	mg/L			02/01/12 14:55	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			02/01/12 14:55	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			02/01/12 14:55	1

Client Sample ID: MW-3

Lab Sample ID: 480-15487-2

Date Collected: 01/25/12 14:25
Date Received: 01/28/12 09:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/30/12 16:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/30/12 16:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/30/12 16:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/30/12 16:22	1
1,1-Dichloroethane	**4.4**		1.0	0.38	ug/L			01/30/12 16:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/30/12 16:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/30/12 16:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/30/12 16:22	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/30/12 16:22	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/30/12 16:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/30/12 16:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/30/12 16:22	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/30/12 16:22	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/30/12 16:22	1
2-Hexanone	ND		5.0	1.2	ug/L			01/30/12 16:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/30/12 16:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/30/12 16:22	1
Acetone	ND		10	3.0	ug/L			01/30/12 16:22	1
Benzene	ND		1.0	0.41	ug/L			01/30/12 16:22	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/30/12 16:22	1
Bromoform	ND		1.0	0.26	ug/L			01/30/12 16:22	1
Bromomethane	ND		1.0	0.69	ug/L			01/30/12 16:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/30/12 16:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/30/12 16:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/30/12 16:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/30/12 16:22	1
Chloroethane	ND		1.0	0.32	ug/L			01/30/12 16:22	1

Client Sample ID: MW-3
Date Collected: 01/25/12 14:25
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.34	ug/L			01/30/12 16:22	1
Chloromethane	ND		1.0	0.35	ug/L			01/30/12 16:22	1
cis-1,2-Dichloroethene	**40**		1.0	0.81	ug/L			01/30/12 16:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/30/12 16:22	1
Cyclohexane	ND		1.0	0.18	ug/L			01/30/12 16:22	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/30/12 16:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/30/12 16:22	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/30/12 16:22	1
Methyl acetate	ND		1.0	0.50	ug/L			01/30/12 16:22	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/30/12 16:22	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/30/12 16:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/30/12 16:22	1
Styrene	ND		1.0	0.73	ug/L			01/30/12 16:22	1
Tetrachloroethene	**22**		1.0	0.36	ug/L			01/30/12 16:22	1
Toluene	ND		1.0	0.51	ug/L			01/30/12 16:22	1
trans-1,2-Dichloroethene	**1.1**		1.0	0.90	ug/L			01/30/12 16:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/30/12 16:22	1
Trichloroethene	**24**		1.0	0.46	ug/L			01/30/12 16:22	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/30/12 16:22	1
Vinyl chloride	**3.8**		1.0	0.90	ug/L			01/30/12 16:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/30/12 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*01/30/12 16:22*	*1*
Toluene-d8 (Surr)	*110*		*71 - 126*		*01/30/12 16:22*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*01/30/12 16:22*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**120**	**B**	1.0	0.22	ug/L			02/01/12 10:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.33**	**H**	0.050	0.011	mg/L			01/28/12 15:09	1
Sulfate	**87.9**		25.0	7.5	mg/L			02/04/12 09:09	5
Alkalinity, Total	**300**		5.0	0.79	mg/L			02/01/12 14:55	1
Alkalinity, Bicarbonate	**300**		5.0	0.79	mg/L			02/01/12 14:55	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			02/01/12 14:55	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			02/01/12 14:55	1

Client Sample ID: PZ-5
Date Collected: 01/25/12 17:45
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.6	1.6	ug/L			01/30/12 16:45	2
1,1-Dichloroethane	ND		0.76	0.76	ug/L			01/30/12 16:45	2
1,2-Dichlorobenzene	ND		1.6	1.6	ug/L			01/30/12 16:45	2
1,3-Dichlorobenzene	ND		1.6	1.6	ug/L			01/30/12 16:45	2

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: PZ-5
Date Collected: 01/25/12 17:45
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.7	1.7	ug/L			01/30/12 16:45	2
Benzene	ND		0.82	0.82	ug/L			01/30/12 16:45	2
Chlorobenzene	ND		1.5	1.5	ug/L			01/30/12 16:45	2
Chloroethane	ND		0.64	0.64	ug/L			01/30/12 16:45	2
cis-1,2-Dichloroethene	**50**		1.6	1.6	ug/L			01/30/12 16:45	2
Ethylbenzene	ND		1.5	1.5	ug/L			01/30/12 16:45	2
m-Xylene & p-Xylene	ND		2.0	1.3	ug/L			01/30/12 16:45	2
o-Xylene	ND		1.5	1.5	ug/L			01/30/12 16:45	2
Tetrachloroethene	**230**	**E**	0.72	0.72	ug/L			01/30/12 16:45	2
Toluene	ND		1.0	1.0	ug/L			01/30/12 16:45	2
trans-1,2-Dichloroethene	**1.8**		1.8	1.8	ug/L			01/30/12 16:45	2
Trichloroethene	**71**		0.92	0.92	ug/L			01/30/12 16:45	2
Vinyl chloride	ND		2.0	1.8	ug/L			01/30/12 16:45	2
Xylenes, Total	ND		2.0	1.3	ug/L			01/30/12 16:45	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*01/30/12 16:45*	*2*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*01/30/12 16:45*	*2*
Toluene-d8 (Surr)	*108*		*71 - 126*		*01/30/12 16:45*	*2*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.3	3.3	ug/L			01/30/12 23:13	4
1,1-Dichloroethane	ND		1.5	1.5	ug/L			01/30/12 23:13	4
1,2-Dichlorobenzene	ND		3.2	3.2	ug/L			01/30/12 23:13	4
1,3-Dichlorobenzene	ND		3.1	3.1	ug/L			01/30/12 23:13	4
1,4-Dichlorobenzene	ND		3.4	3.4	ug/L			01/30/12 23:13	4
Benzene	ND		1.6	1.6	ug/L			01/30/12 23:13	4
Chlorobenzene	ND		3.0	3.0	ug/L			01/30/12 23:13	4
Chloroethane	ND		1.3	1.3	ug/L			01/30/12 23:13	4
cis-1,2-Dichloroethene	**41**		3.2	3.2	ug/L			01/30/12 23:13	4
Ethylbenzene	ND		3.0	3.0	ug/L			01/30/12 23:13	4
m-Xylene & p-Xylene	ND		4.0	2.6	ug/L			01/30/12 23:13	4
o-Xylene	ND		3.0	3.0	ug/L			01/30/12 23:13	4
Tetrachloroethene	**170**		1.4	1.4	ug/L			01/30/12 23:13	4
Toluene	ND		2.0	2.0	ug/L			01/30/12 23:13	4
trans-1,2-Dichloroethene	ND		3.6	3.6	ug/L			01/30/12 23:13	4
Trichloroethene	**52**		1.8	1.8	ug/L			01/30/12 23:13	4
Vinyl chloride	ND		4.0	3.6	ug/L			01/30/12 23:13	4
Xylenes, Total	ND		4.0	2.6	ug/L			01/30/12 23:13	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*01/30/12 23:13*	*4*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*01/30/12 23:13*	*4*
Toluene-d8 (Surr)	*110*		*71 - 126*		*01/30/12 23:13*	*4*

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: PZ-8

Date Collected: 01/25/12 17:32
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.1	4.1	ug/L			01/30/12 17:08	5
1,1-Dichloroethane	**5.4**		1.9	1.9	ug/L			01/30/12 17:08	5
1,2-Dichlorobenzene	ND		4.0	4.0	ug/L			01/30/12 17:08	5
1,3-Dichlorobenzene	ND		3.9	3.9	ug/L			01/30/12 17:08	5
1,4-Dichlorobenzene	ND		4.2	4.2	ug/L			01/30/12 17:08	5
Benzene	ND		2.1	2.1	ug/L			01/30/12 17:08	5
Chlorobenzene	ND		3.8	3.8	ug/L			01/30/12 17:08	5
Chloroethane	ND		1.6	1.6	ug/L			01/30/12 17:08	5
cis-1,2-Dichloroethene	**91**		4.1	4.1	ug/L			01/30/12 17:08	5
Ethylbenzene	ND		3.7	3.7	ug/L			01/30/12 17:08	5
m-Xylene & p-Xylene	ND		5.0	3.3	ug/L			01/30/12 17:08	5
o-Xylene	ND		3.8	3.8	ug/L			01/30/12 17:08	5
Tetrachloroethene	**470**		1.8	1.8	ug/L			01/30/12 17:08	5
Toluene	ND		2.6	2.6	ug/L			01/30/12 17:08	5
trans-1,2-Dichloroethene	ND		4.5	4.5	ug/L			01/30/12 17:08	5
Trichloroethene	**410**		2.3	2.3	ug/L			01/30/12 17:08	5
Vinyl chloride	ND		5.0	4.5	ug/L			01/30/12 17:08	5
Xylenes, Total	ND		5.0	3.3	ug/L			01/30/12 17:08	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*01/30/12 17:08*	*5*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*01/30/12 17:08*	*5*
Toluene-d8 (Surr)	*111*		*71 - 126*		*01/30/12 17:08*	*5*

Client Sample ID: PZ-11R

Date Collected: 01/25/12 16:45
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.82	0.82	ug/L			01/30/12 17:31	1
1,1-Dichloroethane	ND		0.38	0.38	ug/L			01/30/12 17:31	1
1,2-Dichlorobenzene	ND		0.79	0.79	ug/L			01/30/12 17:31	1
1,3-Dichlorobenzene	ND		0.78	0.78	ug/L			01/30/12 17:31	1
1,4-Dichlorobenzene	ND		0.84	0.84	ug/L			01/30/12 17:31	1
Benzene	ND		0.41	0.41	ug/L			01/30/12 17:31	1
Chlorobenzene	ND		0.75	0.75	ug/L			01/30/12 17:31	1
Chloroethane	ND		0.32	0.32	ug/L			01/30/12 17:31	1
cis-1,2-Dichloroethene	**3.3**		0.81	0.81	ug/L			01/30/12 17:31	1
Ethylbenzene	ND		0.74	0.74	ug/L			01/30/12 17:31	1
m-Xylene & p-Xylene	ND		1.0	0.66	ug/L			01/30/12 17:31	1
o-Xylene	ND		0.76	0.76	ug/L			01/30/12 17:31	1
Tetrachloroethene	**2.2**		0.36	0.36	ug/L			01/30/12 17:31	1
Toluene	ND		0.51	0.51	ug/L			01/30/12 17:31	1
trans-1,2-Dichloroethene	**0.97**		0.90	0.90	ug/L			01/30/12 17:31	1
Trichloroethene	**4.2**		0.46	0.46	ug/L			01/30/12 17:31	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/30/12 17:31	1
Xylenes, Total	ND		1.0	0.66	ug/L			01/30/12 17:31	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: PZ-11R

Date Collected: 01/25/12 16:45
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-5
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*01/30/12 17:31*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*01/30/12 17:31*	*1*
Toluene-d8 (Surr)	*110*		*71 - 126*		*01/30/12 17:31*	*1*

Client Sample ID: PZ-13R

Date Collected: 01/25/12 12:00
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/30/12 17:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/30/12 17:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/30/12 17:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/30/12 17:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/30/12 17:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/30/12 17:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/30/12 17:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/30/12 17:54	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/30/12 17:54	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/30/12 17:54	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/30/12 17:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/30/12 17:54	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/30/12 17:54	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/30/12 17:54	1
2-Hexanone	ND		5.0	1.2	ug/L			01/30/12 17:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/30/12 17:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/30/12 17:54	1
Acetone	ND		10	3.0	ug/L			01/30/12 17:54	1
Benzene	ND		1.0	0.41	ug/L			01/30/12 17:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/30/12 17:54	1
Bromoform	ND		1.0	0.26	ug/L			01/30/12 17:54	1
Bromomethane	ND		1.0	0.69	ug/L			01/30/12 17:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/30/12 17:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/30/12 17:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/30/12 17:54	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/30/12 17:54	1
Chloroethane	ND		1.0	0.32	ug/L			01/30/12 17:54	1
Chloroform	ND		1.0	0.34	ug/L			01/30/12 17:54	1
Chloromethane	ND		1.0	0.35	ug/L			01/30/12 17:54	1
cis-1,2-Dichloroethene	**1.1**		1.0	0.81	ug/L			01/30/12 17:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/30/12 17:54	1
Cyclohexane	ND		1.0	0.18	ug/L			01/30/12 17:54	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/30/12 17:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/30/12 17:54	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/30/12 17:54	1
Methyl acetate	ND		1.0	0.50	ug/L			01/30/12 17:54	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/30/12 17:54	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/30/12 17:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/30/12 17:54	1
Styrene	ND		1.0	0.73	ug/L			01/30/12 17:54	1

Client Sample ID: PZ-13R

Date Collected: 01/25/12 12:00
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**0.98**	**J**	1.0	0.36	ug/L			01/30/12 17:54	1
Toluene	ND		1.0	0.51	ug/L			01/30/12 17:54	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/30/12 17:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/30/12 17:54	1
Trichloroethene	**3.7**		1.0	0.46	ug/L			01/30/12 17:54	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/30/12 17:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/30/12 17:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/30/12 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 137*		*01/30/12 17:54*	*1*
Toluene-d8 (Surr)	*109*		*71 - 126*		*01/30/12 17:54*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*01/30/12 17:54*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**41**	**B**	1.0	0.22	ug/L			02/01/12 11:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.13**	**H**	0.050	0.011	mg/L			01/28/12 15:10	1
Sulfate	**115**		25.0	7.5	mg/L			02/04/12 09:09	5
Alkalinity, Total	**404**		5.0	0.79	mg/L			02/06/12 15:30	1
Alkalinity, Bicarbonate	**404**		5.0	0.79	mg/L			02/06/12 15:30	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			02/06/12 15:30	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			02/06/12 15:30	1

Client Sample ID: AI-PZ-2

Date Collected: 01/24/12 15:40
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/30/12 18:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/30/12 18:17	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/30/12 18:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/30/12 18:17	1
1,1-Dichloroethane	**0.48**	**J**	1.0	0.38	ug/L			01/30/12 18:17	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/30/12 18:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/30/12 18:17	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/30/12 18:17	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/30/12 18:17	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/30/12 18:17	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/30/12 18:17	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/30/12 18:17	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/30/12 18:17	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/30/12 18:17	1
2-Hexanone	ND		5.0	1.2	ug/L			01/30/12 18:17	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/30/12 18:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/30/12 18:17	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: AI-PZ-2
Date Collected: 01/24/12 15:40
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			01/30/12 18:17	1
Benzene	ND		1.0	0.41	ug/L			01/30/12 18:17	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/30/12 18:17	1
Bromoform	ND		1.0	0.26	ug/L			01/30/12 18:17	1
Bromomethane	ND		1.0	0.69	ug/L			01/30/12 18:17	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/30/12 18:17	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/30/12 18:17	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/30/12 18:17	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/30/12 18:17	1
Chloroethane	ND		1.0	0.32	ug/L			01/30/12 18:17	1
Chloroform	ND		1.0	0.34	ug/L			01/30/12 18:17	1
Chloromethane	ND		1.0	0.35	ug/L			01/30/12 18:17	1
cis-1,2-Dichloroethene	**22**		1.0	0.81	ug/L			01/30/12 18:17	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/30/12 18:17	1
Cyclohexane	ND		1.0	0.18	ug/L			01/30/12 18:17	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/30/12 18:17	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/30/12 18:17	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/30/12 18:17	1
Methyl acetate	ND		1.0	0.50	ug/L			01/30/12 18:17	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/30/12 18:17	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/30/12 18:17	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/30/12 18:17	1
Styrene	ND		1.0	0.73	ug/L			01/30/12 18:17	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/30/12 18:17	1
Toluene	ND		1.0	0.51	ug/L			01/30/12 18:17	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/30/12 18:17	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/30/12 18:17	1
Trichloroethene	ND		1.0	0.46	ug/L			01/30/12 18:17	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/30/12 18:17	1
Vinyl chloride	**11**		1.0	0.90	ug/L			01/30/12 18:17	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/30/12 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*01/30/12 18:17*	*1*
Toluene-d8 (Surr)	*112*		*71 - 126*		*01/30/12 18:17*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*01/30/12 18:17*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2400**	**B**	100	22	ug/L			02/01/12 12:13	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.81**	**H**	0.050	0.011	mg/L			01/28/12 15:11	1
Sulfate	**38.8**		25.0	7.5	mg/L			02/04/12 09:09	5
Alkalinity, Total	**204**		5.0	0.79	mg/L			02/06/12 15:30	1
Alkalinity, Bicarbonate	**204**		5.0	0.79	mg/L			02/06/12 15:30	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			02/06/12 15:30	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			02/06/12 15:30	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: AZ-PZ-1
Date Collected: 01/24/12 13:00
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250	210	ug/L			01/30/12 18:41	250
1,1,2,2-Tetrachloroethane	ND		250	53	ug/L			01/30/12 18:41	250
1,1,2-Trichloroethane	ND		250	58	ug/L			01/30/12 18:41	250
1,1,2-Trichloro-1,2,2-trifluoroethane	**1900**		250	78	ug/L			01/30/12 18:41	250
1,1-Dichloroethane	**2800**		250	95	ug/L			01/30/12 18:41	250
1,1-Dichloroethene	ND		250	73	ug/L			01/30/12 18:41	250
1,2,4-Trichlorobenzene	ND		250	100	ug/L			01/30/12 18:41	250
1,2-Dibromo-3-Chloropropane	ND		250	98	ug/L			01/30/12 18:41	250
1,2-Dibromoethane	ND		250	180	ug/L			01/30/12 18:41	250
1,2-Dichlorobenzene	ND		250	200	ug/L			01/30/12 18:41	250
1,2-Dichloroethane	ND		250	53	ug/L			01/30/12 18:41	250
1,2-Dichloropropane	ND		250	180	ug/L			01/30/12 18:41	250
1,3-Dichlorobenzene	ND		250	200	ug/L			01/30/12 18:41	250
1,4-Dichlorobenzene	ND		250	210	ug/L			01/30/12 18:41	250
2-Hexanone	ND		1300	310	ug/L			01/30/12 18:41	250
2-Butanone (MEK)	ND		2500	330	ug/L			01/30/12 18:41	250
4-Methyl-2-pentanone (MIBK)	ND		1300	530	ug/L			01/30/12 18:41	250
Acetone	ND		2500	750	ug/L			01/30/12 18:41	250
Benzene	ND		250	100	ug/L			01/30/12 18:41	250
Bromodichloromethane	ND		250	98	ug/L			01/30/12 18:41	250
Bromoform	ND		250	65	ug/L			01/30/12 18:41	250
Bromomethane	ND		250	170	ug/L			01/30/12 18:41	250
Carbon disulfide	ND		250	48	ug/L			01/30/12 18:41	250
Carbon tetrachloride	ND		250	68	ug/L			01/30/12 18:41	250
Chlorobenzene	ND		250	190	ug/L			01/30/12 18:41	250
Dibromochloromethane	ND		250	80	ug/L			01/30/12 18:41	250
Chloroethane	ND		250	80	ug/L			01/30/12 18:41	250
Chloroform	ND		250	85	ug/L			01/30/12 18:41	250
Chloromethane	ND		250	88	ug/L			01/30/12 18:41	250
cis-1,2-Dichloroethene	**37000**	**E**	250	200	ug/L			01/30/12 18:41	250
cis-1,3-Dichloropropene	ND		250	90	ug/L			01/30/12 18:41	250
Cyclohexane	ND		250	45	ug/L			01/30/12 18:41	250
Dichlorodifluoromethane	**1200**		250	170	ug/L			01/30/12 18:41	250
Ethylbenzene	ND		250	190	ug/L			01/30/12 18:41	250
Isopropylbenzene	ND		250	200	ug/L			01/30/12 18:41	250
Methyl acetate	ND		250	130	ug/L			01/30/12 18:41	250
Methyl tert-butyl ether	ND		250	40	ug/L			01/30/12 18:41	250
Methylcyclohexane	ND		250	40	ug/L			01/30/12 18:41	250
Methylene Chloride	ND		250	110	ug/L			01/30/12 18:41	250
Styrene	ND		250	180	ug/L			01/30/12 18:41	250
Tetrachloroethene	ND		250	90	ug/L			01/30/12 18:41	250
Toluene	ND		250	130	ug/L			01/30/12 18:41	250
trans-1,2-Dichloroethene	ND		250	230	ug/L			01/30/12 18:41	250
trans-1,3-Dichloropropene	ND		250	93	ug/L			01/30/12 18:41	250
Trichloroethene	**2300**		250	120	ug/L			01/30/12 18:41	250
Trichlorofluoromethane	ND		250	220	ug/L			01/30/12 18:41	250
Vinyl chloride	**1800**		250	230	ug/L			01/30/12 18:41	250
Xylenes, Total	ND		500	170	ug/L			01/30/12 18:41	250

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: AZ-PZ-1
Date Collected: 01/24/12 13:00
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-8
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*01/30/12 18:41*	*250*
Toluene-d8 (Surr)	*109*		*71 - 126*		*01/30/12 18:41*	*250*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*01/30/12 18:41*	*250*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		500	410	ug/L			01/30/12 23:37	500
1,1,2,2-Tetrachloroethane	ND		500	110	ug/L			01/30/12 23:37	500
1,1,2-Trichloroethane	ND		500	120	ug/L			01/30/12 23:37	500
1,1,2-Trichloro-1,2,2-trifluoroethane	**7600**		500	160	ug/L			01/30/12 23:37	500
1,1-Dichloroethane	**2700**		500	190	ug/L			01/30/12 23:37	500
1,1-Dichloroethene	ND		500	150	ug/L			01/30/12 23:37	500
1,2,4-Trichlorobenzene	ND		500	210	ug/L			01/30/12 23:37	500
1,2-Dibromo-3-Chloropropane	ND		500	200	ug/L			01/30/12 23:37	500
1,2-Dibromoethane	ND		500	370	ug/L			01/30/12 23:37	500
1,2-Dichlorobenzene	ND		500	400	ug/L			01/30/12 23:37	500
1,2-Dichloroethane	ND		500	110	ug/L			01/30/12 23:37	500
1,2-Dichloropropane	ND		500	360	ug/L			01/30/12 23:37	500
1,3-Dichlorobenzene	ND		500	390	ug/L			01/30/12 23:37	500
1,4-Dichlorobenzene	ND		500	420	ug/L			01/30/12 23:37	500
2-Hexanone	ND		2500	620	ug/L			01/30/12 23:37	500
2-Butanone (MEK)	ND		5000	660	ug/L			01/30/12 23:37	500
4-Methyl-2-pentanone (MIBK)	ND		2500	1100	ug/L			01/30/12 23:37	500
Acetone	ND		5000	1500	ug/L			01/30/12 23:37	500
Benzene	ND		500	210	ug/L			01/30/12 23:37	500
Bromodichloromethane	ND		500	200	ug/L			01/30/12 23:37	500
Bromoform	ND		500	130	ug/L			01/30/12 23:37	500
Bromomethane	ND		500	350	ug/L			01/30/12 23:37	500
Carbon disulfide	ND		500	95	ug/L			01/30/12 23:37	500
Carbon tetrachloride	ND		500	140	ug/L			01/30/12 23:37	500
Chlorobenzene	ND		500	380	ug/L			01/30/12 23:37	500
Dibromochloromethane	ND		500	160	ug/L			01/30/12 23:37	500
Chloroethane	ND		500	160	ug/L			01/30/12 23:37	500
Chloroform	ND		500	170	ug/L			01/30/12 23:37	500
Chloromethane	ND		500	180	ug/L			01/30/12 23:37	500
cis-1,2-Dichloroethene	**42000**		500	410	ug/L			01/30/12 23:37	500
cis-1,3-Dichloropropene	ND		500	180	ug/L			01/30/12 23:37	500
Cyclohexane	ND		500	90	ug/L			01/30/12 23:37	500
Dichlorodifluoromethane	**6300**		500	340	ug/L			01/30/12 23:37	500
Ethylbenzene	ND		500	370	ug/L			01/30/12 23:37	500
Isopropylbenzene	ND		500	400	ug/L			01/30/12 23:37	500
Methyl acetate	ND		500	250	ug/L			01/30/12 23:37	500
Methyl tert-butyl ether	ND		500	80	ug/L			01/30/12 23:37	500
Methylcyclohexane	ND		500	80	ug/L			01/30/12 23:37	500
Methylene Chloride	ND		500	220	ug/L			01/30/12 23:37	500
Styrene	ND		500	370	ug/L			01/30/12 23:37	500
Tetrachloroethene	ND		500	180	ug/L			01/30/12 23:37	500
Toluene	ND		500	260	ug/L			01/30/12 23:37	500
trans-1,2-Dichloroethene	ND		500	450	ug/L			01/30/12 23:37	500
trans-1,3-Dichloropropene	ND		500	190	ug/L			01/30/12 23:37	500

Client Sample ID: AZ-PZ-1

Date Collected: 01/24/12 13:00
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**6100**		500	230	ug/L			01/30/12 23:37	500
Trichlorofluoromethane	ND		500	440	ug/L			01/30/12 23:37	500
Vinyl chloride	**2100**		500	450	ug/L			01/30/12 23:37	500
Xylenes, Total	ND		1000	330	ug/L			01/30/12 23:37	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*01/30/12 23:37*	*500*
Toluene-d8 (Surr)	*110*		*71 - 126*		*01/30/12 23:37*	*500*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*01/30/12 23:37*	*500*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2600**	**B**	100	22	ug/L			02/01/12 11:55	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND	H	0.050	0.011	mg/L			01/28/12 14:40	1
Sulfate	**39.8**		5.0	1.5	mg/L			02/04/12 08:51	1
Alkalinity, Total	**456**		5.0	0.79	mg/L			02/06/12 15:30	1
Alkalinity, Bicarbonate	**456**		5.0	0.79	mg/L			02/06/12 15:30	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			02/06/12 15:30	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			02/06/12 15:30	1

Client Sample ID: TB

Date Collected: 01/24/12 00:00
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.82	0.82	ug/L			01/30/12 19:04	1
1,1-Dichloroethane	ND		0.38	0.38	ug/L			01/30/12 19:04	1
1,2-Dichlorobenzene	ND		0.79	0.79	ug/L			01/30/12 19:04	1
1,3-Dichlorobenzene	ND		0.78	0.78	ug/L			01/30/12 19:04	1
1,4-Dichlorobenzene	ND		0.84	0.84	ug/L			01/30/12 19:04	1
Benzene	ND		0.41	0.41	ug/L			01/30/12 19:04	1
Chlorobenzene	ND		0.75	0.75	ug/L			01/30/12 19:04	1
Chloroethane	ND		0.32	0.32	ug/L			01/30/12 19:04	1
cis-1,2-Dichloroethene	ND		0.81	0.81	ug/L			01/30/12 19:04	1
Ethylbenzene	ND		0.74	0.74	ug/L			01/30/12 19:04	1
m-Xylene & p-Xylene	ND		1.0	0.66	ug/L			01/30/12 19:04	1
o-Xylene	ND		0.76	0.76	ug/L			01/30/12 19:04	1
Tetrachloroethene	ND		0.36	0.36	ug/L			01/30/12 19:04	1
Toluene	ND		0.51	0.51	ug/L			01/30/12 19:04	1
trans-1,2-Dichloroethene	ND		0.90	0.90	ug/L			01/30/12 19:04	1
Trichloroethene	ND		0.46	0.46	ug/L			01/30/12 19:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/30/12 19:04	1
Xylenes, Total	ND		1.0	0.66	ug/L			01/30/12 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*01/30/12 19:04*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: TB
Date Collected: 01/24/12 00:00
Date Received: 01/28/12 09:00

Lab Sample ID: 480-15487-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		73 - 120		01/30/12 19:04	1
Toluene-d8 (Surr)	107		71 - 126		01/30/12 19:04	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-49678/5
Matrix: Water
Analysis Batch: 49678

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/30/12 12:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/30/12 12:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/30/12 12:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/30/12 12:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/30/12 12:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/30/12 12:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/30/12 12:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/30/12 12:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/30/12 12:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/30/12 12:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/30/12 12:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/30/12 12:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/30/12 12:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/30/12 12:24	1
2-Hexanone	ND		5.0	1.2	ug/L			01/30/12 12:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/30/12 12:24	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			01/30/12 12:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/30/12 12:24	1
o-Xylene	ND		1.0	0.76	ug/L			01/30/12 12:24	1
Acetone	ND		10	3.0	ug/L			01/30/12 12:24	1
Benzene	ND		1.0	0.41	ug/L			01/30/12 12:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/30/12 12:24	1
Bromoform	ND		1.0	0.26	ug/L			01/30/12 12:24	1
Bromomethane	ND		1.0	0.69	ug/L			01/30/12 12:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/30/12 12:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/30/12 12:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/30/12 12:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/30/12 12:24	1
Chloroethane	ND		1.0	0.32	ug/L			01/30/12 12:24	1
Chloroform	ND		1.0	0.34	ug/L			01/30/12 12:24	1
Chloromethane	ND		1.0	0.35	ug/L			01/30/12 12:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/30/12 12:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/30/12 12:24	1
Cyclohexane	ND		1.0	0.18	ug/L			01/30/12 12:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/30/12 12:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/30/12 12:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/30/12 12:24	1
Methyl acetate	ND		1.0	0.50	ug/L			01/30/12 12:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/30/12 12:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/30/12 12:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/30/12 12:24	1
Styrene	ND		1.0	0.73	ug/L			01/30/12 12:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/30/12 12:24	1
Toluene	ND		1.0	0.51	ug/L			01/30/12 12:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/30/12 12:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/30/12 12:24	1
Trichloroethene	ND		1.0	0.46	ug/L			01/30/12 12:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/30/12 12:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/30/12 12:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-49678/5
Matrix: Water
Analysis Batch: 49678

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			01/30/12 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*01/30/12 12:24*	*1*
Toluene-d8 (Surr)	*109*		*71 - 126*		*01/30/12 12:24*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*01/30/12 12:24*	*1*

Lab Sample ID: LCS 480-49678/4
Matrix: Water
Analysis Batch: 49678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	31.0		ug/L		124	73 - 126
1,1-Dichloroethane	25.0	27.6		ug/L		110	71 - 129
1,1-Dichloroethene	25.0	27.5		ug/L		110	65 - 138
1,2-Dichlorobenzene	25.0	27.2		ug/L		109	77 - 120
1,2-Dichloroethane	25.0	24.7		ug/L		99	75 - 127
1,3-Dichlorobenzene	25.0	27.5		ug/L		110	77 - 120
1,4-Dichlorobenzene	25.0	27.5		ug/L		110	75 - 120
Benzene	25.0	28.1		ug/L		112	71 - 124
Chlorobenzene	25.0	26.9		ug/L		108	72 - 120
Chloroethane	25.0	30.5		ug/L		122	69 - 136
cis-1,2-Dichloroethene	25.0	27.7		ug/L		111	74 - 124
Ethylbenzene	25.0	27.6		ug/L		110	77 - 123
Methyl tert-butyl ether	25.0	24.4		ug/L		98	64 - 127
Tetrachloroethene	25.0	29.2		ug/L		117	74 - 122
Toluene	25.0	28.0		ug/L		112	70 - 122
trans-1,2-Dichloroethene	25.0	28.6		ug/L		114	73 - 127
Trichloroethene	25.0	27.5		ug/L		110	74 - 123
Vinyl chloride	25.0	27.7		ug/L		111	65 - 133
Xylenes, Total	75.0	84.4		ug/L		113	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*
Toluene-d8 (Surr)	*110*		*71 - 126*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*

Lab Sample ID: MB 480-49783/5
Matrix: Water
Analysis Batch: 49783

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.82	0.82	ug/L			01/30/12 22:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/30/12 22:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/30/12 22:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/30/12 22:39	1
1,1-Dichloroethane	ND		0.38	0.38	ug/L			01/30/12 22:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/30/12 22:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/30/12 22:39	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-49783/5
Matrix: Water
Analysis Batch: 49783

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/30/12 22:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/30/12 22:39	1
1,2-Dichlorobenzene	ND		0.79	0.79	ug/L			01/30/12 22:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/30/12 22:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/30/12 22:39	1
1,3-Dichlorobenzene	ND		0.78	0.78	ug/L			01/30/12 22:39	1
1,4-Dichlorobenzene	ND		0.84	0.84	ug/L			01/30/12 22:39	1
2-Hexanone	ND		5.0	1.2	ug/L			01/30/12 22:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/30/12 22:39	1
m-Xylene & p-Xylene	ND		1.0	0.66	ug/L			01/30/12 22:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/30/12 22:39	1
o-Xylene	ND		0.76	0.76	ug/L			01/30/12 22:39	1
Acetone	ND		10	3.0	ug/L			01/30/12 22:39	1
Benzene	ND		0.41	0.41	ug/L			01/30/12 22:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/30/12 22:39	1
Bromoform	ND		1.0	0.26	ug/L			01/30/12 22:39	1
Bromomethane	ND		1.0	0.69	ug/L			01/30/12 22:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/30/12 22:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/30/12 22:39	1
Chlorobenzene	ND		0.75	0.75	ug/L			01/30/12 22:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/30/12 22:39	1
Chloroethane	ND		0.32	0.32	ug/L			01/30/12 22:39	1
Chloroform	ND		1.0	0.34	ug/L			01/30/12 22:39	1
Chloromethane	ND		1.0	0.35	ug/L			01/30/12 22:39	1
cis-1,2-Dichloroethene	ND		0.81	0.81	ug/L			01/30/12 22:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/30/12 22:39	1
Cyclohexane	ND		1.0	0.18	ug/L			01/30/12 22:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/30/12 22:39	1
Ethylbenzene	ND		0.74	0.74	ug/L			01/30/12 22:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/30/12 22:39	1
Methyl acetate	ND		1.0	0.50	ug/L			01/30/12 22:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/30/12 22:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/30/12 22:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/30/12 22:39	1
Styrene	ND		1.0	0.73	ug/L			01/30/12 22:39	1
Tetrachloroethene	ND		0.36	0.36	ug/L			01/30/12 22:39	1
Toluene	ND		0.51	0.51	ug/L			01/30/12 22:39	1
trans-1,2-Dichloroethene	ND		0.90	0.90	ug/L			01/30/12 22:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/30/12 22:39	1
Trichloroethene	ND		0.46	0.46	ug/L			01/30/12 22:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/30/12 22:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/30/12 22:39	1
Xylenes, Total	ND		1.0	0.66	ug/L			01/30/12 22:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*01/30/12 22:39*	*1*
Toluene-d8 (Surr)	*107*		*71 - 126*		*01/30/12 22:39*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*01/30/12 22:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-49783/4
Matrix: Water
Analysis Batch: 49783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	28.1		ug/L		112	73 - 126
1,1-Dichloroethane	25.0	26.1		ug/L		104	71 - 129
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 120
1,3-Dichlorobenzene	25.0	25.9		ug/L		104	77 - 120
1,4-Dichlorobenzene	25.0	25.9		ug/L		104	75 - 120
m-Xylene & p-Xylene	50.0	53.5		ug/L		107	76 - 122
o-Xylene	25.0	26.0		ug/L		104	76 - 122
Benzene	25.0	26.2		ug/L		105	71 - 124
Chlorobenzene	25.0	25.5		ug/L		102	72 - 120
Chloroethane	25.0	30.2		ug/L		121	69 - 136
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	74 - 124
Ethylbenzene	25.0	26.6		ug/L		106	77 - 123
Tetrachloroethene	25.0	26.6		ug/L		106	74 - 122
Toluene	25.0	26.0		ug/L		104	70 - 122
trans-1,2-Dichloroethene	25.0	27.1		ug/L		108	73 - 127
Trichloroethene	25.0	26.0		ug/L		104	74 - 123
Vinyl chloride	25.0	25.8		ug/L		103	65 - 133
Xylenes, Total	75.0	79.5		ug/L		106	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*
Toluene-d8 (Surr)	*111*		*71 - 126*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*

Lab Sample ID: 480-15487-8 MS
Matrix: Water
Analysis Batch: 49783

Client Sample ID: AZ-PZ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		12500	12400		ug/L		99	73 - 126
1,1-Dichloroethane	2700		12500	14500		ug/L		94	71 - 129
1,1-Dichloroethene	ND		12500	11600		ug/L		93	65 - 138
1,2-Dichlorobenzene	ND		12500	12600		ug/L		101	77 - 120
1,2-Dichloroethane	ND		12500	11800		ug/L		94	75 - 127
1,3-Dichlorobenzene	ND		12500	12500		ug/L		100	77 - 120
1,4-Dichlorobenzene	ND		12500	12600		ug/L		100	75 - 120
Benzene	ND		12500	12500		ug/L		100	71 - 124
Chlorobenzene	ND		12500	12300		ug/L		98	72 - 120
Chloroethane	ND		12500	12900		ug/L		103	69 - 136
cis-1,2-Dichloroethene	42000		12500	41500	F	ug/L		-4	74 - 124
Ethylbenzene	ND		12500	12400		ug/L		99	77 - 123
Methyl tert-butyl ether	ND		12500	11400		ug/L		91	64 - 127
Tetrachloroethene	ND		12500	12300		ug/L		98	74 - 122
Toluene	ND		12500	12300		ug/L		98	70 - 122
trans-1,2-Dichloroethene	ND		12500	12700		ug/L		102	73 - 127
Trichloroethene	6100		12500	14600	F	ug/L		68	74 - 123
Vinyl chloride	2100		12500	13200		ug/L		88	65 - 133
Xylenes, Total	ND		37500	37300		ug/L		99	76 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-15487-8 MS
Matrix: Water
Analysis Batch: 49783

Client Sample ID: AZ-PZ-1
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*
Toluene-d8 (Surr)	*111*		*71 - 126*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*

Lab Sample ID: 480-15487-8 MSD
Matrix: Water
Analysis Batch: 49783

Client Sample ID: AZ-PZ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		12500	11900		ug/L		95	73 - 126	4	15
1,1-Dichloroethane	2700		12500	14200		ug/L		92	71 - 129	2	20
1,1-Dichloroethene	ND		12500	11100		ug/L		89	65 - 138	4	16
1,2-Dichlorobenzene	ND		12500	12600		ug/L		101	77 - 120	0	20
1,2-Dichloroethane	ND		12500	11500		ug/L		92	75 - 127	3	20
1,3-Dichlorobenzene	ND		12500	12300		ug/L		98	77 - 120	2	20
1,4-Dichlorobenzene	ND		12500	12300		ug/L		98	75 - 120	2	20
Benzene	ND		12500	12200		ug/L		98	71 - 124	2	13
Chlorobenzene	ND		12500	12100		ug/L		97	72 - 120	2	25
Chloroethane	ND		12500	12800		ug/L		102	69 - 136	1	15
cis-1,2-Dichloroethene	42000		12500	40800	F	ug/L		-10	74 - 124	2	15
Ethylbenzene	ND		12500	12100		ug/L		96	77 - 123	3	15
Methyl tert-butyl ether	ND		12500	11300		ug/L		90	64 - 127	1	37
Tetrachloroethene	ND		12500	12000		ug/L		96	74 - 122	2	20
Toluene	ND		12500	12100		ug/L		97	70 - 122	2	15
trans-1,2-Dichloroethene	ND		12500	12000		ug/L		96	73 - 127	6	20
Trichloroethene	6100		12500	13800	F	ug/L		62	74 - 123	6	16
Vinyl chloride	2100		12500	12300		ug/L		82	65 - 133	7	15
Xylenes, Total	ND		37500	36000		ug/L		96	76 - 122	4	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*
Toluene-d8 (Surr)	*113*		*71 - 126*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-49929/2
Matrix: Water
Analysis Batch: 49929

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	0.220	J	1.0	0.22	ug/L			02/01/12 08:25	1

Lab Sample ID: LCS 480-49929/3
Matrix: Water
Analysis Batch: 49929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	3.88	5.15		ug/L		133	48 - 174

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCSD 480-49929/4
Matrix: Water
Analysis Batch: 49929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			3.88	4.84		ug/L		125	48 - 174	6	50

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 480-50470/48
Matrix: Water
Analysis Batch: 50470

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.5	mg/L			02/04/12 08:33	1

Lab Sample ID: MB 480-50470/66
Matrix: Water
Analysis Batch: 50470

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.5	mg/L			02/04/12 09:09	1

Lab Sample ID: LCS 480-50470/47
Matrix: Water
Analysis Batch: 50470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			30.0	29.58		mg/L		99	90 - 110		

Lab Sample ID: LCS 480-50470/65
Matrix: Water
Analysis Batch: 50470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			30.0	29.30		mg/L		98	90 - 110		

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-50051/3
Matrix: Water
Analysis Batch: 50051

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0	0.79	mg/L			02/01/12 14:55	1
Alkalinity, Bicarbonate	ND		5.0	0.79	mg/L			02/01/12 14:55	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			02/01/12 14:55	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			02/01/12 14:55	1

Lab Sample ID: LCS 480-50051/4
Matrix: Water
Analysis Batch: 50051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity, Total			100	96.00		mg/L		96	90 - 110		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 480-50576/3
Matrix: Water
Analysis Batch: 50576

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0	0.79	mg/L			02/06/12 15:30	1
Alkalinity, Bicarbonate	ND		5.0	0.79	mg/L			02/06/12 15:30	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			02/06/12 15:30	1
Hydroxide Alkalinity	ND		5.0	0.79	mg/L			02/06/12 15:30	1

Lab Sample ID: LCS 480-50576/4
Matrix: Water
Analysis Batch: 50576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	100.0		mg/L		100	90 - 110

GC/MS VOA

Analysis Batch: 49678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-15487-1	MW-1	Total/NA	Water	8260B	
480-15487-2	MW-3	Total/NA	Water	8260B	
480-15487-3	PZ-5	Total/NA	Water	8260B	
480-15487-4	PZ-8	Total/NA	Water	8260B	
480-15487-5	PZ-11R	Total/NA	Water	8260B	
480-15487-6	PZ-13R	Total/NA	Water	8260B	
480-15487-7	AI-PZ-2	Total/NA	Water	8260B	
480-15487-8	AZ-PZ-1	Total/NA	Water	8260B	
480-15487-9	TB	Total/NA	Water	8260B	
LCS 480-49678/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-49678/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 49783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-15487-3 - DL	PZ-5	Total/NA	Water	8260B	
480-15487-8 - DL	AZ-PZ-1	Total/NA	Water	8260B	
480-15487-8 MS	AZ-PZ-1	Total/NA	Water	8260B	
480-15487-8 MSD	AZ-PZ-1	Total/NA	Water	8260B	
LCS 480-49783/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-49783/5	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 49929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-15487-1	MW-1	Total/NA	Water	RSK-175	
480-15487-2	MW-3	Total/NA	Water	RSK-175	
480-15487-6	PZ-13R	Total/NA	Water	RSK-175	
480-15487-7	AI-PZ-2	Total/NA	Water	RSK-175	
480-15487-8	AZ-PZ-1	Total/NA	Water	RSK-175	
LCS 480-49929/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-49929/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 480-49929/2	Method Blank	Total/NA	Water	RSK-175	

General Chemistry

Analysis Batch: 49646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-15487-1	MW-1	Total/NA	Water	353.2	
480-15487-2	MW-3	Total/NA	Water	353.2	
480-15487-6	PZ-13R	Total/NA	Water	353.2	
480-15487-7	AI-PZ-2	Total/NA	Water	353.2	
480-15487-8	AZ-PZ-1	Total/NA	Water	353.2	

Analysis Batch: 50051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-15487-1	MW-1	Total/NA	Water	SM 2320B	
480-15487-2	MW-3	Total/NA	Water	SM 2320B	
LCS 480-50051/4	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-50051/3	Method Blank	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 50470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-15487-1	MW-1	Total/NA	Water	D516-90, 02	
480-15487-2	MW-3	Total/NA	Water	D516-90, 02	
480-15487-6	PZ-13R	Total/NA	Water	D516-90, 02	
480-15487-7	AI-PZ-2	Total/NA	Water	D516-90, 02	
480-15487-8	AZ-PZ-1	Total/NA	Water	D516-90, 02	
LCS 480-50470/47	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-50470/65	Lab Control Sample	Total/NA	Water	D516-90, 02	
MB 480-50470/48	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-50470/66	Method Blank	Total/NA	Water	D516-90, 02	

Analysis Batch: 50576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-15487-6	PZ-13R	Total/NA	Water	SM 2320B	
480-15487-7	AI-PZ-2	Total/NA	Water	SM 2320B	
480-15487-8	AZ-PZ-1	Total/NA	Water	SM 2320B	
LCS 480-50576/4	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-50576/3	Method Blank	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: MW-1

Lab Sample ID: 480-15487-1

Date Collected: 01/25/12 16:20

Matrix: Water

Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	49678	01/30/12 15:59	RL	TAL BUF
Total/NA	Analysis	RSK-175		1	49929	02/01/12 10:21	MN	TAL BUF
Total/NA	Analysis	353.2		1	49646	01/28/12 15:06	JR	TAL BUF
Total/NA	Analysis	SM 2320B		1	50051	02/01/12 14:55	EGN	TAL BUF
Total/NA	Analysis	D516-90, 02		5	50470	02/04/12 09:09	PN	TAL BUF

Client Sample ID: MW-3

Lab Sample ID: 480-15487-2

Date Collected: 01/25/12 14:25

Matrix: Water

Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	49678	01/30/12 16:22	RL	TAL BUF
Total/NA	Analysis	RSK-175		1	49929	02/01/12 10:38	MN	TAL BUF
Total/NA	Analysis	353.2		1	49646	01/28/12 15:09	JR	TAL BUF
Total/NA	Analysis	SM 2320B		1	50051	02/01/12 14:55	EGN	TAL BUF
Total/NA	Analysis	D516-90, 02		5	50470	02/04/12 09:09	PN	TAL BUF

Client Sample ID: PZ-5

Lab Sample ID: 480-15487-3

Date Collected: 01/25/12 17:45

Matrix: Water

Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	49678	01/30/12 16:45	RL	TAL BUF
Total/NA	Analysis	8260B	DL	4	49783	01/30/12 23:13	RL	TAL BUF

Client Sample ID: PZ-8

Lab Sample ID: 480-15487-4

Date Collected: 01/25/12 17:32

Matrix: Water

Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	49678	01/30/12 17:08	RL	TAL BUF

Client Sample ID: PZ-11R

Lab Sample ID: 480-15487-5

Date Collected: 01/25/12 16:45

Matrix: Water

Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	49678	01/30/12 17:31	RL	TAL BUF

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Client Sample ID: PZ-13R

Lab Sample ID: 480-15487-6

Date Collected: 01/25/12 12:00
Matrix: Water
Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	49678	01/30/12 17:54	RL	TAL BUF
Total/NA	Analysis	RSK-175		1	49929	02/01/12 11:12	MN	TAL BUF
Total/NA	Analysis	353.2		1	49646	01/28/12 15:10	JR	TAL BUF
Total/NA	Analysis	D516-90, 02		5	50470	02/04/12 09:09	PN	TAL BUF
Total/NA	Analysis	SM 2320B		1	50576	02/06/12 15:30	EGN	TAL BUF

Client Sample ID: AI-PZ-2

Lab Sample ID: 480-15487-7

Date Collected: 01/24/12 15:40
Matrix: Water
Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	49678	01/30/12 18:17	RL	TAL BUF
Total/NA	Analysis	RSK-175		100	49929	02/01/12 12:13	MN	TAL BUF
Total/NA	Analysis	353.2		1	49646	01/28/12 15:11	JR	TAL BUF
Total/NA	Analysis	D516-90, 02		5	50470	02/04/12 09:09	PN	TAL BUF
Total/NA	Analysis	SM 2320B		1	50576	02/06/12 15:30	EGN	TAL BUF

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-15487-8

Date Collected: 01/24/12 13:00
Matrix: Water
Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	49678	01/30/12 18:41	RL	TAL BUF
Total/NA	Analysis	8260B	DL	500	49783	01/30/12 23:37	RL	TAL BUF
Total/NA	Analysis	RSK-175		100	49929	02/01/12 11:55	MN	TAL BUF
Total/NA	Analysis	353.2		1	49646	01/28/12 14:40	JR	TAL BUF
Total/NA	Analysis	D516-90, 02		1	50470	02/04/12 08:51	PN	TAL BUF
Total/NA	Analysis	SM 2320B		1	50576	02/06/12 15:30	EGN	TAL BUF

Client Sample ID: TB

Lab Sample ID: 480-15487-9

Date Collected: 01/24/12 00:00
Matrix: Water
Date Received: 01/28/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	49678	01/30/12 19:04	RL	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Buffalo	Arkansas	State Program	6	88-0686
TestAmerica Buffalo	California	NELAC	9	1169CA
TestAmerica Buffalo	Connecticut	State Program	1	PH-0568
TestAmerica Buffalo	Florida	NELAC	4	E87672
TestAmerica Buffalo	Georgia	Georgia EPD	4	N/A
TestAmerica Buffalo	Georgia	State Program	4	956
TestAmerica Buffalo	Illinois	NELAC	5	100325 / 200003
TestAmerica Buffalo	Iowa	State Program	7	374
TestAmerica Buffalo	Kansas	NELAC	7	E-10187
TestAmerica Buffalo	Kentucky	Kentucky UST	4	30
TestAmerica Buffalo	Kentucky	State Program	4	90029
TestAmerica Buffalo	Louisiana	NELAC	6	02031
TestAmerica Buffalo	Maine	State Program	1	NY0044
TestAmerica Buffalo	Maryland	State Program	3	294
TestAmerica Buffalo	Massachusetts	State Program	1	M-NY044
TestAmerica Buffalo	Michigan	State Program	5	9937
TestAmerica Buffalo	Minnesota	NELAC	5	036-999-337
TestAmerica Buffalo	New Hampshire	NELAC	1	2337
TestAmerica Buffalo	New Hampshire	NELAC	1	68-00281
TestAmerica Buffalo	New Jersey	NELAC	2	NY455
TestAmerica Buffalo	New York	NELAC	2	10026
TestAmerica Buffalo	North Dakota	State Program	8	R-176
TestAmerica Buffalo	Oklahoma	State Program	6	9421
TestAmerica Buffalo	Oregon	NELAC	10	NY200003
TestAmerica Buffalo	Pennsylvania	NELAC	3	68-00281
TestAmerica Buffalo	Tennessee	State Program	4	TN02970
TestAmerica Buffalo	Texas	NELAC	6	T104704412-08-TX
TestAmerica Buffalo	USDA	USDA		P330-08-00242
TestAmerica Buffalo	Virginia	NELAC Secondary AB	3	460185
TestAmerica Buffalo	Virginia	State Program	3	278
TestAmerica Buffalo	Washington	State Program	10	C1677
TestAmerica Buffalo	Wisconsin	State Program	5	998310390

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
RSK-175	Dissolved Gases (GC)	RSK	TAL BUF
353.2	Nitrate	EPA	TAL BUF
D516-90, 02	Sulfate	ASTM	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Lab Contact - Candace Fox
Lab Project#: 48002828

ARCADIS
Infrastructure · Water · Environment · Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Jeff Bonsteel	Telephone: 518-452-7826
Address: 465 New Karner Rd	Fax: 518-452-4398
City: Albany State: NY Zip: 12205	E-mail Address: Jeffrey.Bonsteel@Arcadis-us.com
Project Name/Location (City, State): LMC Utica NY	Project #: NJ001040.V.1
Sampler's Printed Name: Dan Zuck	Sampler's Signature: [signature]

Preservative	HCl	HCl	None	None			
Filtered (✓)							
# of Containers	21	10	5	9.5			
Container Information	Vial	Vial	Plastic	Plastic			

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: _____

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VOCs 8260B	Methane	Alkalinity	Sulfer/Nitrates				REMARKS
MW-1	1/25/12	1620		X	GW	3	2	1	2				
MW-3		1425		X		3	2	1	2				
~~MW-13SO~~ 03													
PZ-5		1745		X		1							
PZ-8		1732		X		2							
PZ-11R		1645		X		3							
PZ-13R		1200		X		3	2	1	1.5				
A1-PZ-2	1/24/12	1540		X		3	2	1	2				
A2-PZ-1	1/24/12	1300		X		3	2	1	2				
TB	—	—	—		W	2							

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America Amherst	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Daniel Zuck	Printed Name: RE English	Printed Name: RE English	Printed Name: [signature]
☒ Cooler packed with ice (✓)		Signature: [signature]	Signature: RE	Signature: RE	Signature:
Specify Turnaround Requirements: Zuk	Sample Receipt:	Firm: Arcadis	Firm/Courier: TA Syr	Firm/Courier: TA Syr	Firm: TAL
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 1/27/12 1345	Date/Time: 01-27-12, 13:45	Date/Time: 01-27-12, 19:00	Date/Time: 1/28/12 0900

20730826 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

3.6 #2

2/9/2012

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Login Number: 15487

List Source: TestAmerica Buffalo

List Number: 1

Creator: May, Joel M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Detection Limit Exceptions Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-15487-1

The requested project specific reporting limits listed below were less than lab standard quantitation limits but greater than or equal to the lab MDL. It must be noted that results reported below lab standard quantitation limits (PQL) may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
8260B	Water	1,1,1-Trichloroethane	ug/L	0.82	1.0
8260B	Water	1,1-Dichloroethane	ug/L	0.38	1.0
8260B	Water	1,2-Dichlorobenzene	ug/L	0.79	1.0
8260B	Water	1,3-Dichlorobenzene	ug/L	0.78	1.0
8260B	Water	1,4-Dichlorobenzene	ug/L	0.84	1.0
8260B	Water	Benzene	ug/L	0.41	1.0
8260B	Water	Chlorobenzene	ug/L	0.75	1.0
8260B	Water	Chloroethane	ug/L	0.32	1.0
8260B	Water	cis-1,2-Dichloroethene	ug/L	0.81	1.0
8260B	Water	Ethylbenzene	ug/L	0.74	1.0
8260B	Water	m-Xylene & p-Xylene	ug/L	1.0	2.0
8260B	Water	o-Xylene	ug/L	0.76	1.0
8260B	Water	Tetrachloroethene	ug/L	0.36	1.0
8260B	Water	Toluene	ug/L	0.51	1.0
8260B	Water	trans-1,2-Dichloroethene	ug/L	0.90	1.0
8260B	Water	Trichloroethene	ug/L	0.46	1.0
8260B	Water	Xylenes, Total	ug/L	1.0	2.0

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-22467-1
Client Project/Site: Lockheed Martin Corporation -Pilot Study

For:
ARCADIS U.S., Inc.
855 route 146
Suite 210
Clifton Park, New York 12065

Attn: Mr. Jeffrey Bonsteel

Candace L. Fox

Authorized for release by:
7/25/2012 4:49:22 PM

Candace Fox
Project Manager II
candace.fox@testamericainc.com

Links

Review your project results through TotalAccess

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-22467-1	PZ-11R	Water	07/11/12 10:55	07/12/12 10:00
480-22467-2	PZ-13R	Water	07/10/12 16:52	07/12/12 10:00
480-22467-3	PZ-13R	Water	07/11/12 11:10	07/12/12 10:00
480-22467-4	MW-18	Water	07/10/12 13:20	07/12/12 10:00
480-22467-5	MW-21	Water	07/10/12 14:35	07/12/12 10:00
480-22467-6	MW-1	Water	07/11/12 12:20	07/12/12 10:00
480-22467-7	MW-3	Water	07/11/12 12:45	07/12/12 10:00
480-22467-8	A2-PZ-2	Water	07/11/12 14:35	07/12/12 10:00
480-22467-9	A2-PZ-1	Water	07/11/12 15:20	07/12/12 10:00
480-22467-10	TB-071012	Water	07/10/12 00:00	07/12/12 10:00
480-22467-11	DUP-071112	Water	07/11/12 00:00	07/12/12 10:00

Definitions/Glossary

Client: ARCADIS U.S., Inc. TestAmerica Job ID: 480-22467-1
Project/Site: Lockheed Martin Corporation -Pilot Study

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-22467-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-22467-1

Comments
No additional comments.

Receipt
The samples were received on 7/12/2012 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7° C.

GC/MS VOA
Method(s) 8260B: The method blank for batch 72377 contained Chloroform above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: A2-PZ-1 (480-22467-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-22467-8 MS), (480-22467-8 MSD), A2-PZ-2 (480-22467-8), MW-18 (480-22467-4DL). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC VOA
Method(s) RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: DUP-071112 (480-22467-11), MW-1 (480-22467-6), MW-3 (480-22467-7), PZ-13R (480-22467-2). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: The following sample was diluted to bring the concentration of target analytes within the calibration range: A2-PZ-1 (480-22467-9). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry
Method(s) 353.2: The results reported for the following sample(s) do not concur with results previously reported for this site: MW-1 (480-22467-6), PZ-13R (480-22467-3). Reanalysis was performed, and the result(s) confirmed.

No other analytical or quality issues were noted.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: PZ-11R — Lab Sample ID: 480-22467-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.4	J	10	3.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	5.2		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	8.7		1.0	0.46	ug/L	1		8260B	Total/NA

Client Sample ID: PZ-13R — Lab Sample ID: 480-22467-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.3	J	10	3.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	1.1		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	4.3		1.0	0.46	ug/L	1		8260B	Total/NA
Methane	150		39	13	ug/L	10		RSK-175	Total/NA
Sulfate	119		25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	486		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	486		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	4.4		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: PZ-13R — Lab Sample ID: 480-22467-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.36		0.050	0.011	mg/L	1		353.2	Total/NA

Client Sample ID: MW-18 — Lab Sample ID: 480-22467-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	37		1.0	0.38	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	1.3		1.0	0.29	ug/L	1		8260B	Total/NA
Acetone	9.1	J	10	3.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	790	E	1.0	0.81	ug/L	1		8260B	Total/NA
Ethylbenzene	1.4		1.0	0.74	ug/L	1		8260B	Total/NA
Tetrachloroethene	57		1.0	0.36	ug/L	1		8260B	Total/NA
Toluene	1.4		1.0	0.51	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.6		1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	200	E	1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	7.6		1.0	0.90	ug/L	1		8260B	Total/NA
Xylenes, Total	1.0	J	2.0	0.66	ug/L	1		8260B	Total/NA
1,1-Dichloroethane - DL	40		20	7.6	ug/L	20		8260B	Total/NA
cis-1,2-Dichloroethene - DL	890		20	16	ug/L	20		8260B	Total/NA
Tetrachloroethene - DL	62		20	7.2	ug/L	20		8260B	Total/NA
Trichloroethene - DL	220		20	9.2	ug/L	20		8260B	Total/NA

Client Sample ID: MW-21 — Lab Sample ID: 480-22467-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.8	J	10	3.0	ug/L	1		8260B	Total/NA
Vinyl chloride	6.5		1.0	0.90	ug/L	1		8260B	Total/NA

Client Sample ID: MW-1 — Lab Sample ID: 480-22467-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.9		1.0	0.38	ug/L	1		8260B	Total/NA
Acetone	8.8	J	10	3.0	ug/L	1		8260B	Total/NA

Client Sample ID: MW-1 (Continued)

Lab Sample ID: 480-22467-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	40		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	36		1.0	0.36	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.4		1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	14		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	4.3		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	270		39	13	ug/L	10		RSK-175	Total/NA
Nitrate as N	0.16		0.050	0.011	mg/L	1		353.2	Total/NA
Sulfate	131		25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	355		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	355		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	0.47	J	1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 480-22467-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.3		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	23		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	12		1.0	0.36	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.1		1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	12		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	13		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	140		39	13	ug/L	10		RSK-175	Total/NA
Sulfate	117		50.0	15.0	mg/L	10		D516-90, 02	Total/NA
Alkalinity, Total	242		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	242		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	0.89	J	1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: A2-PZ-2

Lab Sample ID: 480-22467-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	130		10	8.1	ug/L	10		8260B	Total/NA
Tetrachloroethene	810		10	3.6	ug/L	10		8260B	Total/NA
Trichloroethene	360		10	4.6	ug/L	10		8260B	Total/NA

Client Sample ID: A2-PZ-1

Lab Sample ID: 480-22467-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	940		250	78	ug/L	250		8260B	Total/NA
1,1-Dichloroethane	1100		250	95	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	17000		250	200	ug/L	250		8260B	Total/NA
Trichloroethene	2600		250	120	ug/L	250		8260B	Total/NA
Vinyl chloride	830		250	230	ug/L	250		8260B	Total/NA
Methane	1700		390	130	ug/L	100		RSK-175	Total/NA
Sulfate	25.1		5.0	1.5	mg/L	1		D516-90, 02	Total/NA
Alkalinity, Total	476		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	476		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	3.3		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: TB-071012

Lab Sample ID: 480-22467-10

No Detections

Client Sample ID: DUP-071112

Lab Sample ID: 480-22467-11

Client Sample ID: DUP-071112 (Continued)

Lab Sample ID: 480-22467-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.1		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	23		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	12		1.0	0.36	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.0		1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	11		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	13		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	170		39	13	ug/L	10		RSK-175	Total/NA
Sulfate	125		25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	243		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	243		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	0.80	J	1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: PZ-11R
Date Collected: 07/11/12 10:55
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/14/12 00:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/14/12 00:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/14/12 00:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/14/12 00:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/14/12 00:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/14/12 00:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/14/12 00:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/14/12 00:04	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/14/12 00:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/14/12 00:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/14/12 00:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/14/12 00:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/14/12 00:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/14/12 00:04	1
2-Hexanone	ND		5.0	1.2	ug/L			07/14/12 00:04	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/14/12 00:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/14/12 00:04	1
Acetone	**9.4**	**J**	10	3.0	ug/L			07/14/12 00:04	1
Benzene	ND		1.0	0.41	ug/L			07/14/12 00:04	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/14/12 00:04	1
Bromoform	ND		1.0	0.26	ug/L			07/14/12 00:04	1
Bromomethane	ND		1.0	0.69	ug/L			07/14/12 00:04	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/14/12 00:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/14/12 00:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/14/12 00:04	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/14/12 00:04	1
Chloroethane	ND		1.0	0.32	ug/L			07/14/12 00:04	1
Chloroform	ND		1.0	0.34	ug/L			07/14/12 00:04	1
Chloromethane	ND		1.0	0.35	ug/L			07/14/12 00:04	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.81	ug/L			07/14/12 00:04	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/14/12 00:04	1
Cyclohexane	ND		1.0	0.18	ug/L			07/14/12 00:04	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/14/12 00:04	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/14/12 00:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/14/12 00:04	1
Methyl acetate	ND		1.0	0.50	ug/L			07/14/12 00:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/14/12 00:04	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/14/12 00:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/14/12 00:04	1
Styrene	ND		1.0	0.73	ug/L			07/14/12 00:04	1
Tetrachloroethene	**5.2**		1.0	0.36	ug/L			07/14/12 00:04	1
Toluene	ND		1.0	0.51	ug/L			07/14/12 00:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/14/12 00:04	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/14/12 00:04	1
Trichloroethene	**8.7**		1.0	0.46	ug/L			07/14/12 00:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/14/12 00:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/14/12 00:04	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/14/12 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*07/14/12 00:04*	*1*

Client Sample ID: PZ-11R
Date Collected: 07/11/12 10:55
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*107*		*71 - 126*		*07/14/12 00:04*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*07/14/12 00:04*	*1*

Client Sample ID: PZ-13R
Date Collected: 07/10/12 16:52
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/12 13:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/12 13:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/12 13:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/12 13:58	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/15/12 13:58	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/12 13:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/12 13:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/12 13:58	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/12 13:58	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/12 13:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/12 13:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/12 13:58	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/12 13:58	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/12 13:58	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/12 13:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/12 13:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/12 13:58	1
Acetone	**9.3**	**J**	10	3.0	ug/L			07/15/12 13:58	1
Benzene	ND		1.0	0.41	ug/L			07/15/12 13:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/12 13:58	1
Bromoform	ND		1.0	0.26	ug/L			07/15/12 13:58	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/12 13:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/12 13:58	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/12 13:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/12 13:58	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/12 13:58	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/12 13:58	1
Chloroform	ND		1.0	0.34	ug/L			07/15/12 13:58	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/12 13:58	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.81	ug/L			07/15/12 13:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/12 13:58	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/12 13:58	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/12 13:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/12 13:58	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/12 13:58	1
Methyl acetate	ND		1.0	0.50	ug/L			07/15/12 13:58	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/12 13:58	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/12 13:58	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/12 13:58	1
Styrene	ND		1.0	0.73	ug/L			07/15/12 13:58	1
Tetrachloroethene	**1.1**		1.0	0.36	ug/L			07/15/12 13:58	1
Toluene	ND		1.0	0.51	ug/L			07/15/12 13:58	1

Client Sample ID: PZ-13R — Lab Sample ID: 480-22467-2

Date Collected: 07/10/12 16:52 **Matrix: Water**
Date Received: 07/12/12 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/15/12 13:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/12 13:58	1
Trichloroethene	**4.3**		1.0	0.46	ug/L			07/15/12 13:58	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/12 13:58	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/15/12 13:58	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/12 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 137*		*07/15/12 13:58*	*1*
Toluene-d8 (Surr)	*108*		*71 - 126*		*07/15/12 13:58*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*07/15/12 13:58*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**150**		39	13	ug/L			07/13/12 15:28	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**119**		25.0	7.5	mg/L			07/13/12 17:28	5
Alkalinity, Total	**486**		5.0	0.79	mg/L			07/17/12 04:11	1
Alkalinity, Bicarbonate	**486**		5.0	0.79	mg/L			07/17/12 04:11	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			07/17/12 04:11	1
Total Organic Carbon	**4.4**		1.0	0.43	mg/L			07/18/12 11:28	1

Client Sample ID: PZ-13R — Lab Sample ID: 480-22467-3

Date Collected: 07/11/12 11:10 **Matrix: Water**
Date Received: 07/12/12 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.36**		0.050	0.011	mg/L			07/12/12 17:46	1

Client Sample ID: MW-18 — Lab Sample ID: 480-22467-4

Date Collected: 07/10/12 13:20 **Matrix: Water**
Date Received: 07/12/12 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/12 14:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/12 14:21	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/12 14:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/12 14:21	1
1,1-Dichloroethane	**37**		1.0	0.38	ug/L			07/15/12 14:21	1
1,1-Dichloroethene	**1.3**		1.0	0.29	ug/L			07/15/12 14:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/12 14:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/12 14:21	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/12 14:21	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/12 14:21	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/12 14:21	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/12 14:21	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/12 14:21	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/12 14:21	1

Client Sample ID: MW-18
Date Collected: 07/10/12 13:20
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		5.0	1.2	ug/L			07/15/12 14:21	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/12 14:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/12 14:21	1
Acetone	**9.1**	**J**	10	3.0	ug/L			07/15/12 14:21	1
Benzene	ND		1.0	0.41	ug/L			07/15/12 14:21	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/12 14:21	1
Bromoform	ND		1.0	0.26	ug/L			07/15/12 14:21	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/12 14:21	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/12 14:21	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/12 14:21	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/12 14:21	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/12 14:21	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/12 14:21	1
Chloroform	ND		1.0	0.34	ug/L			07/15/12 14:21	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/12 14:21	1
cis-1,2-Dichloroethene	**790**	**E**	1.0	0.81	ug/L			07/15/12 14:21	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/12 14:21	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/12 14:21	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/12 14:21	1
Ethylbenzene	**1.4**		1.0	0.74	ug/L			07/15/12 14:21	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/12 14:21	1
Methyl acetate	ND		1.0	0.50	ug/L			07/15/12 14:21	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/12 14:21	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/12 14:21	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/12 14:21	1
Styrene	ND		1.0	0.73	ug/L			07/15/12 14:21	1
Tetrachloroethene	**57**		1.0	0.36	ug/L			07/15/12 14:21	1
Toluene	**1.4**		1.0	0.51	ug/L			07/15/12 14:21	1
trans-1,2-Dichloroethene	**2.6**		1.0	0.90	ug/L			07/15/12 14:21	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/12 14:21	1
Trichloroethene	**200**	**E**	1.0	0.46	ug/L			07/15/12 14:21	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/12 14:21	1
Vinyl chloride	**7.6**		1.0	0.90	ug/L			07/15/12 14:21	1
Xylenes, Total	**1.0**	**J**	2.0	0.66	ug/L			07/15/12 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*07/15/12 14:21*	*1*
Toluene-d8 (Surr)	*110*		*71 - 126*		*07/15/12 14:21*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*07/15/12 14:21*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			07/16/12 13:13	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L			07/16/12 13:13	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			07/16/12 13:13	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			07/16/12 13:13	20
1,1-Dichloroethane	**40**		20	7.6	ug/L			07/16/12 13:13	20
1,1-Dichloroethene	ND		20	5.8	ug/L			07/16/12 13:13	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			07/16/12 13:13	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			07/16/12 13:13	20
1,2-Dibromoethane	ND		20	15	ug/L			07/16/12 13:13	20

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: MW-18
Date Collected: 07/10/12 13:20
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		20	16	ug/L			07/16/12 13:13	20
1,2-Dichloroethane	ND		20	4.2	ug/L			07/16/12 13:13	20
1,2-Dichloropropane	ND		20	14	ug/L			07/16/12 13:13	20
1,3-Dichlorobenzene	ND		20	16	ug/L			07/16/12 13:13	20
1,4-Dichlorobenzene	ND		20	17	ug/L			07/16/12 13:13	20
2-Hexanone	ND		100	25	ug/L			07/16/12 13:13	20
2-Butanone (MEK)	ND		200	26	ug/L			07/16/12 13:13	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			07/16/12 13:13	20
Acetone	ND		200	60	ug/L			07/16/12 13:13	20
Benzene	ND		20	8.2	ug/L			07/16/12 13:13	20
Bromodichloromethane	ND		20	7.8	ug/L			07/16/12 13:13	20
Bromoform	ND		20	5.2	ug/L			07/16/12 13:13	20
Bromomethane	ND		20	14	ug/L			07/16/12 13:13	20
Carbon disulfide	ND		20	3.8	ug/L			07/16/12 13:13	20
Carbon tetrachloride	ND		20	5.4	ug/L			07/16/12 13:13	20
Chlorobenzene	ND		20	15	ug/L			07/16/12 13:13	20
Dibromochloromethane	ND		20	6.4	ug/L			07/16/12 13:13	20
Chloroethane	ND		20	6.4	ug/L			07/16/12 13:13	20
Chloroform	ND		20	6.8	ug/L			07/16/12 13:13	20
Chloromethane	ND		20	7.0	ug/L			07/16/12 13:13	20
cis-1,2-Dichloroethene	**890**		20	16	ug/L			07/16/12 13:13	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			07/16/12 13:13	20
Cyclohexane	ND		20	3.6	ug/L			07/16/12 13:13	20
Dichlorodifluoromethane	ND		20	14	ug/L			07/16/12 13:13	20
Ethylbenzene	ND		20	15	ug/L			07/16/12 13:13	20
Isopropylbenzene	ND		20	16	ug/L			07/16/12 13:13	20
Methyl acetate	ND		20	10	ug/L			07/16/12 13:13	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			07/16/12 13:13	20
Methylcyclohexane	ND		20	3.2	ug/L			07/16/12 13:13	20
Methylene Chloride	ND		20	8.8	ug/L			07/16/12 13:13	20
Styrene	ND		20	15	ug/L			07/16/12 13:13	20
Tetrachloroethene	**62**		20	7.2	ug/L			07/16/12 13:13	20
Toluene	ND		20	10	ug/L			07/16/12 13:13	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			07/16/12 13:13	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			07/16/12 13:13	20
Trichloroethene	**220**		20	9.2	ug/L			07/16/12 13:13	20
Trichlorofluoromethane	ND		20	18	ug/L			07/16/12 13:13	20
Vinyl chloride	ND		20	18	ug/L			07/16/12 13:13	20
Xylenes, Total	ND		40	13	ug/L			07/16/12 13:13	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*07/16/12 13:13*	*20*
Toluene-d8 (Surr)	*109*		*71 - 126*		*07/16/12 13:13*	*20*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*07/16/12 13:13*	*20*

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: MW-21
Date Collected: 07/10/12 14:35
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/12 14:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/12 14:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/12 14:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/12 14:44	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/15/12 14:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/12 14:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/12 14:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/12 14:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/12 14:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/12 14:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/12 14:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/12 14:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/12 14:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/12 14:44	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/12 14:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/12 14:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/12 14:44	1
Acetone	**8.8**	**J**	10	3.0	ug/L			07/15/12 14:44	1
Benzene	ND		1.0	0.41	ug/L			07/15/12 14:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/12 14:44	1
Bromoform	ND		1.0	0.26	ug/L			07/15/12 14:44	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/12 14:44	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/12 14:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/12 14:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/12 14:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/12 14:44	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/12 14:44	1
Chloroform	ND		1.0	0.34	ug/L			07/15/12 14:44	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/12 14:44	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/15/12 14:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/12 14:44	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/12 14:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/12 14:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/12 14:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/12 14:44	1
Methyl acetate	ND		1.0	0.50	ug/L			07/15/12 14:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/12 14:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/12 14:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/12 14:44	1
Styrene	ND		1.0	0.73	ug/L			07/15/12 14:44	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/15/12 14:44	1
Toluene	ND		1.0	0.51	ug/L			07/15/12 14:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/15/12 14:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/12 14:44	1
Trichloroethene	ND		1.0	0.46	ug/L			07/15/12 14:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/12 14:44	1
Vinyl chloride	**6.5**		1.0	0.90	ug/L			07/15/12 14:44	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/12 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*		*07/15/12 14:44*	*1*

Client Sample ID: MW-21
Date Collected: 07/10/12 14:35
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*113*		*71 - 126*		*07/15/12 14:44*	*1*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*07/15/12 14:44*	*1*

Client Sample ID: MW-1
Date Collected: 07/11/12 12:20
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/12 15:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/12 15:07	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/12 15:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/12 15:07	1
1,1-Dichloroethane	**5.9**		1.0	0.38	ug/L			07/15/12 15:07	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/12 15:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/12 15:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/12 15:07	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/12 15:07	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/12 15:07	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/12 15:07	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/12 15:07	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/12 15:07	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/12 15:07	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/12 15:07	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/12 15:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/12 15:07	1
Acetone	**8.8**	**J**	10	3.0	ug/L			07/15/12 15:07	1
Benzene	ND		1.0	0.41	ug/L			07/15/12 15:07	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/12 15:07	1
Bromoform	ND		1.0	0.26	ug/L			07/15/12 15:07	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/12 15:07	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/12 15:07	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/12 15:07	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/12 15:07	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/12 15:07	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/12 15:07	1
Chloroform	ND		1.0	0.34	ug/L			07/15/12 15:07	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/12 15:07	1
cis-1,2-Dichloroethene	**40**		1.0	0.81	ug/L			07/15/12 15:07	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/12 15:07	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/12 15:07	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/12 15:07	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/12 15:07	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/12 15:07	1
Methyl acetate	ND		1.0	0.50	ug/L			07/15/12 15:07	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/12 15:07	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/12 15:07	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/12 15:07	1
Styrene	ND		1.0	0.73	ug/L			07/15/12 15:07	1
Tetrachloroethene	**36**		1.0	0.36	ug/L			07/15/12 15:07	1
Toluene	ND		1.0	0.51	ug/L			07/15/12 15:07	1

Client Sample ID: MW-1
Date Collected: 07/11/12 12:20
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**1.4**		1.0	0.90	ug/L			07/15/12 15:07	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/12 15:07	1
Trichloroethene	**14**		1.0	0.46	ug/L			07/15/12 15:07	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/12 15:07	1
Vinyl chloride	**4.3**		1.0	0.90	ug/L			07/15/12 15:07	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/12 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*07/15/12 15:07*	*1*
Toluene-d8 (Surr)	*106*		*71 - 126*		*07/15/12 15:07*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*07/15/12 15:07*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**270**		39	13	ug/L			07/13/12 15:45	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.16**		0.050	0.011	mg/L			07/12/12 21:09	1
Sulfate	**131**		25.0	7.5	mg/L			07/13/12 17:28	5
Alkalinity, Total	**355**		5.0	0.79	mg/L			07/16/12 02:53	1
Alkalinity, Bicarbonate	**355**		5.0	0.79	mg/L			07/16/12 02:53	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			07/16/12 02:53	1
Total Organic Carbon	**0.47**	**J**	1.0	0.43	mg/L			07/16/12 23:15	1

Client Sample ID: MW-3
Date Collected: 07/11/12 12:45
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/12 15:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/12 15:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/12 15:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/12 15:30	1
1,1-Dichloroethane	**4.3**		1.0	0.38	ug/L			07/15/12 15:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/12 15:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/12 15:30	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/12 15:30	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/12 15:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/12 15:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/12 15:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/12 15:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/12 15:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/12 15:30	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/12 15:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/12 15:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/12 15:30	1
Acetone	ND		10	3.0	ug/L			07/15/12 15:30	1
Benzene	ND		1.0	0.41	ug/L			07/15/12 15:30	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/12 15:30	1
Bromoform	ND		1.0	0.26	ug/L			07/15/12 15:30	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: MW-3
Date Collected: 07/11/12 12:45
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			07/15/12 15:30	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/12 15:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/12 15:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/12 15:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/12 15:30	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/12 15:30	1
Chloroform	ND		1.0	0.34	ug/L			07/15/12 15:30	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/12 15:30	1
cis-1,2-Dichloroethene	**23**		1.0	0.81	ug/L			07/15/12 15:30	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/12 15:30	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/12 15:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/12 15:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/12 15:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/12 15:30	1
Methyl acetate	ND		1.0	0.50	ug/L			07/15/12 15:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/12 15:30	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/12 15:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/12 15:30	1
Styrene	ND		1.0	0.73	ug/L			07/15/12 15:30	1
Tetrachloroethene	**12**		1.0	0.36	ug/L			07/15/12 15:30	1
Toluene	ND		1.0	0.51	ug/L			07/15/12 15:30	1
trans-1,2-Dichloroethene	**1.1**		1.0	0.90	ug/L			07/15/12 15:30	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/12 15:30	1
Trichloroethene	**12**		1.0	0.46	ug/L			07/15/12 15:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/12 15:30	1
Vinyl chloride	**13**		1.0	0.90	ug/L			07/15/12 15:30	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/12 15:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*		*07/15/12 15:30*	*1*
Toluene-d8 (Surr)	*111*		*71 - 126*		*07/15/12 15:30*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*07/15/12 15:30*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**140**		39	13	ug/L			07/13/12 16:02	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			07/12/12 17:48	1
Sulfate	**117**		50.0	15.0	mg/L			07/17/12 00:26	10
Alkalinity, Total	**242**		5.0	0.79	mg/L			07/16/12 02:34	1
Alkalinity, Bicarbonate	**242**		5.0	0.79	mg/L			07/16/12 02:34	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			07/16/12 02:34	1
Total Organic Carbon	**0.89**	**J**	1.0	0.43	mg/L			07/14/12 20:17	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: A2-PZ-2
Date Collected: 07/11/12 14:35
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			07/16/12 13:36	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			07/16/12 13:36	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			07/16/12 13:36	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			07/16/12 13:36	10
1,1-Dichloroethane	ND		10	3.8	ug/L			07/16/12 13:36	10
1,1-Dichloroethene	ND		10	2.9	ug/L			07/16/12 13:36	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			07/16/12 13:36	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			07/16/12 13:36	10
1,2-Dibromoethane	ND		10	7.3	ug/L			07/16/12 13:36	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			07/16/12 13:36	10
1,2-Dichloroethane	ND		10	2.1	ug/L			07/16/12 13:36	10
1,2-Dichloropropane	ND		10	7.2	ug/L			07/16/12 13:36	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			07/16/12 13:36	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			07/16/12 13:36	10
2-Hexanone	ND		50	12	ug/L			07/16/12 13:36	10
2-Butanone (MEK)	ND		100	13	ug/L			07/16/12 13:36	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			07/16/12 13:36	10
Acetone	ND		100	30	ug/L			07/16/12 13:36	10
Benzene	ND		10	4.1	ug/L			07/16/12 13:36	10
Bromodichloromethane	ND		10	3.9	ug/L			07/16/12 13:36	10
Bromoform	ND		10	2.6	ug/L			07/16/12 13:36	10
Bromomethane	ND		10	6.9	ug/L			07/16/12 13:36	10
Carbon disulfide	ND		10	1.9	ug/L			07/16/12 13:36	10
Carbon tetrachloride	ND		10	2.7	ug/L			07/16/12 13:36	10
Chlorobenzene	ND		10	7.5	ug/L			07/16/12 13:36	10
Dibromochloromethane	ND		10	3.2	ug/L			07/16/12 13:36	10
Chloroethane	ND		10	3.2	ug/L			07/16/12 13:36	10
Chloroform	ND		10	3.4	ug/L			07/16/12 13:36	10
Chloromethane	ND		10	3.5	ug/L			07/16/12 13:36	10
cis-1,2-Dichloroethene	**130**		10	8.1	ug/L			07/16/12 13:36	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			07/16/12 13:36	10
Cyclohexane	ND		10	1.8	ug/L			07/16/12 13:36	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			07/16/12 13:36	10
Ethylbenzene	ND		10	7.4	ug/L			07/16/12 13:36	10
Isopropylbenzene	ND		10	7.9	ug/L			07/16/12 13:36	10
Methyl acetate	ND		10	5.0	ug/L			07/16/12 13:36	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			07/16/12 13:36	10
Methylcyclohexane	ND		10	1.6	ug/L			07/16/12 13:36	10
Methylene Chloride	ND		10	4.4	ug/L			07/16/12 13:36	10
Styrene	ND		10	7.3	ug/L			07/16/12 13:36	10
Tetrachloroethene	**810**		10	3.6	ug/L			07/16/12 13:36	10
Toluene	ND		10	5.1	ug/L			07/16/12 13:36	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			07/16/12 13:36	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			07/16/12 13:36	10
Trichloroethene	**360**		10	4.6	ug/L			07/16/12 13:36	10
Trichlorofluoromethane	ND		10	8.8	ug/L			07/16/12 13:36	10
Vinyl chloride	ND		10	9.0	ug/L			07/16/12 13:36	10
Xylenes, Total	ND		20	6.6	ug/L			07/16/12 13:36	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*66 - 137*		*07/16/12 13:36*	*10*

Client Sample ID: A2-PZ-2

Lab Sample ID: 480-22467-8
Date Collected: 07/11/12 14:35
Matrix: Water
Date Received: 07/12/12 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*108*		*71 - 126*		*07/16/12 13:36*	*10*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*07/16/12 13:36*	*10*

Client Sample ID: A2-PZ-1

Lab Sample ID: 480-22467-9
Date Collected: 07/11/12 15:20
Matrix: Water
Date Received: 07/12/12 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250	210	ug/L			07/15/12 16:16	250
1,1,2,2-Tetrachloroethane	ND		250	53	ug/L			07/15/12 16:16	250
1,1,2-Trichloroethane	ND		250	58	ug/L			07/15/12 16:16	250
1,1,2-Trichloro-1,2,2-trifluoroethane	**940**		250	78	ug/L			07/15/12 16:16	250
1,1-Dichloroethane	**1100**		250	95	ug/L			07/15/12 16:16	250
1,1-Dichloroethene	ND		250	73	ug/L			07/15/12 16:16	250
1,2,4-Trichlorobenzene	ND		250	100	ug/L			07/15/12 16:16	250
1,2-Dibromo-3-Chloropropane	ND		250	98	ug/L			07/15/12 16:16	250
1,2-Dibromoethane	ND		250	180	ug/L			07/15/12 16:16	250
1,2-Dichlorobenzene	ND		250	200	ug/L			07/15/12 16:16	250
1,2-Dichloroethane	ND		250	53	ug/L			07/15/12 16:16	250
1,2-Dichloropropane	ND		250	180	ug/L			07/15/12 16:16	250
1,3-Dichlorobenzene	ND		250	200	ug/L			07/15/12 16:16	250
1,4-Dichlorobenzene	ND		250	210	ug/L			07/15/12 16:16	250
2-Hexanone	ND		1300	310	ug/L			07/15/12 16:16	250
2-Butanone (MEK)	ND		2500	330	ug/L			07/15/12 16:16	250
4-Methyl-2-pentanone (MIBK)	ND		1300	530	ug/L			07/15/12 16:16	250
Acetone	ND		2500	750	ug/L			07/15/12 16:16	250
Benzene	ND		250	100	ug/L			07/15/12 16:16	250
Bromodichloromethane	ND		250	98	ug/L			07/15/12 16:16	250
Bromoform	ND		250	65	ug/L			07/15/12 16:16	250
Bromomethane	ND		250	170	ug/L			07/15/12 16:16	250
Carbon disulfide	ND		250	48	ug/L			07/15/12 16:16	250
Carbon tetrachloride	ND		250	68	ug/L			07/15/12 16:16	250
Chlorobenzene	ND		250	190	ug/L			07/15/12 16:16	250
Dibromochloromethane	ND		250	80	ug/L			07/15/12 16:16	250
Chloroethane	ND		250	80	ug/L			07/15/12 16:16	250
Chloroform	ND		250	85	ug/L			07/15/12 16:16	250
Chloromethane	ND		250	88	ug/L			07/15/12 16:16	250
cis-1,2-Dichloroethene	**17000**		250	200	ug/L			07/15/12 16:16	250
cis-1,3-Dichloropropene	ND		250	90	ug/L			07/15/12 16:16	250
Cyclohexane	ND		250	45	ug/L			07/15/12 16:16	250
Dichlorodifluoromethane	ND		250	170	ug/L			07/15/12 16:16	250
Ethylbenzene	ND		250	190	ug/L			07/15/12 16:16	250
Isopropylbenzene	ND		250	200	ug/L			07/15/12 16:16	250
Methyl acetate	ND		250	130	ug/L			07/15/12 16:16	250
Methyl tert-butyl ether	ND		250	40	ug/L			07/15/12 16:16	250
Methylcyclohexane	ND		250	40	ug/L			07/15/12 16:16	250
Methylene Chloride	ND		250	110	ug/L			07/15/12 16:16	250
Styrene	ND		250	180	ug/L			07/15/12 16:16	250
Tetrachloroethene	ND		250	90	ug/L			07/15/12 16:16	250

Client Sample ID: A2-PZ-1

Lab Sample ID: 480-22467-9

Date Collected: 07/11/12 15:20

Matrix: Water

Date Received: 07/12/12 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		250	130	ug/L			07/15/12 16:16	250
trans-1,2-Dichloroethene	ND		250	230	ug/L			07/15/12 16:16	250
trans-1,3-Dichloropropene	ND		250	93	ug/L			07/15/12 16:16	250
Trichloroethene	**2600**		250	120	ug/L			07/15/12 16:16	250
Trichlorofluoromethane	ND		250	220	ug/L			07/15/12 16:16	250
Vinyl chloride	**830**		250	230	ug/L			07/15/12 16:16	250
Xylenes, Total	ND		500	170	ug/L			07/15/12 16:16	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*07/15/12 16:16*	*250*
Toluene-d8 (Surr)	*106*		*71 - 126*		*07/15/12 16:16*	*250*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*07/15/12 16:16*	*250*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**1700**		390	130	ug/L			07/14/12 11:18	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			07/12/12 17:51	1
Sulfate	**25.1**		5.0	1.5	mg/L			07/17/12 02:49	1
Alkalinity, Total	**476**		5.0	0.79	mg/L			07/16/12 02:28	1
Alkalinity, Bicarbonate	**476**		5.0	0.79	mg/L			07/16/12 02:28	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			07/16/12 02:28	1
Total Organic Carbon	**3.3**		1.0	0.43	mg/L			07/14/12 19:57	1

Client Sample ID: TB-071012

Lab Sample ID: 480-22467-10

Date Collected: 07/10/12 00:00

Matrix: Water

Date Received: 07/12/12 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/12 16:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/12 16:38	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/12 16:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/12 16:38	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/15/12 16:38	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/12 16:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/12 16:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/12 16:38	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/12 16:38	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/12 16:38	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/12 16:38	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/12 16:38	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/12 16:38	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/12 16:38	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/12 16:38	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/12 16:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/12 16:38	1
Acetone	ND		10	3.0	ug/L			07/15/12 16:38	1
Benzene	ND		1.0	0.41	ug/L			07/15/12 16:38	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/12 16:38	1

Client Sample ID: TB-071012
Date Collected: 07/10/12 00:00
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			07/15/12 16:38	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/12 16:38	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/12 16:38	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/12 16:38	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/12 16:38	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/12 16:38	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/12 16:38	1
Chloroform	ND		1.0	0.34	ug/L			07/15/12 16:38	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/12 16:38	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/15/12 16:38	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/12 16:38	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/12 16:38	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/12 16:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/12 16:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/12 16:38	1
Methyl acetate	ND		1.0	0.50	ug/L			07/15/12 16:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/12 16:38	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/12 16:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/12 16:38	1
Styrene	ND		1.0	0.73	ug/L			07/15/12 16:38	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/15/12 16:38	1
Toluene	ND		1.0	0.51	ug/L			07/15/12 16:38	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/15/12 16:38	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/12 16:38	1
Trichloroethene	ND		1.0	0.46	ug/L			07/15/12 16:38	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/12 16:38	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/15/12 16:38	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/12 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*07/15/12 16:38*	*1*
Toluene-d8 (Surr)	*108*		*71 - 126*		*07/15/12 16:38*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*07/15/12 16:38*	*1*

Client Sample ID: DUP-071112
Date Collected: 07/11/12 00:00
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/12 17:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/12 17:01	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/12 17:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/12 17:01	1
1,1-Dichloroethane	**4.1**		1.0	0.38	ug/L			07/15/12 17:01	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/12 17:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/12 17:01	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/12 17:01	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/12 17:01	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/12 17:01	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/12 17:01	1

Client Sample ID: DUP-071112
Date Collected: 07/11/12 00:00
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/12 17:01	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/12 17:01	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/12 17:01	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/12 17:01	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/12 17:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/12 17:01	1
Acetone	ND		10	3.0	ug/L			07/15/12 17:01	1
Benzene	ND		1.0	0.41	ug/L			07/15/12 17:01	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/12 17:01	1
Bromoform	ND		1.0	0.26	ug/L			07/15/12 17:01	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/12 17:01	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/12 17:01	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/12 17:01	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/12 17:01	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/12 17:01	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/12 17:01	1
Chloroform	ND		1.0	0.34	ug/L			07/15/12 17:01	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/12 17:01	1
cis-1,2-Dichloroethene	**23**		1.0	0.81	ug/L			07/15/12 17:01	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/12 17:01	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/12 17:01	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/12 17:01	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/12 17:01	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/12 17:01	1
Methyl acetate	ND		1.0	0.50	ug/L			07/15/12 17:01	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/12 17:01	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/12 17:01	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/12 17:01	1
Styrene	ND		1.0	0.73	ug/L			07/15/12 17:01	1
Tetrachloroethene	**12**		1.0	0.36	ug/L			07/15/12 17:01	1
Toluene	ND		1.0	0.51	ug/L			07/15/12 17:01	1
trans-1,2-Dichloroethene	**1.0**		1.0	0.90	ug/L			07/15/12 17:01	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/12 17:01	1
Trichloroethene	**11**		1.0	0.46	ug/L			07/15/12 17:01	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/12 17:01	1
Vinyl chloride	**13**		1.0	0.90	ug/L			07/15/12 17:01	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/12 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*07/15/12 17:01*	*1*
Toluene-d8 (Surr)	*110*		*71 - 126*		*07/15/12 17:01*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*07/15/12 17:01*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**170**		39	13	ug/L			07/13/12 16:53	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			07/12/12 17:52	1
Sulfate	**125**		25.0	7.5	mg/L			07/17/12 02:56	5
Alkalinity, Total	**243**		5.0	0.79	mg/L			07/16/12 02:21	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: DUP-071112
Date Collected: 07/11/12 00:00
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-11
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Bicarbonate	**243**		5.0	0.79	mg/L			07/16/12 02:21	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			07/16/12 02:21	1
Total Organic Carbon	**0.80**	**J**	1.0	0.43	mg/L			07/14/12 20:37	1

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-72377/5
Matrix: Water
Analysis Batch: 72377

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/13/12 22:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/13/12 22:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/13/12 22:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/13/12 22:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/13/12 22:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/13/12 22:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/13/12 22:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/13/12 22:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/13/12 22:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/13/12 22:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/13/12 22:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/13/12 22:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/13/12 22:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/13/12 22:43	1
2-Hexanone	ND		5.0	1.2	ug/L			07/13/12 22:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/13/12 22:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/13/12 22:43	1
Acetone	ND		10	3.0	ug/L			07/13/12 22:43	1
Benzene	ND		1.0	0.41	ug/L			07/13/12 22:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/13/12 22:43	1
Bromoform	ND		1.0	0.26	ug/L			07/13/12 22:43	1
Bromomethane	ND		1.0	0.69	ug/L			07/13/12 22:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/13/12 22:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/13/12 22:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/13/12 22:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/13/12 22:43	1
Chloroethane	ND		1.0	0.32	ug/L			07/13/12 22:43	1
Chloroform	0.446	J	1.0	0.34	ug/L			07/13/12 22:43	1
Chloromethane	ND		1.0	0.35	ug/L			07/13/12 22:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/13/12 22:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/13/12 22:43	1
Cyclohexane	ND		1.0	0.18	ug/L			07/13/12 22:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/13/12 22:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/13/12 22:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/13/12 22:43	1
Methyl acetate	ND		1.0	0.50	ug/L			07/13/12 22:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/13/12 22:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/13/12 22:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/13/12 22:43	1
Styrene	ND		1.0	0.73	ug/L			07/13/12 22:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/13/12 22:43	1
Toluene	ND		1.0	0.51	ug/L			07/13/12 22:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/13/12 22:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/13/12 22:43	1
Trichloroethene	ND		1.0	0.46	ug/L			07/13/12 22:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/13/12 22:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/13/12 22:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/13/12 22:43	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-72377/5
Matrix: Water
Analysis Batch: 72377

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*111*		*66 - 137*		*07/13/12 22:43*	*1*
Toluene-d8 (Surr)	*110*		*71 - 126*		*07/13/12 22:43*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*07/13/12 22:43*	*1*

Lab Sample ID: LCS 480-72377/4
Matrix: Water
Analysis Batch: 72377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.2		ug/L		101	71 - 129
1,1-Dichloroethene	25.0	23.7		ug/L		95	65 - 138
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 120
1,2-Dichloroethane	25.0	27.4		ug/L		110	75 - 127
Benzene	25.0	25.6		ug/L		102	71 - 124
Chlorobenzene	25.0	25.8		ug/L		103	72 - 120
cis-1,2-Dichloroethene	25.0	25.1		ug/L		100	74 - 124
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
Methyl tert-butyl ether	25.0	23.3		ug/L		93	64 - 127
Tetrachloroethene	25.0	26.2		ug/L		105	74 - 122
Toluene	25.0	25.4		ug/L		102	70 - 122
trans-1,2-Dichloroethene	25.0	25.5		ug/L		102	73 - 127
Trichloroethene	25.0	24.9		ug/L		100	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 137*
Toluene-d8 (Surr)	*109*		*71 - 126*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*

Lab Sample ID: MB 480-72427/5
Matrix: Water
Analysis Batch: 72427

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/12 12:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/12 12:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/12 12:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/12 12:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/15/12 12:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/12 12:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/12 12:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/12 12:22	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/12 12:22	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/12 12:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/12 12:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/12 12:22	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/12 12:22	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/12 12:22	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/12 12:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/12 12:22	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-72427/5
Matrix: Water
Analysis Batch: 72427

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/12 12:22	1
Acetone	ND		10	3.0	ug/L			07/15/12 12:22	1
Benzene	ND		1.0	0.41	ug/L			07/15/12 12:22	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/12 12:22	1
Bromoform	ND		1.0	0.26	ug/L			07/15/12 12:22	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/12 12:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/12 12:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/12 12:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/12 12:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/12 12:22	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/12 12:22	1
Chloroform	ND		1.0	0.34	ug/L			07/15/12 12:22	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/12 12:22	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/15/12 12:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/12 12:22	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/12 12:22	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/12 12:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/12 12:22	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/12 12:22	1
Methyl acetate	ND		1.0	0.50	ug/L			07/15/12 12:22	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/12 12:22	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/12 12:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/12 12:22	1
Styrene	ND		1.0	0.73	ug/L			07/15/12 12:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/15/12 12:22	1
Toluene	ND		1.0	0.51	ug/L			07/15/12 12:22	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/15/12 12:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/12 12:22	1
Trichloroethene	ND		1.0	0.46	ug/L			07/15/12 12:22	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/12 12:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/15/12 12:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/12 12:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*66 - 137*		*07/15/12 12:22*	*1*
Toluene-d8 (Surr)	*110*		*71 - 126*		*07/15/12 12:22*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*07/15/12 12:22*	*1*

Lab Sample ID: LCS 480-72427/4
Matrix: Water
Analysis Batch: 72427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	24.7		ug/L		99	71 - 129
1,1-Dichloroethene	25.0	22.3		ug/L		89	65 - 138
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	77 - 120
1,2-Dichloroethane	25.0	27.6		ug/L		110	75 - 127
Benzene	25.0	25.0		ug/L		100	71 - 124
Chlorobenzene	25.0	25.1		ug/L		100	72 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-72427/4
Matrix: Water
Analysis Batch: 72427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	74 - 124
Ethylbenzene	25.0	25.5		ug/L		102	77 - 123
Methyl tert-butyl ether	25.0	21.9		ug/L		88	64 - 127
Tetrachloroethene	25.0	25.2		ug/L		101	74 - 122
Toluene	25.0	25.0		ug/L		100	70 - 122
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	73 - 127
Trichloroethene	25.0	24.7		ug/L		99	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 137*
Toluene-d8 (Surr)	*112*		*71 - 126*
4-Bromofluorobenzene (Surr)	*113*		*73 - 120*

Lab Sample ID: MB 480-72475/5
Matrix: Water
Analysis Batch: 72475

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/16/12 10:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/16/12 10:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/16/12 10:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/16/12 10:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/16/12 10:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/16/12 10:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/16/12 10:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/16/12 10:15	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/16/12 10:15	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/16/12 10:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/16/12 10:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/16/12 10:15	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/16/12 10:15	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/16/12 10:15	1
2-Hexanone	ND		5.0	1.2	ug/L			07/16/12 10:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/16/12 10:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/16/12 10:15	1
Acetone	ND		10	3.0	ug/L			07/16/12 10:15	1
Benzene	ND		1.0	0.41	ug/L			07/16/12 10:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/16/12 10:15	1
Bromoform	ND		1.0	0.26	ug/L			07/16/12 10:15	1
Bromomethane	ND		1.0	0.69	ug/L			07/16/12 10:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/16/12 10:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/16/12 10:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/16/12 10:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/16/12 10:15	1
Chloroethane	ND		1.0	0.32	ug/L			07/16/12 10:15	1
Chloroform	ND		1.0	0.34	ug/L			07/16/12 10:15	1
Chloromethane	ND		1.0	0.35	ug/L			07/16/12 10:15	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/16/12 10:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/16/12 10:15	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-72475/5
Matrix: Water
Analysis Batch: 72475

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			07/16/12 10:15	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/16/12 10:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/16/12 10:15	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/16/12 10:15	1
Methyl acetate	ND		1.0	0.50	ug/L			07/16/12 10:15	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/16/12 10:15	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/16/12 10:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/16/12 10:15	1
Styrene	ND		1.0	0.73	ug/L			07/16/12 10:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/16/12 10:15	1
Toluene	ND		1.0	0.51	ug/L			07/16/12 10:15	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/16/12 10:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/16/12 10:15	1
Trichloroethene	ND		1.0	0.46	ug/L			07/16/12 10:15	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/16/12 10:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/16/12 10:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/16/12 10:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*66 - 137*		*07/16/12 10:15*	*1*
Toluene-d8 (Surr)	*113*		*71 - 126*		*07/16/12 10:15*	*1*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*07/16/12 10:15*	*1*

Lab Sample ID: LCS 480-72475/4
Matrix: Water
Analysis Batch: 72475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.0		ug/L		100	71 - 129
1,1-Dichloroethene	25.0	21.4		ug/L		86	65 - 138
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	77 - 120
1,2-Dichloroethane	25.0	27.1		ug/L		108	75 - 127
Benzene	25.0	24.6		ug/L		98	71 - 124
Chlorobenzene	25.0	25.5		ug/L		102	72 - 120
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	74 - 124
Ethylbenzene	25.0	25.4		ug/L		102	77 - 123
Methyl tert-butyl ether	25.0	21.2		ug/L		85	64 - 127
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122
Toluene	25.0	24.8		ug/L		99	70 - 122
trans-1,2-Dichloroethene	25.0	23.7		ug/L		95	73 - 127
Trichloroethene	25.0	23.7		ug/L		95	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*66 - 137*
Toluene-d8 (Surr)	*112*		*71 - 126*
4-Bromofluorobenzene (Surr)	*112*		*73 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-22467-8 MS
Matrix: Water
Analysis Batch: 72475

Client Sample ID: A2-PZ-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		250	295		ug/L		118	71 - 129
1,1-Dichloroethene	ND		250	277		ug/L		111	65 - 138
1,2-Dichlorobenzene	ND		250	277		ug/L		111	77 - 120
1,2-Dichloroethane	ND		250	310		ug/L		124	75 - 127
Benzene	ND		250	288		ug/L		115	71 - 124
Chlorobenzene	ND		250	281		ug/L		112	72 - 120
cis-1,2-Dichloroethene	130		250	425		ug/L		116	74 - 124
Ethylbenzene	ND		250	292		ug/L		117	77 - 123
Methyl tert-butyl ether	ND		250	250		ug/L		100	64 - 127
Tetrachloroethene	810		250	1040	E	ug/L		91	74 - 122
Toluene	ND		250	283		ug/L		113	70 - 122
trans-1,2-Dichloroethene	ND		250	300		ug/L		120	73 - 127
Trichloroethene	360		250	642		ug/L		113	74 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*117*		*66 - 137*
Toluene-d8 (Surr)	*110*		*71 - 126*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*

Lab Sample ID: 480-22467-8 MSD
Matrix: Water
Analysis Batch: 72475

Client Sample ID: A2-PZ-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	ND		250	289		ug/L		116	71 - 129	2	20
1,1-Dichloroethene	ND		250	276		ug/L		110	65 - 138	0	16
1,2-Dichlorobenzene	ND		250	274		ug/L		110	77 - 120	1	20
1,2-Dichloroethane	ND		250	297		ug/L		119	75 - 127	4	20
Benzene	ND		250	279		ug/L		112	71 - 124	3	13
Chlorobenzene	ND		250	278		ug/L		111	72 - 120	1	25
cis-1,2-Dichloroethene	130		250	410		ug/L		110	74 - 124	4	15
Ethylbenzene	ND		250	291		ug/L		116	77 - 123	0	15
Methyl tert-butyl ether	ND		250	240		ug/L		96	64 - 127	4	37
Tetrachloroethene	810		250	1100	E	ug/L		114	74 - 122	5	20
Toluene	ND		250	281		ug/L		112	70 - 122	1	15
trans-1,2-Dichloroethene	ND		250	291		ug/L		116	73 - 127	3	20
Trichloroethene	360		250	631		ug/L		108	74 - 123	2	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*116*		*66 - 137*
Toluene-d8 (Surr)	*110*		*71 - 126*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-72224/2
Matrix: Water
Analysis Batch: 72224

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		3.9	1.3	ug/L			07/13/12 07:59	1

Lab Sample ID: LCS 480-72224/3
Matrix: Water
Analysis Batch: 72224

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			7.77	7.21		ug/L		93	48 - 174		

Lab Sample ID: LCSD 480-72224/4
Matrix: Water
Analysis Batch: 72224

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			7.77	6.83		ug/L		88	48 - 174	5	50

Lab Sample ID: MB 480-72402/2
Matrix: Water
Analysis Batch: 72402

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		3.9	1.3	ug/L			07/14/12 09:45	1

Lab Sample ID: LCS 480-72402/3
Matrix: Water
Analysis Batch: 72402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane			7.77	7.56		ug/L		97	48 - 174		

Lab Sample ID: LCSD 480-72402/4
Matrix: Water
Analysis Batch: 72402

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			7.77	6.94		ug/L		89	48 - 174	9	50

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 480-72379/33
Matrix: Water
Analysis Batch: 72379

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.5	mg/L			07/13/12 17:09	1

Method: D516-90, 02 - Sulfate (Continued)

Lab Sample ID: LCS 480-72379/32
Matrix: Water
Analysis Batch: 72379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	29.43		mg/L		98	90 - 110

Lab Sample ID: MB 480-72640/23
Matrix: Water
Analysis Batch: 72640

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.5	mg/L			07/17/12 02:49	1

Lab Sample ID: MB 480-72640/7
Matrix: Water
Analysis Batch: 72640

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.5	mg/L			07/17/12 00:12	1

Lab Sample ID: LCS 480-72640/22
Matrix: Water
Analysis Batch: 72640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	27.82		mg/L		93	90 - 110

Lab Sample ID: LCS 480-72640/6
Matrix: Water
Analysis Batch: 72640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	27.50		mg/L		92	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-72452/5
Matrix: Water
Analysis Batch: 72452

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0	0.79	mg/L			07/16/12 01:35	1
Alkalinity, Bicarbonate	ND		5.0	0.79	mg/L			07/16/12 01:35	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			07/16/12 01:35	1

Lab Sample ID: LCS 480-72452/6
Matrix: Water
Analysis Batch: 72452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	102.1		mg/L		102	90 - 110

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MB 480-72656/5
Matrix: Water
Analysis Batch: 72656

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0	0.79	mg/L			07/17/12 02:59	1
Alkalinity, Bicarbonate	ND		5.0	0.79	mg/L			07/17/12 02:59	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			07/17/12 02:59	1

Lab Sample ID: LCS 480-72656/6
Matrix: Water
Analysis Batch: 72656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	97.78		mg/L		98	90 - 110

Method: SM 5310D - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-72532/3
Matrix: Water
Analysis Batch: 72532

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.43	mg/L			07/14/12 18:17	1

Lab Sample ID: LCS 480-72532/4
Matrix: Water
Analysis Batch: 72532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	60.94		mg/L		102	90 - 110

Lab Sample ID: MB 480-72740/3
Matrix: Water
Analysis Batch: 72740

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.43	mg/L			07/16/12 21:55	1

Lab Sample ID: LCS 480-72740/4
Matrix: Water
Analysis Batch: 72740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	61.83		mg/L		103	90 - 110

Lab Sample ID: MB 480-72906/51
Matrix: Water
Analysis Batch: 72906

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.43	mg/L			07/18/12 02:52	1

Method: SM 5310D - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 480-72906/75
Matrix: Water
Analysis Batch: 72906

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.43	mg/L			07/18/12 09:18	1

Lab Sample ID: LCS 480-72906/52
Matrix: Water
Analysis Batch: 72906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	58.88		mg/L		98	90 - 110

Lab Sample ID: LCS 480-72906/76
Matrix: Water
Analysis Batch: 72906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	58.59		mg/L		98	90 - 110

Lab Sample ID: 480-22467-2 MS
Matrix: Water
Analysis Batch: 72906

Client Sample ID: PZ-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	4.4		20.0	20.75		mg/L		82	54 - 131

GC/MS VOA

Analysis Batch: 72377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-1	PZ-11R	Total/NA	Water	8260B	
LCS 480-72377/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-72377/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 72427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-2	PZ-13R	Total/NA	Water	8260B	
480-22467-4	MW-18	Total/NA	Water	8260B	
480-22467-5	MW-21	Total/NA	Water	8260B	
480-22467-6	MW-1	Total/NA	Water	8260B	
480-22467-7	MW-3	Total/NA	Water	8260B	
480-22467-9	A2-PZ-1	Total/NA	Water	8260B	
480-22467-10	TB-071012	Total/NA	Water	8260B	
480-22467-11	DUP-071112	Total/NA	Water	8260B	
LCS 480-72427/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-72427/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 72475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-4 - DL	MW-18	Total/NA	Water	8260B	
480-22467-8	A2-PZ-2	Total/NA	Water	8260B	
480-22467-8 MS	A2-PZ-2	Total/NA	Water	8260B	
480-22467-8 MSD	A2-PZ-2	Total/NA	Water	8260B	
LCS 480-72475/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-72475/5	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 72224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-2	PZ-13R	Total/NA	Water	RSK-175	
480-22467-6	MW-1	Total/NA	Water	RSK-175	
480-22467-7	MW-3	Total/NA	Water	RSK-175	
480-22467-11	DUP-071112	Total/NA	Water	RSK-175	
LCS 480-72224/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-72224/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 480-72224/2	Method Blank	Total/NA	Water	RSK-175	

Analysis Batch: 72402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-9	A2-PZ-1	Total/NA	Water	RSK-175	
LCS 480-72402/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-72402/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 480-72402/2	Method Blank	Total/NA	Water	RSK-175	

General Chemistry

Analysis Batch: 72205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-3	PZ-13R	Total/NA	Water	353.2	
480-22467-6	MW-1	Total/NA	Water	353.2	
480-22467-7	MW-3	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 72205 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-9	A2-PZ-1	Total/NA	Water	353.2	
480-22467-11	DUP-071112	Total/NA	Water	353.2	

Analysis Batch: 72379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-2	PZ-13R	Total/NA	Water	D516-90, 02	
480-22467-6	MW-1	Total/NA	Water	D516-90, 02	
LCS 480-72379/32	Lab Control Sample	Total/NA	Water	D516-90, 02	
MB 480-72379/33	Method Blank	Total/NA	Water	D516-90, 02	

Analysis Batch: 72452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-6	MW-1	Total/NA	Water	SM 2320B	
480-22467-7	MW-3	Total/NA	Water	SM 2320B	
480-22467-9	A2-PZ-1	Total/NA	Water	SM 2320B	
480-22467-11	DUP-071112	Total/NA	Water	SM 2320B	
LCS 480-72452/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-72452/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 72532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-7	MW-3	Total/NA	Water	SM 5310D	
480-22467-9	A2-PZ-1	Total/NA	Water	SM 5310D	
480-22467-11	DUP-071112	Total/NA	Water	SM 5310D	
LCS 480-72532/4	Lab Control Sample	Total/NA	Water	SM 5310D	
MB 480-72532/3	Method Blank	Total/NA	Water	SM 5310D	

Analysis Batch: 72640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-7	MW-3	Total/NA	Water	D516-90, 02	
480-22467-9	A2-PZ-1	Total/NA	Water	D516-90, 02	
480-22467-11	DUP-071112	Total/NA	Water	D516-90, 02	
LCS 480-72640/22	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-72640/6	Lab Control Sample	Total/NA	Water	D516-90, 02	
MB 480-72640/23	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-72640/7	Method Blank	Total/NA	Water	D516-90, 02	

Analysis Batch: 72656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-2	PZ-13R	Total/NA	Water	SM 2320B	
LCS 480-72656/6	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-72656/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 72740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-6	MW-1	Total/NA	Water	SM 5310D	
LCS 480-72740/4	Lab Control Sample	Total/NA	Water	SM 5310D	
MB 480-72740/3	Method Blank	Total/NA	Water	SM 5310D	

Analysis Batch: 72906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-2	PZ-13R	Total/NA	Water	SM 5310D	

General Chemistry (Continued)

Analysis Batch: 72906 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-22467-2 MS	PZ-13R	Total/NA	Water	SM 5310D	
LCS 480-72906/52	Lab Control Sample	Total/NA	Water	SM 5310D	
LCS 480-72906/76	Lab Control Sample	Total/NA	Water	SM 5310D	
MB 480-72906/51	Method Blank	Total/NA	Water	SM 5310D	
MB 480-72906/75	Method Blank	Total/NA	Water	SM 5310D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: PZ-11R
Lab Sample ID: 480-22467-1
Date Collected: 07/11/12 10:55
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72377	07/14/12 00:04	ND	TAL BUF

Client Sample ID: PZ-13R
Lab Sample ID: 480-22467-2
Date Collected: 07/10/12 16:52
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72427	07/15/12 13:58	ND	TAL BUF
Total/NA	Analysis	RSK-175		10	72224	07/13/12 15:28	CD	TAL BUF
Total/NA	Analysis	D516-90, 02		5	72379	07/13/12 17:28	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	72656	07/17/12 04:11	JS	TAL BUF
Total/NA	Analysis	SM 5310D		1	72906	07/18/12 11:28	KAC	TAL BUF

Client Sample ID: PZ-13R
Lab Sample ID: 480-22467-3
Date Collected: 07/11/12 11:10
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	72205	07/12/12 17:46	NH	TAL BUF

Client Sample ID: MW-18
Lab Sample ID: 480-22467-4
Date Collected: 07/10/12 13:20
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72427	07/15/12 14:21	ND	TAL BUF
Total/NA	Analysis	8260B	DL	20	72475	07/16/12 13:13	RL	TAL BUF

Client Sample ID: MW-21
Lab Sample ID: 480-22467-5
Date Collected: 07/10/12 14:35
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72427	07/15/12 14:44	ND	TAL BUF

Client Sample ID: MW-1
Lab Sample ID: 480-22467-6
Date Collected: 07/11/12 12:20
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72427	07/15/12 15:07	ND	TAL BUF
Total/NA	Analysis	RSK-175		10	72224	07/13/12 15:45	CD	TAL BUF

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: MW-1

Lab Sample ID: 480-22467-6

Date Collected: 07/11/12 12:20
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	72205	07/12/12 21:09	NH	TAL BUF
Total/NA	Analysis	D516-90, 02		5	72379	07/13/12 17:28	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	72452	07/16/12 02:53	JP	TAL BUF
Total/NA	Analysis	SM 5310D		1	72740	07/16/12 23:15	KAC	TAL BUF

Client Sample ID: MW-3

Lab Sample ID: 480-22467-7

Date Collected: 07/11/12 12:45
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72427	07/15/12 15:30	ND	TAL BUF
Total/NA	Analysis	RSK-175		10	72224	07/13/12 16:02	CD	TAL BUF
Total/NA	Analysis	353.2		1	72205	07/12/12 17:48	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	72452	07/16/12 02:34	JP	TAL BUF
Total/NA	Analysis	SM 5310D		1	72532	07/14/12 20:17	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		10	72640	07/17/12 00:26	PJQ	TAL BUF

Client Sample ID: A2-PZ-2

Lab Sample ID: 480-22467-8

Date Collected: 07/11/12 14:35
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	72475	07/16/12 13:36	RL	TAL BUF

Client Sample ID: A2-PZ-1

Lab Sample ID: 480-22467-9

Date Collected: 07/11/12 15:20
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	72427	07/15/12 16:16	ND	TAL BUF
Total/NA	Analysis	RSK-175		100	72402	07/14/12 11:18	CD	TAL BUF
Total/NA	Analysis	353.2		1	72205	07/12/12 17:51	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	72452	07/16/12 02:28	JP	TAL BUF
Total/NA	Analysis	SM 5310D		1	72532	07/14/12 19:57	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		1	72640	07/17/12 02:49	PJQ	TAL BUF

Client Sample ID: TB-071012

Lab Sample ID: 480-22467-10

Date Collected: 07/10/12 00:00
Matrix: Water
Date Received: 07/12/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72427	07/15/12 16:38	ND	TAL BUF

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Client Sample ID: DUP-071112
Date Collected: 07/11/12 00:00
Date Received: 07/12/12 10:00

Lab Sample ID: 480-22467-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	72427	07/15/12 17:01	ND	TAL BUF
Total/NA	Analysis	RSK-175		10	72224	07/13/12 16:53	CD	TAL BUF
Total/NA	Analysis	353.2		1	72205	07/12/12 17:52	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	72452	07/16/12 02:21	JP	TAL BUF
Total/NA	Analysis	SM 5310D		1	72532	07/14/12 20:37	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		5	72640	07/17/12 02:56	PJQ	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-12
California	NELAC	9	1169CA	09-30-12
Connecticut	State Program	1	PH-0568	09-30-12
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	03-31-12
Illinois	NELAC	5	200003	09-30-12
Iowa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-12
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-12
New Hampshire	NELAC	1	2337	11-17-12
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-12
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-12
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAC	3	460185	09-14-12
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-12
Wisconsin	State Program	5	998310390	08-31-12

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Lockheed Martin Corporation -Pilot Study

TestAmerica Job ID: 480-22467-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
RSK-175	Dissolved Gases (GC)	RSK	TAL BUF
353.2	Nitrate	EPA	TAL BUF
D516-90, 02	Sulfate	ASTM	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 5310D	Organic Carbon, Total (TOC)	SM	TAL BUF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Chain of Custody Record

TestAmerica

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-25883-5178.1
Client Contact: Mr Dan Zuck	Phone: 516-369-2741	E-Mail: candace fox@testamericainc.com		Page: Page 1 of 1
Company: ARCADIS U S , Inc				Job #
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): Zuck			
State, Zip: NY, 13214-0066	PO # 40.1.102 NJ001016.0001			
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	WO #			
Email: dan.zuck@arcadis-us.com				
Project Name: Lockheed Martin Corporation	Project # 48002828			
Site: New York	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - TCL list OLM04.2	RSK_176 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516, Nitrate_Calc	TOC	Total Number of containers	Special Instructions/Note:
Preservation Code:							A	A	N	N	A		
PZ-11R	7/11/12	1055	G	Water			3						
PZ-13R	7/10/12	1652	G	Water			3	2	1	*2	2		* collected 7/11/12 @ 1110
MW-18	7/10/12	1320	G	Water			3						
MW-21	7/10/12	1435	G	Water			3						
MW-1	7/11/12	1220	G	Water			3	2	1	2	2		
MW-3	7/11/12	1245	G	Water			3	2	1	2	2		
A2-PZ-2	7/11/12	1435	G	Water			3						
A2-PZ-1	7/11/12	1520	G	Water			3	2	1	2	2		
TB-071012	7/10/12	—	—	Water			3						
DUP-071112	7/11/12	—	G	Water			3	2	1	2	2		
				Water									

Possible Hazard Identification

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Please Report Results to J. Bousted

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		7/11/12 1700	Arcadis		7-12-12 0800	TAL
2					1000	UPS
3						

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.7 & 3

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Login Number: 22467

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-26196-1
Client Project/Site: Lockheed Martin Corporation

For:
ARCADIS U.S. Inc
630 Plaza Drive, Suite 600
Highlands Ranch, Colorado 80129

Attn: Accounts Payable

Candace L. Fox

Authorized for release by:
10/19/2012 3:03:25 PM

Candace Fox
Project Manager II
candace.fox@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-26196-1	TB-100412	Water	10/04/12 00:00	10/05/12 09:00
480-26196-2	DUP-100412	Water	10/04/12 00:00	10/05/12 09:00
480-26196-3	A1-PZ-2	Water	10/04/12 11:00	10/05/12 09:00
480-26196-4	A2-PZ-1	Water	10/04/12 12:00	10/05/12 09:00
480-26196-5	A2-PZ-2	Water	10/03/12 17:41	10/05/12 09:00
480-26196-6	MW-1	Water	10/04/12 16:15	10/05/12 09:00
480-26196-7	MW-2	Water	10/03/12 15:05	10/05/12 09:00
480-26196-8	MW-3	Water	10/04/12 15:05	10/05/12 09:00
480-26196-9	MW-4	Water	10/03/12 13:55	10/05/12 09:00
480-26196-10	MW-5	Water	10/02/12 15:20	10/05/12 09:00
480-26196-11	MW-10	Water	10/04/12 13:30	10/05/12 09:00
480-26196-12	MW-18	Water	10/03/12 16:00	10/05/12 09:00
480-26196-13	MW-20	Water	10/02/12 14:55	10/05/12 09:00
480-26196-14	MW-21	Water	10/02/12 13:55	10/05/12 09:00
480-26196-15	PZ-5	Water	10/02/12 17:48	10/05/12 09:00
480-26196-16	PZ-6	Water	10/02/12 17:30	10/05/12 09:00
480-26196-17	PZ-7	Water	10/02/12 19:05	10/05/12 09:00
480-26196-18	PZ-8	Water	10/03/12 12:45	10/05/12 09:00
480-26196-19	PZ-11R	Water	10/02/12 15:40	10/05/12 09:00
480-26196-20	PZ-13R	Water	10/02/12 16:05	10/05/12 09:00
480-26196-21	PZ-18	Water	10/03/12 11:45	10/05/12 09:00
480-26196-22	PZ-26	Water	10/03/12 16:50	10/05/12 09:00
480-26289-1	MW-14BR	Water	10/05/12 16:05	10/06/12 10:25
480-26289-2	TB-100512	Water	10/05/12 00:00	10/06/12 10:25

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-26196-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-26196-1

Comments
No additional comments.

Receipt
The samples were received on 10/5/2012 9:00 AM and 10/6/2012 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.4º C and 4.4º C.

GC/MS VOA
Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: (480-26196-4 MS), (480-26196-4 MSD), A2-PZ-1 (480-26196-4), PZ-5 (480-26196-15), PZ-8 (480-26196-18). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: A2-PZ-2 (480-26196-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-18 (480-26196-12). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following compound was outside control limits in the continuing calibration verification (CCV) associated with batch 84839: Bromomethane. This compound is not classified as a Calibration Check Compound (CCC) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for six analytes to be outside limits; therefore, the data have been reported.

Method(s) 8260B: The following compound was outside control limits in the continuing calibration verification (CCV) associated with batch 84884: Bromomethane. This compound is not classified as a Calibration Check Compound (CCC) in the reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for six analytes to be outside limits; therefore, the data have been reported.

Method(s) 8260B: The following sample submitted for volatiles analysis was received with insufficient preservation (pH >2): MW-20 (480-26196-13).

No analytical or quality issues were noted.

GC VOA
Method(s) RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: A1-PZ-2 (480-26196-3), A2-PZ-1 (480-26196-4), DUP-100412 (480-26196-2), MW-1 (480-26196-6), MW-10 (480-26196-11). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry
Method(s) 353.2: The results reported for the following sample(s) do not concur with results previously reported for this site: PZ-13R (480-26196-20). Reanalysis was performed, and the result(s) confirmed.

Method(s) 353.2: The following sample(s) was received outside of holding time: PZ-13R (480-26196-20).

Method(s) 353.2: The following sample(s) was received outside of holding time: PZ-13R (480-26196-20).

Method(s) Nitrate by calc: The following sample(s) was received outside of holding time: PZ-13R (480-26196-20).

No other analytical or quality issues were noted.

Job ID: 480-26196-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: TB-100412 — Lab Sample ID: 480-26196-1

No Detections

Client Sample ID: DUP-100412 — Lab Sample ID: 480-26196-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.5		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	58		1.0	0.81	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	3.8		1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	2.0		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	47		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	130		40	2.2	ug/L	10		RSK-175	Total/NA
Sulfate	220	B	100	30.0	mg/L	20		D516-90, 02	Total/NA
Alkalinity, Total	233		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	233		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	4.2		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: A1-PZ-2 — Lab Sample ID: 480-26196-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.49	J	1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.81	ug/L	1		8260B	Total/NA
Vinyl chloride	8.4		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	2800		200	11	ug/L	50		RSK-175	Total/NA
Sulfate	2.4	J B	5.0	1.5	mg/L	1		D516-90, 02	Total/NA
Alkalinity, Total	299		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	299		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	4.0		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: A2-PZ-1 — Lab Sample ID: 480-26196-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1300		250	95	ug/L	250		8260B	Total/NA
cis-1,2-Dichloroethene	23000		250	200	ug/L	250		8260B	Total/NA
Trichloroethene	1500		250	120	ug/L	250		8260B	Total/NA
Vinyl chloride	1300		250	230	ug/L	250		8260B	Total/NA
Methane	800		200	11	ug/L	50		RSK-175	Total/NA
Sulfate	75.9	B	25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	474		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	474		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	6.9		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: A2-PZ-2 — Lab Sample ID: 480-26196-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	120		10	8.1	ug/L	10		8260B	Total/NA
Tetrachloroethene	730		10	3.6	ug/L	10		8260B	Total/NA
Trichloroethene	330		10	4.6	ug/L	10		8260B	Total/NA

Client Sample ID: MW-1 — Lab Sample ID: 480-26196-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.7		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	44		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	99		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	25		1.0	0.46	ug/L	1		8260B	Total/NA

Client Sample ID: MW-1 (Continued) — Lab Sample ID: 480-26196-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	3.9		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	57		40	2.2	ug/L	10		RSK-175	Total/NA
Nitrate as N	2.0		0.050	0.011	mg/L	1		353.2	Total/NA
Sulfate	176	B	50.0	15.0	mg/L	10		D516-90, 02	Total/NA
Alkalinity, Total	376		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	376		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	2.3		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 480-26196-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.9		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.81	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.7		1.0	0.90	ug/L	1		8260B	Total/NA
Vinyl chloride	38		1.0	0.90	ug/L	1		8260B	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 480-26196-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.4		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	46		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	8.4		1.0	0.36	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.91	J	1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	12		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	9.1		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	18		4.0	0.22	ug/L	1		RSK-175	Total/NA
Nitrate as N	0.26		0.050	0.011	mg/L	1		353.2	Total/NA
Sulfate	151	B	50.0	15.0	mg/L	10		D516-90, 02	Total/NA
Alkalinity, Total	395		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	395		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	2.7		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 480-26196-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.0		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	4.6		1.0	0.81	ug/L	1		8260B	Total/NA
Vinyl chloride	4.8		1.0	0.90	ug/L	1		8260B	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 480-26196-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.55	J	1.0	0.36	ug/L	1		8260B	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 480-26196-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.5		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	45		1.0	0.81	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	3.2		1.0	0.90	ug/L	1		8260B	Total/NA
Trichloroethene	1.7		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	38		1.0	0.90	ug/L	1		8260B	Total/NA
Methane	300		80	4.4	ug/L	20		RSK-175	Total/NA

Client Sample ID: MW-10 (Continued) — Lab Sample ID: 480-26196-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	203	B	50.0	15.0	mg/L	10		D516-90, 02	Total/NA
Alkalinity, Total	234		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	234		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Total Organic Carbon	3.9		1.0	0.43	mg/L	1		SM 5310D	Total/NA

Client Sample ID: MW-18 — Lab Sample ID: 480-26196-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	18		5.0	1.9	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	420		5.0	4.1	ug/L	5		8260B	Total/NA
Tetrachloroethene	11		5.0	1.8	ug/L	5		8260B	Total/NA
Trichloroethene	80		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: MW-20 — Lab Sample ID: 480-26196-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.41	J	1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	480		10	1.3	ug/L	1		8260B	Total/NA
Acetone	78		10	3.0	ug/L	1		8260B	Total/NA
Carbon disulfide	0.76	J	1.0	0.19	ug/L	1		8260B	Total/NA
Chloroethane	4.3		1.0	0.32	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.81	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	7.1		1.0	0.90	ug/L	1		8260B	Total/NA
Vinyl chloride	1.9		1.0	0.90	ug/L	1		8260B	Total/NA

Client Sample ID: MW-21 — Lab Sample ID: 480-26196-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	13		1.0	0.90	ug/L	1		8260B	Total/NA

Client Sample ID: PZ-5 — Lab Sample ID: 480-26196-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	160		4.0	3.2	ug/L	4		8260B	Total/NA
Ethylbenzene	3.8	J	4.0	3.0	ug/L	4		8260B	Total/NA
Tetrachloroethene	7.2		4.0	1.4	ug/L	4		8260B	Total/NA
Trichloroethene	3.9	J	4.0	1.8	ug/L	4		8260B	Total/NA
Vinyl chloride	27		4.0	3.6	ug/L	4		8260B	Total/NA
Xylenes, Total	14		8.0	2.6	ug/L	4		8260B	Total/NA

Client Sample ID: PZ-6 — Lab Sample ID: 480-26196-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	21		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	7.2		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	20		1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	2.1		1.0	0.90	ug/L	1		8260B	Total/NA

Client Sample ID: PZ-7 — Lab Sample ID: 480-26196-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.58	J	1.0	0.38	ug/L	1		8260B	Total/NA

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-8 — Lab Sample ID: 480-26196-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.2	J	5.0	1.9	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	56		5.0	4.1	ug/L	5		8260B	Total/NA
Tetrachloroethene	380		5.0	1.8	ug/L	5		8260B	Total/NA
Trichloroethene	320		5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: PZ-11R — Lab Sample ID: 480-26196-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.8		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	2.8		1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	6.0		1.0	0.46	ug/L	1		8260B	Total/NA

Client Sample ID: PZ-13R — Lab Sample ID: 480-26196-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.9		1.0	0.81	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.59	J	1.0	0.36	ug/L	1		8260B	Total/NA
Trichloroethene	3.5		1.0	0.46	ug/L	1		8260B	Total/NA
Methane	6.6		4.0	0.22	ug/L	1		RSK-175	Total/NA
Sulfate	67.6	B	25.0	7.5	mg/L	5		D516-90, 02	Total/NA
Alkalinity, Total	495		5.0	0.79	mg/L	1		SM 2320B	Total/NA
Alkalinity, Bicarbonate	495		5.0	0.79	mg/L	1		SM 2320B	Total/NA

Client Sample ID: PZ-18 — Lab Sample ID: 480-26196-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.41	J	1.0	0.36	ug/L	1		8260B	Total/NA

Client Sample ID: PZ-26 — Lab Sample ID: 480-26196-22

No Detections

Client Sample ID: MW-14BR — Lab Sample ID: 480-26289-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.7	J	10	1.3	ug/L	1		8260B	Total/NA
Acetone	16		10	3.0	ug/L	1		8260B	Total/NA
Carbon disulfide	0.20	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: TB-100512 — Lab Sample ID: 480-26289-2

No Detections

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: TB-100412
Date Collected: 10/04/12 00:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/12 21:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/12 21:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/12 21:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/12 21:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/10/12 21:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/12 21:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/12 21:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/10/12 21:56	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/12 21:56	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/12 21:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/12 21:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/12 21:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/12 21:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/12 21:56	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/12 21:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/12 21:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/12 21:56	1
Acetone	ND		10	3.0	ug/L			10/10/12 21:56	1
Benzene	ND		1.0	0.41	ug/L			10/10/12 21:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/12 21:56	1
Bromoform	ND		1.0	0.26	ug/L			10/10/12 21:56	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/12 21:56	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/12 21:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/12 21:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/12 21:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/12 21:56	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/12 21:56	1
Chloroform	ND		1.0	0.34	ug/L			10/10/12 21:56	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/12 21:56	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/10/12 21:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/12 21:56	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/12 21:56	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/12 21:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/12 21:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/12 21:56	1
Methyl acetate	ND		1.0	0.50	ug/L			10/10/12 21:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/12 21:56	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/12 21:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/12 21:56	1
Styrene	ND		1.0	0.73	ug/L			10/10/12 21:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/12 21:56	1
Toluene	ND		1.0	0.51	ug/L			10/10/12 21:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/12 21:56	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/12 21:56	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/12 21:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/12 21:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/10/12 21:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/12 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*10/10/12 21:56*	*1*

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: TB-100412

Lab Sample ID: 480-26196-1

Date Collected: 10/04/12 00:00

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/10/12 21:56*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/10/12 21:56*	*1*

Client Sample ID: DUP-100412

Lab Sample ID: 480-26196-2

Date Collected: 10/04/12 00:00

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 15:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 15:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 15:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 15:06	1
1,1-Dichloroethane	**2.5**		1.0	0.38	ug/L			10/11/12 15:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 15:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 15:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 15:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 15:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 15:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 15:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 15:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 15:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 15:06	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 15:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 15:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 15:06	1
Acetone	ND		10	3.0	ug/L			10/11/12 15:06	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 15:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 15:06	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 15:06	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 15:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 15:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 15:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 15:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 15:06	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 15:06	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 15:06	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 15:06	1
cis-1,2-Dichloroethene	**58**		1.0	0.81	ug/L			10/11/12 15:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 15:06	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 15:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 15:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 15:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 15:06	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 15:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 15:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 15:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 15:06	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 15:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 15:06	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 15:06	1

Client Sample ID: DUP-100412

Lab Sample ID: 480-26196-2

Date Collected: 10/04/12 00:00

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**3.8**		1.0	0.90	ug/L			10/11/12 15:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 15:06	1
Trichloroethene	**2.0**		1.0	0.46	ug/L			10/11/12 15:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 15:06	1
Vinyl chloride	**47**		1.0	0.90	ug/L			10/11/12 15:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*10/11/12 15:06*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*10/11/12 15:06*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 15:06*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**130**		40	2.2	ug/L			10/08/12 09:17	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			10/05/12 21:04	1
Sulfate	**220**	**B**	100	30.0	mg/L			10/10/12 20:05	20
Alkalinity, Total	**233**		5.0	0.79	mg/L			10/09/12 14:08	1
Alkalinity, Bicarbonate	**233**		5.0	0.79	mg/L			10/09/12 14:08	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:08	1
Total Organic Carbon	**4.2**		1.0	0.43	mg/L			10/08/12 22:41	1

Client Sample ID: A1-PZ-2

Lab Sample ID: 480-26196-3

Date Collected: 10/04/12 11:00

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/12 22:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/12 22:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/12 22:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/12 22:39	1
1,1-Dichloroethane	**0.49**	**J**	1.0	0.38	ug/L			10/10/12 22:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/12 22:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/12 22:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/10/12 22:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/12 22:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/12 22:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/12 22:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/12 22:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/12 22:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/12 22:39	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/12 22:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/12 22:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/12 22:39	1
Acetone	ND		10	3.0	ug/L			10/10/12 22:39	1
Benzene	ND		1.0	0.41	ug/L			10/10/12 22:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/12 22:39	1
Bromoform	ND		1.0	0.26	ug/L			10/10/12 22:39	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: A1-PZ-2
Date Collected: 10/04/12 11:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			10/10/12 22:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/12 22:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/12 22:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/12 22:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/12 22:39	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/12 22:39	1
Chloroform	ND		1.0	0.34	ug/L			10/10/12 22:39	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/12 22:39	1
cis-1,2-Dichloroethene	**10**		1.0	0.81	ug/L			10/10/12 22:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/12 22:39	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/12 22:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/12 22:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/12 22:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/12 22:39	1
Methyl acetate	ND		1.0	0.50	ug/L			10/10/12 22:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/12 22:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/12 22:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/12 22:39	1
Styrene	ND		1.0	0.73	ug/L			10/10/12 22:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/12 22:39	1
Toluene	ND		1.0	0.51	ug/L			10/10/12 22:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/12 22:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/12 22:39	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/12 22:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/12 22:39	1
Vinyl chloride	**8.4**		1.0	0.90	ug/L			10/10/12 22:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/12 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*10/10/12 22:39*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/10/12 22:39*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/10/12 22:39*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2800**		200	11	ug/L			10/08/12 10:13	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			10/05/12 21:05	1
Sulfate	**2.4**	**J B**	5.0	1.5	mg/L			10/10/12 19:25	1
Alkalinity, Total	**299**		5.0	0.79	mg/L			10/09/12 14:14	1
Alkalinity, Bicarbonate	**299**		5.0	0.79	mg/L			10/09/12 14:14	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:14	1
Total Organic Carbon	**4.0**		1.0	0.43	mg/L			10/08/12 23:00	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: A2-PZ-1
Date Collected: 10/04/12 12:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250	210	ug/L			10/10/12 23:01	250
1,1,2,2-Tetrachloroethane	ND		250	53	ug/L			10/10/12 23:01	250
1,1,2-Trichloroethane	ND		250	58	ug/L			10/10/12 23:01	250
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	78	ug/L			10/10/12 23:01	250
1,1-Dichloroethane	**1300**		250	95	ug/L			10/10/12 23:01	250
1,1-Dichloroethene	ND		250	73	ug/L			10/10/12 23:01	250
1,2,4-Trichlorobenzene	ND		250	100	ug/L			10/10/12 23:01	250
1,2-Dibromo-3-Chloropropane	ND		250	98	ug/L			10/10/12 23:01	250
1,2-Dibromoethane	ND		250	180	ug/L			10/10/12 23:01	250
1,2-Dichlorobenzene	ND		250	200	ug/L			10/10/12 23:01	250
1,2-Dichloroethane	ND		250	53	ug/L			10/10/12 23:01	250
1,2-Dichloropropane	ND		250	180	ug/L			10/10/12 23:01	250
1,3-Dichlorobenzene	ND		250	200	ug/L			10/10/12 23:01	250
1,4-Dichlorobenzene	ND		250	210	ug/L			10/10/12 23:01	250
2-Hexanone	ND		1300	310	ug/L			10/10/12 23:01	250
2-Butanone (MEK)	ND		2500	330	ug/L			10/10/12 23:01	250
4-Methyl-2-pentanone (MIBK)	ND		1300	530	ug/L			10/10/12 23:01	250
Acetone	ND		2500	750	ug/L			10/10/12 23:01	250
Benzene	ND		250	100	ug/L			10/10/12 23:01	250
Bromodichloromethane	ND		250	98	ug/L			10/10/12 23:01	250
Bromoform	ND		250	65	ug/L			10/10/12 23:01	250
Bromomethane	ND		250	170	ug/L			10/10/12 23:01	250
Carbon disulfide	ND		250	48	ug/L			10/10/12 23:01	250
Carbon tetrachloride	ND		250	68	ug/L			10/10/12 23:01	250
Chlorobenzene	ND		250	190	ug/L			10/10/12 23:01	250
Dibromochloromethane	ND		250	80	ug/L			10/10/12 23:01	250
Chloroethane	ND		250	80	ug/L			10/10/12 23:01	250
Chloroform	ND		250	85	ug/L			10/10/12 23:01	250
Chloromethane	ND		250	88	ug/L			10/10/12 23:01	250
cis-1,2-Dichloroethene	**23000**		250	200	ug/L			10/10/12 23:01	250
cis-1,3-Dichloropropene	ND		250	90	ug/L			10/10/12 23:01	250
Cyclohexane	ND		250	45	ug/L			10/10/12 23:01	250
Dichlorodifluoromethane	ND		250	170	ug/L			10/10/12 23:01	250
Ethylbenzene	ND		250	190	ug/L			10/10/12 23:01	250
Isopropylbenzene	ND		250	200	ug/L			10/10/12 23:01	250
Methyl acetate	ND		250	130	ug/L			10/10/12 23:01	250
Methyl tert-butyl ether	ND		250	40	ug/L			10/10/12 23:01	250
Methylcyclohexane	ND		250	40	ug/L			10/10/12 23:01	250
Methylene Chloride	ND		250	110	ug/L			10/10/12 23:01	250
Styrene	ND		250	180	ug/L			10/10/12 23:01	250
Tetrachloroethene	ND		250	90	ug/L			10/10/12 23:01	250
Toluene	ND		250	130	ug/L			10/10/12 23:01	250
trans-1,2-Dichloroethene	ND		250	230	ug/L			10/10/12 23:01	250
trans-1,3-Dichloropropene	ND		250	93	ug/L			10/10/12 23:01	250
Trichloroethene	**1500**		250	120	ug/L			10/10/12 23:01	250
Trichlorofluoromethane	ND		250	220	ug/L			10/10/12 23:01	250
Vinyl chloride	**1300**		250	230	ug/L			10/10/12 23:01	250
Xylenes, Total	ND		500	170	ug/L			10/10/12 23:01	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*10/10/12 23:01*	*250*

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: A2-PZ-1

Date Collected: 10/04/12 12:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*106*		*71 - 126*		*10/10/12 23:01*	*250*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*10/10/12 23:01*	*250*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**800**		200	11	ug/L			10/08/12 10:30	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			10/05/12 21:06	1
Sulfate	**75.9**	**B**	25.0	7.5	mg/L			10/12/12 15:09	5
Alkalinity, Total	**474**		5.0	0.79	mg/L			10/09/12 14:22	1
Alkalinity, Bicarbonate	**474**		5.0	0.79	mg/L			10/09/12 14:22	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:22	1
Total Organic Carbon	**6.9**		1.0	0.43	mg/L			10/08/12 23:20	1

Client Sample ID: A2-PZ-2

Date Collected: 10/03/12 17:41
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			10/11/12 15:27	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			10/11/12 15:27	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			10/11/12 15:27	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			10/11/12 15:27	10
1,1-Dichloroethane	ND		10	3.8	ug/L			10/11/12 15:27	10
1,1-Dichloroethene	ND		10	2.9	ug/L			10/11/12 15:27	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			10/11/12 15:27	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			10/11/12 15:27	10
1,2-Dibromoethane	ND		10	7.3	ug/L			10/11/12 15:27	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			10/11/12 15:27	10
1,2-Dichloroethane	ND		10	2.1	ug/L			10/11/12 15:27	10
1,2-Dichloropropane	ND		10	7.2	ug/L			10/11/12 15:27	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			10/11/12 15:27	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			10/11/12 15:27	10
2-Hexanone	ND		50	12	ug/L			10/11/12 15:27	10
2-Butanone (MEK)	ND		100	13	ug/L			10/11/12 15:27	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			10/11/12 15:27	10
Acetone	ND		100	30	ug/L			10/11/12 15:27	10
Benzene	ND		10	4.1	ug/L			10/11/12 15:27	10
Bromodichloromethane	ND		10	3.9	ug/L			10/11/12 15:27	10
Bromoform	ND		10	2.6	ug/L			10/11/12 15:27	10
Bromomethane	ND		10	6.9	ug/L			10/11/12 15:27	10
Carbon disulfide	ND		10	1.9	ug/L			10/11/12 15:27	10
Carbon tetrachloride	ND		10	2.7	ug/L			10/11/12 15:27	10
Chlorobenzene	ND		10	7.5	ug/L			10/11/12 15:27	10
Dibromochloromethane	ND		10	3.2	ug/L			10/11/12 15:27	10
Chloroethane	ND		10	3.2	ug/L			10/11/12 15:27	10
Chloroform	ND		10	3.4	ug/L			10/11/12 15:27	10
Chloromethane	ND		10	3.5	ug/L			10/11/12 15:27	10

Client Sample ID: A2-PZ-2

Date Collected: 10/03/12 17:41
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**120**		10	8.1	ug/L			10/11/12 15:27	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			10/11/12 15:27	10
Cyclohexane	ND		10	1.8	ug/L			10/11/12 15:27	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			10/11/12 15:27	10
Ethylbenzene	ND		10	7.4	ug/L			10/11/12 15:27	10
Isopropylbenzene	ND		10	7.9	ug/L			10/11/12 15:27	10
Methyl acetate	ND		10	5.0	ug/L			10/11/12 15:27	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			10/11/12 15:27	10
Methylcyclohexane	ND		10	1.6	ug/L			10/11/12 15:27	10
Methylene Chloride	ND		10	4.4	ug/L			10/11/12 15:27	10
Styrene	ND		10	7.3	ug/L			10/11/12 15:27	10
Tetrachloroethene	**730**		10	3.6	ug/L			10/11/12 15:27	10
Toluene	ND		10	5.1	ug/L			10/11/12 15:27	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			10/11/12 15:27	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			10/11/12 15:27	10
Trichloroethene	**330**		10	4.6	ug/L			10/11/12 15:27	10
Trichlorofluoromethane	ND		10	8.8	ug/L			10/11/12 15:27	10
Vinyl chloride	ND		10	9.0	ug/L			10/11/12 15:27	10
Xylenes, Total	ND		20	6.6	ug/L			10/11/12 15:27	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*10/11/12 15:27*	*10*
Toluene-d8 (Surr)	*102*		*71 - 126*		*10/11/12 15:27*	*10*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/11/12 15:27*	*10*

Client Sample ID: MW-1

Date Collected: 10/04/12 16:15
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/12 23:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/12 23:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/12 23:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/12 23:44	1
1,1-Dichloroethane	**5.7**		1.0	0.38	ug/L			10/10/12 23:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/12 23:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/12 23:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/10/12 23:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/12 23:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/12 23:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/12 23:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/12 23:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/12 23:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/12 23:44	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/12 23:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/12 23:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/12 23:44	1
Acetone	ND		10	3.0	ug/L			10/10/12 23:44	1
Benzene	ND		1.0	0.41	ug/L			10/10/12 23:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/12 23:44	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: MW-1
Date Collected: 10/04/12 16:15
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			10/10/12 23:44	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/12 23:44	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/12 23:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/12 23:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/12 23:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/12 23:44	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/12 23:44	1
Chloroform	ND		1.0	0.34	ug/L			10/10/12 23:44	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/12 23:44	1
cis-1,2-Dichloroethene	**44**		1.0	0.81	ug/L			10/10/12 23:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/12 23:44	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/12 23:44	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/12 23:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/12 23:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/12 23:44	1
Methyl acetate	ND		1.0	0.50	ug/L			10/10/12 23:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/12 23:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/12 23:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/12 23:44	1
Styrene	ND		1.0	0.73	ug/L			10/10/12 23:44	1
Tetrachloroethene	**99**		1.0	0.36	ug/L			10/10/12 23:44	1
Toluene	ND		1.0	0.51	ug/L			10/10/12 23:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/12 23:44	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/12 23:44	1
Trichloroethene	**25**		1.0	0.46	ug/L			10/10/12 23:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/12 23:44	1
Vinyl chloride	**3.9**		1.0	0.90	ug/L			10/10/12 23:44	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/12 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/10/12 23:44*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/10/12 23:44*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/10/12 23:44*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**57**		40	2.2	ug/L			10/08/12 10:58	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**2.0**		0.050	0.011	mg/L			10/05/12 21:44	1
Sulfate	**176**	**B**	50.0	15.0	mg/L			10/12/12 17:52	10
Alkalinity, Total	**376**		5.0	0.79	mg/L			10/09/12 14:28	1
Alkalinity, Bicarbonate	**376**		5.0	0.79	mg/L			10/09/12 14:28	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:28	1
Total Organic Carbon	**2.3**		1.0	0.43	mg/L			10/08/12 23:40	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: MW-2
Date Collected: 10/03/12 15:05
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 00:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 00:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 00:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 00:06	1
1,1-Dichloroethane	**4.9**		1.0	0.38	ug/L			10/11/12 00:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 00:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 00:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 00:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 00:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 00:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 00:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 00:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 00:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 00:06	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 00:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 00:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 00:06	1
Acetone	ND		10	3.0	ug/L			10/11/12 00:06	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 00:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 00:06	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 00:06	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 00:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 00:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 00:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 00:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 00:06	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 00:06	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 00:06	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 00:06	1
cis-1,2-Dichloroethene	**14**		1.0	0.81	ug/L			10/11/12 00:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 00:06	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 00:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 00:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 00:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 00:06	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 00:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 00:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 00:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 00:06	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 00:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 00:06	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 00:06	1
trans-1,2-Dichloroethene	**1.7**		1.0	0.90	ug/L			10/11/12 00:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 00:06	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 00:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 00:06	1
Vinyl chloride	**38**		1.0	0.90	ug/L			10/11/12 00:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*10/11/12 00:06*	*1*

Client Sample ID: MW-2

Lab Sample ID: 480-26196-7

Date Collected: 10/03/12 15:05

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 00:06*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/11/12 00:06*	*1*

Client Sample ID: MW-3

Lab Sample ID: 480-26196-8

Date Collected: 10/04/12 15:05

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 00:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 00:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 00:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 00:27	1
1,1-Dichloroethane	**5.4**		1.0	0.38	ug/L			10/11/12 00:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 00:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 00:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 00:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 00:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 00:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 00:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 00:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 00:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 00:27	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 00:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 00:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 00:27	1
Acetone	ND		10	3.0	ug/L			10/11/12 00:27	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 00:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 00:27	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 00:27	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 00:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 00:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 00:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 00:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 00:27	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 00:27	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 00:27	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 00:27	1
cis-1,2-Dichloroethene	**46**		1.0	0.81	ug/L			10/11/12 00:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 00:27	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 00:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 00:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 00:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 00:27	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 00:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 00:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 00:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 00:27	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 00:27	1
Tetrachloroethene	**8.4**		1.0	0.36	ug/L			10/11/12 00:27	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 00:27	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: MW-3

Lab Sample ID: 480-26196-8

Date Collected: 10/04/12 15:05

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.91	J	1.0	0.90	ug/L			10/11/12 00:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 00:27	1
Trichloroethene	12		1.0	0.46	ug/L			10/11/12 00:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 00:27	1
Vinyl chloride	9.1		1.0	0.90	ug/L			10/11/12 00:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/11/12 00:27*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*10/11/12 00:27*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 00:27*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	18		4.0	0.22	ug/L			10/08/12 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.26		0.050	0.011	mg/L			10/05/12 21:45	1
Sulfate	151	B	50.0	15.0	mg/L			10/10/12 19:29	10
Alkalinity, Total	395		5.0	0.79	mg/L			10/09/12 14:36	1
Alkalinity, Bicarbonate	395		5.0	0.79	mg/L			10/09/12 14:36	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:36	1
Total Organic Carbon	2.7		1.0	0.43	mg/L			10/08/12 23:59	1

Client Sample ID: MW-4

Lab Sample ID: 480-26196-9

Date Collected: 10/03/12 13:55

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 00:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 00:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 00:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 00:49	1
1,1-Dichloroethane	1.0		1.0	0.38	ug/L			10/11/12 00:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 00:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 00:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 00:49	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 00:49	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 00:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 00:49	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 00:49	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 00:49	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 00:49	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 00:49	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 00:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 00:49	1
Acetone	ND		10	3.0	ug/L			10/11/12 00:49	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 00:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 00:49	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 00:49	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: MW-4

Lab Sample ID: 480-26196-9

Date Collected: 10/03/12 13:55

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 00:49	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 00:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 00:49	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 00:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 00:49	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 00:49	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 00:49	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 00:49	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.81	ug/L			10/11/12 00:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 00:49	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 00:49	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 00:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 00:49	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 00:49	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 00:49	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 00:49	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 00:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 00:49	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 00:49	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 00:49	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 00:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 00:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 00:49	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 00:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 00:49	1
Vinyl chloride	**4.8**		1.0	0.90	ug/L			10/11/12 00:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/11/12 00:49*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/11/12 00:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/11/12 00:49*	*1*

Client Sample ID: MW-5

Lab Sample ID: 480-26196-10

Date Collected: 10/02/12 15:20

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 01:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 01:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 01:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 01:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 01:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 01:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 01:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 01:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 01:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 01:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 01:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 01:10	1

Client Sample ID: MW-5 — **Lab Sample ID: 480-26196-10**
Date Collected: 10/02/12 15:20 — **Matrix: Water**
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 01:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 01:10	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 01:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 01:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 01:10	1
Acetone	ND		10	3.0	ug/L			10/11/12 01:10	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 01:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 01:10	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 01:10	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 01:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 01:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 01:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 01:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 01:10	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 01:10	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 01:10	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 01:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 01:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 01:10	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 01:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 01:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 01:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 01:10	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 01:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 01:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 01:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 01:10	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 01:10	1
Tetrachloroethene	**0.55**	**J**	1.0	0.36	ug/L			10/11/12 01:10	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 01:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 01:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 01:10	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 01:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 01:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 01:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*10/11/12 01:10*	*1*
Toluene-d8 (Surr)	*104*		*71 - 126*		*10/11/12 01:10*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/11/12 01:10*	*1*

Client Sample ID: MW-10 — **Lab Sample ID: 480-26196-11**
Date Collected: 10/04/12 13:30 — **Matrix: Water**
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 01:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 01:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 01:32	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: MW-10
Date Collected: 10/04/12 13:30
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 01:32	1
1,1-Dichloroethane	**3.5**		1.0	0.38	ug/L			10/11/12 01:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 01:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 01:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 01:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 01:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 01:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 01:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 01:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 01:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 01:32	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 01:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 01:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 01:32	1
Acetone	ND		10	3.0	ug/L			10/11/12 01:32	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 01:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 01:32	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 01:32	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 01:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 01:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 01:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 01:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 01:32	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 01:32	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 01:32	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 01:32	1
cis-1,2-Dichloroethene	**45**		1.0	0.81	ug/L			10/11/12 01:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 01:32	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 01:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 01:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 01:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 01:32	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 01:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 01:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 01:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 01:32	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 01:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 01:32	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 01:32	1
trans-1,2-Dichloroethene	**3.2**		1.0	0.90	ug/L			10/11/12 01:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 01:32	1
Trichloroethene	**1.7**		1.0	0.46	ug/L			10/11/12 01:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 01:32	1
Vinyl chloride	**38**		1.0	0.90	ug/L			10/11/12 01:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*10/11/12 01:32*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/11/12 01:32*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 01:32*	*1*

Client Sample ID: MW-10

Lab Sample ID: 480-26196-11

Date Collected: 10/04/12 13:30

Matrix: Water

Date Received: 10/05/12 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**300**		80	4.4	ug/L			10/08/12 11:32	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			10/05/12 21:09	1
Sulfate	**203**	**B**	50.0	15.0	mg/L			10/12/12 17:52	10
Alkalinity, Total	**234**		5.0	0.79	mg/L			10/09/12 14:53	1
Alkalinity, Bicarbonate	**234**		5.0	0.79	mg/L			10/09/12 14:53	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:53	1
Total Organic Carbon	**3.9**		1.0	0.43	mg/L			10/09/12 00:38	1

Client Sample ID: MW-18

Lab Sample ID: 480-26196-12

Date Collected: 10/03/12 16:00

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			10/12/12 00:05	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			10/12/12 00:05	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			10/12/12 00:05	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			10/12/12 00:05	5
1,1-Dichloroethane	**18**		5.0	1.9	ug/L			10/12/12 00:05	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			10/12/12 00:05	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			10/12/12 00:05	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			10/12/12 00:05	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			10/12/12 00:05	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			10/12/12 00:05	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			10/12/12 00:05	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			10/12/12 00:05	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			10/12/12 00:05	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			10/12/12 00:05	5
2-Hexanone	ND		25	6.2	ug/L			10/12/12 00:05	5
2-Butanone (MEK)	ND		50	6.6	ug/L			10/12/12 00:05	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			10/12/12 00:05	5
Acetone	ND		50	15	ug/L			10/12/12 00:05	5
Benzene	ND		5.0	2.1	ug/L			10/12/12 00:05	5
Bromodichloromethane	ND		5.0	2.0	ug/L			10/12/12 00:05	5
Bromoform	ND		5.0	1.3	ug/L			10/12/12 00:05	5
Bromomethane	ND		5.0	3.5	ug/L			10/12/12 00:05	5
Carbon disulfide	ND		5.0	0.95	ug/L			10/12/12 00:05	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			10/12/12 00:05	5
Chlorobenzene	ND		5.0	3.8	ug/L			10/12/12 00:05	5
Dibromochloromethane	ND		5.0	1.6	ug/L			10/12/12 00:05	5
Chloroethane	ND		5.0	1.6	ug/L			10/12/12 00:05	5
Chloroform	ND		5.0	1.7	ug/L			10/12/12 00:05	5
Chloromethane	ND		5.0	1.8	ug/L			10/12/12 00:05	5
cis-1,2-Dichloroethene	**420**		5.0	4.1	ug/L			10/12/12 00:05	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			10/12/12 00:05	5
Cyclohexane	ND		5.0	0.90	ug/L			10/12/12 00:05	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			10/12/12 00:05	5
Ethylbenzene	ND		5.0	3.7	ug/L			10/12/12 00:05	5

Client Sample ID: MW-18

Lab Sample ID: 480-26196-12

Date Collected: 10/03/12 16:00

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	4.0	ug/L			10/12/12 00:05	5
Methyl acetate	ND		5.0	2.5	ug/L			10/12/12 00:05	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			10/12/12 00:05	5
Methylcyclohexane	ND		5.0	0.80	ug/L			10/12/12 00:05	5
Methylene Chloride	ND		5.0	2.2	ug/L			10/12/12 00:05	5
Styrene	ND		5.0	3.7	ug/L			10/12/12 00:05	5
Tetrachloroethene	**11**		5.0	1.8	ug/L			10/12/12 00:05	5
Toluene	ND		5.0	2.6	ug/L			10/12/12 00:05	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			10/12/12 00:05	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			10/12/12 00:05	5
Trichloroethene	**80**		5.0	2.3	ug/L			10/12/12 00:05	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			10/12/12 00:05	5
Vinyl chloride	ND		5.0	4.5	ug/L			10/12/12 00:05	5
Xylenes, Total	ND		10	3.3	ug/L			10/12/12 00:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/12/12 00:05*	*5*
Toluene-d8 (Surr)	*107*		*71 - 126*		*10/12/12 00:05*	*5*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*10/12/12 00:05*	*5*

Client Sample ID: MW-20

Lab Sample ID: 480-26196-13

Date Collected: 10/02/12 14:55

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/12/12 00:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/12/12 00:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/12/12 00:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/12/12 00:28	1
1,1-Dichloroethane	**0.41**	**J**	1.0	0.38	ug/L			10/12/12 00:28	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/12/12 00:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/12/12 00:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/12/12 00:28	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/12/12 00:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/12/12 00:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/12/12 00:28	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/12/12 00:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/12/12 00:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/12/12 00:28	1
2-Hexanone	ND		5.0	1.2	ug/L			10/12/12 00:28	1
2-Butanone (MEK)	**480**		10	1.3	ug/L			10/12/12 00:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/12/12 00:28	1
Acetone	**78**		10	3.0	ug/L			10/12/12 00:28	1
Benzene	ND		1.0	0.41	ug/L			10/12/12 00:28	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/12/12 00:28	1
Bromoform	ND		1.0	0.26	ug/L			10/12/12 00:28	1
Bromomethane	ND		1.0	0.69	ug/L			10/12/12 00:28	1
Carbon disulfide	**0.76**	**J**	1.0	0.19	ug/L			10/12/12 00:28	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/12/12 00:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/12/12 00:28	1

Client Sample ID: MW-20

Date Collected: 10/02/12 14:55
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.32	ug/L			10/12/12 00:28	1
Chloroethane	**4.3**		1.0	0.32	ug/L			10/12/12 00:28	1
Chloroform	ND		1.0	0.34	ug/L			10/12/12 00:28	1
Chloromethane	ND		1.0	0.35	ug/L			10/12/12 00:28	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.81	ug/L			10/12/12 00:28	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/12/12 00:28	1
Cyclohexane	ND		1.0	0.18	ug/L			10/12/12 00:28	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/12/12 00:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/12/12 00:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/12/12 00:28	1
Methyl acetate	ND		1.0	0.50	ug/L			10/12/12 00:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/12/12 00:28	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/12/12 00:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/12/12 00:28	1
Styrene	ND		1.0	0.73	ug/L			10/12/12 00:28	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/12/12 00:28	1
Toluene	ND		1.0	0.51	ug/L			10/12/12 00:28	1
trans-1,2-Dichloroethene	**7.1**		1.0	0.90	ug/L			10/12/12 00:28	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/12/12 00:28	1
Trichloroethene	ND		1.0	0.46	ug/L			10/12/12 00:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/12/12 00:28	1
Vinyl chloride	**1.9**		1.0	0.90	ug/L			10/12/12 00:28	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/12/12 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*66 - 137*		*10/12/12 00:28*	*1*
Toluene-d8 (Surr)	*108*		*71 - 126*		*10/12/12 00:28*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*10/12/12 00:28*	*1*

Client Sample ID: MW-21

Date Collected: 10/02/12 13:55
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 02:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 02:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 02:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 02:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 02:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 02:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 02:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 02:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 02:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 02:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 02:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 02:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 02:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 02:37	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 02:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 02:37	1

Client Sample ID: MW-21

Lab Sample ID: 480-26196-14

Date Collected: 10/02/12 13:55

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 02:37	1
Acetone	ND		10	3.0	ug/L			10/11/12 02:37	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 02:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 02:37	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 02:37	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 02:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 02:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 02:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 02:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 02:37	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 02:37	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 02:37	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 02:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 02:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 02:37	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 02:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 02:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 02:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 02:37	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 02:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 02:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 02:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 02:37	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 02:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 02:37	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 02:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 02:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 02:37	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 02:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 02:37	1
Vinyl chloride	**13**		1.0	0.90	ug/L			10/11/12 02:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 02:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*10/11/12 02:37*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/11/12 02:37*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/11/12 02:37*	*1*

Client Sample ID: PZ-5

Lab Sample ID: 480-26196-15

Date Collected: 10/02/12 17:48

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			10/11/12 02:59	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			10/11/12 02:59	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			10/11/12 02:59	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			10/11/12 02:59	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			10/11/12 02:59	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			10/11/12 02:59	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			10/11/12 02:59	4

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-5
Date Collected: 10/02/12 17:48
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			10/11/12 02:59	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			10/11/12 02:59	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			10/11/12 02:59	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			10/11/12 02:59	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			10/11/12 02:59	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			10/11/12 02:59	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			10/11/12 02:59	4
2-Hexanone	ND		20	5.0	ug/L			10/11/12 02:59	4
2-Butanone (MEK)	ND		40	5.3	ug/L			10/11/12 02:59	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			10/11/12 02:59	4
Acetone	ND		40	12	ug/L			10/11/12 02:59	4
Benzene	ND		4.0	1.6	ug/L			10/11/12 02:59	4
Bromodichloromethane	ND		4.0	1.6	ug/L			10/11/12 02:59	4
Bromoform	ND		4.0	1.0	ug/L			10/11/12 02:59	4
Bromomethane	ND		4.0	2.8	ug/L			10/11/12 02:59	4
Carbon disulfide	ND		4.0	0.76	ug/L			10/11/12 02:59	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			10/11/12 02:59	4
Chlorobenzene	ND		4.0	3.0	ug/L			10/11/12 02:59	4
Dibromochloromethane	ND		4.0	1.3	ug/L			10/11/12 02:59	4
Chloroethane	ND		4.0	1.3	ug/L			10/11/12 02:59	4
Chloroform	ND		4.0	1.4	ug/L			10/11/12 02:59	4
Chloromethane	ND		4.0	1.4	ug/L			10/11/12 02:59	4
cis-1,2-Dichloroethene	**160**		4.0	3.2	ug/L			10/11/12 02:59	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			10/11/12 02:59	4
Cyclohexane	ND		4.0	0.72	ug/L			10/11/12 02:59	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			10/11/12 02:59	4
Ethylbenzene	**3.8**	**J**	4.0	3.0	ug/L			10/11/12 02:59	4
Isopropylbenzene	ND		4.0	3.2	ug/L			10/11/12 02:59	4
Methyl acetate	ND		4.0	2.0	ug/L			10/11/12 02:59	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			10/11/12 02:59	4
Methylcyclohexane	ND		4.0	0.64	ug/L			10/11/12 02:59	4
Methylene Chloride	ND		4.0	1.8	ug/L			10/11/12 02:59	4
Styrene	ND		4.0	2.9	ug/L			10/11/12 02:59	4
Tetrachloroethene	**7.2**		4.0	1.4	ug/L			10/11/12 02:59	4
Toluene	ND		4.0	2.0	ug/L			10/11/12 02:59	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			10/11/12 02:59	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			10/11/12 02:59	4
Trichloroethene	**3.9**	**J**	4.0	1.8	ug/L			10/11/12 02:59	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			10/11/12 02:59	4
Vinyl chloride	**27**		4.0	3.6	ug/L			10/11/12 02:59	4
Xylenes, Total	**14**		8.0	2.6	ug/L			10/11/12 02:59	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/11/12 02:59*	*4*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 02:59*	*4*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/11/12 02:59*	*4*

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-6
Date Collected: 10/02/12 17:30
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 03:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 03:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 03:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 03:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 03:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 03:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 03:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 03:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 03:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 03:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 03:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 03:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 03:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 03:20	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 03:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 03:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 03:20	1
Acetone	ND		10	3.0	ug/L			10/11/12 03:20	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 03:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 03:20	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 03:20	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 03:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 03:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 03:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 03:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 03:20	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 03:20	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 03:20	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 03:20	1
cis-1,2-Dichloroethene	**21**		1.0	0.81	ug/L			10/11/12 03:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 03:20	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 03:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 03:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 03:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 03:20	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 03:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 03:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 03:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 03:20	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 03:20	1
Tetrachloroethene	**7.2**		1.0	0.36	ug/L			10/11/12 03:20	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 03:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 03:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 03:20	1
Trichloroethene	**20**		1.0	0.46	ug/L			10/11/12 03:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 03:20	1
Vinyl chloride	**2.1**		1.0	0.90	ug/L			10/11/12 03:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*10/11/12 03:20*	*1*

Client Sample ID: PZ-6

Date Collected: 10/02/12 17:30
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 03:20*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/11/12 03:20*	*1*

Client Sample ID: PZ-7

Date Collected: 10/02/12 19:05
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 03:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 03:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 03:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 03:42	1
1,1-Dichloroethane	**0.58**	**J**	1.0	0.38	ug/L			10/11/12 03:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 03:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 03:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 03:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 03:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 03:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 03:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 03:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 03:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 03:42	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 03:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 03:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 03:42	1
Acetone	ND		10	3.0	ug/L			10/11/12 03:42	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 03:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 03:42	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 03:42	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 03:42	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 03:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 03:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 03:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 03:42	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 03:42	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 03:42	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 03:42	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 03:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 03:42	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 03:42	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 03:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 03:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 03:42	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 03:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 03:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 03:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 03:42	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 03:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 03:42	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 03:42	1

Client Sample ID: PZ-7

Lab Sample ID: 480-26196-17

Date Collected: 10/02/12 19:05

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 03:42	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 03:42	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 03:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 03:42	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 03:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*10/11/12 03:42*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 03:42*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*10/11/12 03:42*	*1*

Client Sample ID: PZ-8

Lab Sample ID: 480-26196-18

Date Collected: 10/03/12 12:45

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			10/11/12 04:03	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			10/11/12 04:03	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			10/11/12 04:03	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			10/11/12 04:03	5
1,1-Dichloroethane	**4.2**	**J**	5.0	1.9	ug/L			10/11/12 04:03	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			10/11/12 04:03	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			10/11/12 04:03	5
1,2-Dibromo-3-Chloropropane	ND		5.0	2.0	ug/L			10/11/12 04:03	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			10/11/12 04:03	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			10/11/12 04:03	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			10/11/12 04:03	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			10/11/12 04:03	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			10/11/12 04:03	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			10/11/12 04:03	5
2-Hexanone	ND		25	6.2	ug/L			10/11/12 04:03	5
2-Butanone (MEK)	ND		50	6.6	ug/L			10/11/12 04:03	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			10/11/12 04:03	5
Acetone	ND		50	15	ug/L			10/11/12 04:03	5
Benzene	ND		5.0	2.1	ug/L			10/11/12 04:03	5
Bromodichloromethane	ND		5.0	2.0	ug/L			10/11/12 04:03	5
Bromoform	ND		5.0	1.3	ug/L			10/11/12 04:03	5
Bromomethane	ND		5.0	3.5	ug/L			10/11/12 04:03	5
Carbon disulfide	ND		5.0	0.95	ug/L			10/11/12 04:03	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			10/11/12 04:03	5
Chlorobenzene	ND		5.0	3.8	ug/L			10/11/12 04:03	5
Dibromochloromethane	ND		5.0	1.6	ug/L			10/11/12 04:03	5
Chloroethane	ND		5.0	1.6	ug/L			10/11/12 04:03	5
Chloroform	ND		5.0	1.7	ug/L			10/11/12 04:03	5
Chloromethane	ND		5.0	1.8	ug/L			10/11/12 04:03	5
cis-1,2-Dichloroethene	**56**		5.0	4.1	ug/L			10/11/12 04:03	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			10/11/12 04:03	5
Cyclohexane	ND		5.0	0.90	ug/L			10/11/12 04:03	5
Dichlorodifluoromethane	ND		5.0	3.4	ug/L			10/11/12 04:03	5

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-8

Lab Sample ID: 480-26196-18

Date Collected: 10/03/12 12:45

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		5.0	3.7	ug/L			10/11/12 04:03	5
Isopropylbenzene	ND		5.0	4.0	ug/L			10/11/12 04:03	5
Methyl acetate	ND		5.0	2.5	ug/L			10/11/12 04:03	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			10/11/12 04:03	5
Methylcyclohexane	ND		5.0	0.80	ug/L			10/11/12 04:03	5
Methylene Chloride	ND		5.0	2.2	ug/L			10/11/12 04:03	5
Styrene	ND		5.0	3.7	ug/L			10/11/12 04:03	5
Tetrachloroethene	**380**		5.0	1.8	ug/L			10/11/12 04:03	5
Toluene	ND		5.0	2.6	ug/L			10/11/12 04:03	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			10/11/12 04:03	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			10/11/12 04:03	5
Trichloroethene	**320**		5.0	2.3	ug/L			10/11/12 04:03	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			10/11/12 04:03	5
Vinyl chloride	ND		5.0	4.5	ug/L			10/11/12 04:03	5
Xylenes, Total	ND		10	3.3	ug/L			10/11/12 04:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*10/11/12 04:03*	*5*
Toluene-d8 (Surr)	*101*		*71 - 126*		*10/11/12 04:03*	*5*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 04:03*	*5*

Client Sample ID: PZ-11R

Lab Sample ID: 480-26196-19

Date Collected: 10/02/12 15:40

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 04:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 04:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 04:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 04:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 04:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 04:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 04:25	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 04:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 04:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 04:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 04:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 04:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 04:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 04:25	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 04:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 04:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 04:25	1
Acetone	ND		10	3.0	ug/L			10/11/12 04:25	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 04:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 04:25	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 04:25	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 04:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 04:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 04:25	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-11R

Lab Sample ID: 480-26196-19

Date Collected: 10/02/12 15:40
Matrix: Water
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 04:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 04:25	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 04:25	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 04:25	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 04:25	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.81	ug/L			10/11/12 04:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 04:25	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 04:25	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 04:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 04:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 04:25	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 04:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 04:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 04:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 04:25	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 04:25	1
Tetrachloroethene	**2.8**		1.0	0.36	ug/L			10/11/12 04:25	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 04:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 04:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 04:25	1
Trichloroethene	**6.0**		1.0	0.46	ug/L			10/11/12 04:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 04:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 04:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/11/12 04:25*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 04:25*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 04:25*	*1*

Client Sample ID: PZ-13R

Lab Sample ID: 480-26196-20

Date Collected: 10/02/12 16:05
Matrix: Water
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 04:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 04:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 04:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 04:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 04:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 04:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 04:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 04:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 04:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 04:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 04:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 04:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 04:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 04:47	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 04:47	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-13R
Date Collected: 10/02/12 16:05
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 04:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 04:47	1
Acetone	ND		10	3.0	ug/L			10/11/12 04:47	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 04:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 04:47	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 04:47	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 04:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 04:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 04:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 04:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 04:47	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 04:47	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 04:47	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 04:47	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.81	ug/L			10/11/12 04:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 04:47	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 04:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 04:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 04:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 04:47	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 04:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 04:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 04:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 04:47	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 04:47	1
Tetrachloroethene	**0.59**	**J**	1.0	0.36	ug/L			10/11/12 04:47	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 04:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 04:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 04:47	1
Trichloroethene	**3.5**		1.0	0.46	ug/L			10/11/12 04:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 04:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 04:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*10/11/12 04:47*	*1*
Toluene-d8 (Surr)	*104*		*71 - 126*		*10/11/12 04:47*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 04:47*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**6.6**		4.0	0.22	ug/L			10/08/12 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND	H	0.050	0.011	mg/L			10/05/12 21:11	1
Sulfate	**67.6**	**B**	25.0	7.5	mg/L			10/10/12 19:32	5
Alkalinity, Total	**495**		5.0	0.79	mg/L			10/09/12 15:07	1
Alkalinity, Bicarbonate	**495**		5.0	0.79	mg/L			10/09/12 15:07	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 15:07	1
Total Organic Carbon	ND		1.0	0.43	mg/L			10/09/12 17:53	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-18
Date Collected: 10/03/12 11:45
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 03:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 03:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 03:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 03:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 03:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 03:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 03:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 03:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 03:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 03:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 03:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 03:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 03:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 03:52	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 03:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 03:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 03:52	1
Acetone	ND		10	3.0	ug/L			10/11/12 03:52	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 03:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 03:52	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 03:52	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 03:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 03:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 03:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 03:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 03:52	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 03:52	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 03:52	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 03:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 03:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 03:52	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 03:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 03:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 03:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 03:52	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 03:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 03:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 03:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 03:52	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 03:52	1
Tetrachloroethene	**0.41**	**J**	1.0	0.36	ug/L			10/11/12 03:52	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 03:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 03:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 03:52	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 03:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 03:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 03:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/11/12 03:52*	*1*

Client Sample ID: PZ-18

Lab Sample ID: 480-26196-21

Date Collected: 10/03/12 11:45

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*110*		*71 - 126*		*10/11/12 03:52*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*10/11/12 03:52*	*1*

Client Sample ID: PZ-26

Lab Sample ID: 480-26196-22

Date Collected: 10/03/12 16:50

Matrix: Water

Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 04:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 04:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 04:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 04:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 04:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 04:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 04:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 04:16	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 04:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 04:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 04:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 04:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 04:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 04:16	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 04:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 04:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 04:16	1
Acetone	ND		10	3.0	ug/L			10/11/12 04:16	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 04:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 04:16	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 04:16	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 04:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 04:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 04:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 04:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 04:16	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 04:16	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 04:16	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 04:16	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 04:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 04:16	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 04:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 04:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 04:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 04:16	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 04:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 04:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 04:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 04:16	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 04:16	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 04:16	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 04:16	1

Client Sample ID: PZ-26

Date Collected: 10/03/12 16:50
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 04:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 04:16	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 04:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 04:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 04:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*10/11/12 04:16*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/11/12 04:16*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*10/11/12 04:16*	*1*

Client Sample ID: MW-14BR

Date Collected: 10/05/12 16:05
Date Received: 10/06/12 10:25

Lab Sample ID: 480-26289-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/12/12 03:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/12/12 03:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/12/12 03:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/12/12 03:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/12/12 03:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/12/12 03:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/12/12 03:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/12/12 03:04	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/12/12 03:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/12/12 03:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/12/12 03:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/12/12 03:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/12/12 03:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/12/12 03:04	1
2-Hexanone	ND		5.0	1.2	ug/L			10/12/12 03:04	1
2-Butanone (MEK)	**2.7**	**J**	10	1.3	ug/L			10/12/12 03:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/12/12 03:04	1
Acetone	**16**		10	3.0	ug/L			10/12/12 03:04	1
Benzene	ND		1.0	0.41	ug/L			10/12/12 03:04	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/12/12 03:04	1
Bromoform	ND		1.0	0.26	ug/L			10/12/12 03:04	1
Bromomethane	ND		1.0	0.69	ug/L			10/12/12 03:04	1
Carbon disulfide	**0.20**	**J**	1.0	0.19	ug/L			10/12/12 03:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/12/12 03:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/12/12 03:04	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/12/12 03:04	1
Chloroethane	ND		1.0	0.32	ug/L			10/12/12 03:04	1
Chloroform	ND		1.0	0.34	ug/L			10/12/12 03:04	1
Chloromethane	ND		1.0	0.35	ug/L			10/12/12 03:04	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/12/12 03:04	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/12/12 03:04	1
Cyclohexane	ND		1.0	0.18	ug/L			10/12/12 03:04	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/12/12 03:04	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: MW-14BR

Lab Sample ID: 480-26289-1

Date Collected: 10/05/12 16:05

Matrix: Water

Date Received: 10/06/12 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L			10/12/12 03:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/12/12 03:04	1
Methyl acetate	ND		1.0	0.50	ug/L			10/12/12 03:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/12/12 03:04	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/12/12 03:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/12/12 03:04	1
Styrene	ND		1.0	0.73	ug/L			10/12/12 03:04	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/12/12 03:04	1
Toluene	ND		1.0	0.51	ug/L			10/12/12 03:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/12/12 03:04	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/12/12 03:04	1
Trichloroethene	ND		1.0	0.46	ug/L			10/12/12 03:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/12/12 03:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/12/12 03:04	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/12/12 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*10/12/12 03:04*	*1*
Toluene-d8 (Surr)	*109*		*71 - 126*		*10/12/12 03:04*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/12/12 03:04*	*1*

Client Sample ID: TB-100512

Lab Sample ID: 480-26289-2

Date Collected: 10/05/12 00:00

Matrix: Water

Date Received: 10/06/12 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/12/12 03:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/12/12 03:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/12/12 03:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/12/12 03:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/12/12 03:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/12/12 03:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/12/12 03:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/12/12 03:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/12/12 03:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/12/12 03:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/12/12 03:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/12/12 03:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/12/12 03:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/12/12 03:26	1
2-Hexanone	ND		5.0	1.2	ug/L			10/12/12 03:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/12/12 03:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/12/12 03:26	1
Acetone	ND		10	3.0	ug/L			10/12/12 03:26	1
Benzene	ND		1.0	0.41	ug/L			10/12/12 03:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/12/12 03:26	1
Bromoform	ND		1.0	0.26	ug/L			10/12/12 03:26	1
Bromomethane	ND		1.0	0.69	ug/L			10/12/12 03:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/12/12 03:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/12/12 03:26	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: TB-100512
Date Collected: 10/05/12 00:00
Date Received: 10/06/12 10:25

Lab Sample ID: 480-26289-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			10/12/12 03:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/12/12 03:26	1
Chloroethane	ND		1.0	0.32	ug/L			10/12/12 03:26	1
Chloroform	ND		1.0	0.34	ug/L			10/12/12 03:26	1
Chloromethane	ND		1.0	0.35	ug/L			10/12/12 03:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/12/12 03:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/12/12 03:26	1
Cyclohexane	ND		1.0	0.18	ug/L			10/12/12 03:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/12/12 03:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/12/12 03:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/12/12 03:26	1
Methyl acetate	ND		1.0	0.50	ug/L			10/12/12 03:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/12/12 03:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/12/12 03:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/12/12 03:26	1
Styrene	ND		1.0	0.73	ug/L			10/12/12 03:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/12/12 03:26	1
Toluene	ND		1.0	0.51	ug/L			10/12/12 03:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/12/12 03:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/12/12 03:26	1
Trichloroethene	ND		1.0	0.46	ug/L			10/12/12 03:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/12/12 03:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/12/12 03:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/12/12 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/12/12 03:26*	*1*
Toluene-d8 (Surr)	*106*		*71 - 126*		*10/12/12 03:26*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*10/12/12 03:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-84839/5
Matrix: Water
Analysis Batch: 84839

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/12 21:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/12 21:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/12 21:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/12 21:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/10/12 21:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/12 21:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/12 21:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/10/12 21:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/12 21:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/12 21:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/12 21:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/12 21:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/12 21:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/12 21:24	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/12 21:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/12 21:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/12 21:24	1
Acetone	ND		10	3.0	ug/L			10/10/12 21:24	1
Benzene	ND		1.0	0.41	ug/L			10/10/12 21:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/12 21:24	1
Bromoform	ND		1.0	0.26	ug/L			10/10/12 21:24	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/12 21:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/12 21:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/12 21:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/12 21:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/12 21:24	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/12 21:24	1
Chloroform	ND		1.0	0.34	ug/L			10/10/12 21:24	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/12 21:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/10/12 21:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/12 21:24	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/12 21:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/12 21:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/12 21:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/12 21:24	1
Methyl acetate	ND		1.0	0.50	ug/L			10/10/12 21:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/12 21:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/12 21:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/12 21:24	1
Styrene	ND		1.0	0.73	ug/L			10/10/12 21:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/12 21:24	1
Toluene	ND		1.0	0.51	ug/L			10/10/12 21:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/12 21:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/12 21:24	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/12 21:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/12 21:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/10/12 21:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/12 21:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-84839/5
Matrix: Water
Analysis Batch: 84839

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		10/10/12 21:24	1
Toluene-d8 (Surr)	104		71 - 126		10/10/12 21:24	1
4-Bromofluorobenzene (Surr)	93		73 - 120		10/10/12 21:24	1

Lab Sample ID: LCS 480-84839/4
Matrix: Water
Analysis Batch: 84839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	25.4		ug/L		102	71 - 129
1,1-Dichloroethene	25.0	21.8		ug/L		87	58 - 121
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	25.8		ug/L		103	75 - 127
Benzene	25.0	25.5		ug/L		102	71 - 124
Chlorobenzene	25.0	24.5		ug/L		98	72 - 120
cis-1,2-Dichloroethene	25.0	24.7		ug/L		99	74 - 124
Ethylbenzene	25.0	25.6		ug/L		103	77 - 123
Methyl tert-butyl ether	25.0	21.5		ug/L		86	64 - 127
Tetrachloroethene	25.0	25.6		ug/L		102	74 - 122
Toluene	25.0	24.5		ug/L		98	80 - 122
trans-1,2-Dichloroethene	25.0	26.1		ug/L		104	73 - 127
Trichloroethene	25.0	24.6		ug/L		98	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		66 - 137
Toluene-d8 (Surr)	104		71 - 126
4-Bromofluorobenzene (Surr)	99		73 - 120

Lab Sample ID: 480-26196-4 MS
Matrix: Water
Analysis Batch: 84839

Client Sample ID: A2-PZ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	1300		6250	7890		ug/L		105	71 - 129
1,1-Dichloroethene	ND		6250	5520		ug/L		88	58 - 121
1,2-Dichlorobenzene	ND		6250	6120		ug/L		98	80 - 124
1,2-Dichloroethane	ND		6250	6560		ug/L		105	75 - 127
Benzene	ND		6250	6450		ug/L		103	71 - 124
Chlorobenzene	ND		6250	6190		ug/L		99	72 - 120
cis-1,2-Dichloroethene	23000		6250	28600	E	ug/L		88	74 - 124
Ethylbenzene	ND		6250	6460		ug/L		103	77 - 123
Methyl tert-butyl ether	ND		6250	5260		ug/L		84	64 - 127
Tetrachloroethene	ND		6250	6380		ug/L		102	74 - 122
Toluene	ND		6250	6180		ug/L		99	80 - 122
trans-1,2-Dichloroethene	ND		6250	6690		ug/L		107	73 - 127
Trichloroethene	1500		6250	7830		ug/L		101	74 - 123

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		66 - 137

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-26196-4 MS
Matrix: Water
Analysis Batch: 84839

Client Sample ID: A2-PZ-1
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	*103*		*71 - 126*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*

Lab Sample ID: 480-26196-4 MSD
Matrix: Water
Analysis Batch: 84839

Client Sample ID: A2-PZ-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	1300		6250	7680		ug/L		102	71 - 129	3	20
1,1-Dichloroethene	ND		6250	5210		ug/L		83	58 - 121	6	16
1,2-Dichlorobenzene	ND		6250	6130		ug/L		98	80 - 124	0	20
1,2-Dichloroethane	ND		6250	6600		ug/L		106	75 - 127	1	20
Benzene	ND		6250	6260		ug/L		100	71 - 124	3	13
Chlorobenzene	ND		6250	6050		ug/L		97	72 - 120	2	25
cis-1,2-Dichloroethene	23000		6250	27900	E	ug/L		78	74 - 124	2	15
Ethylbenzene	ND		6250	6220		ug/L		99	77 - 123	4	15
Methyl tert-butyl ether	ND		6250	5190		ug/L		83	64 - 127	1	37
Tetrachloroethene	ND		6250	6000		ug/L		96	74 - 122	6	20
Toluene	ND		6250	5970		ug/L		96	80 - 122	3	15
trans-1,2-Dichloroethene	ND		6250	6440		ug/L		103	73 - 127	4	20
Trichloroethene	1500		6250	7510		ug/L		96	74 - 123	4	16

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*
Toluene-d8 (Surr)	*102*		*71 - 126*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*

Lab Sample ID: MB 480-84845/5
Matrix: Water
Analysis Batch: 84845

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/12 23:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/12 23:00	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/12 23:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/12 23:00	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/10/12 23:00	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/12 23:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/12 23:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/10/12 23:00	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/12 23:00	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/12 23:00	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/12 23:00	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/12 23:00	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/12 23:00	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/12 23:00	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/12 23:00	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/12 23:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/12 23:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-84845/5
Matrix: Water
Analysis Batch: 84845

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			10/10/12 23:00	1
Benzene	ND		1.0	0.41	ug/L			10/10/12 23:00	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/12 23:00	1
Bromoform	ND		1.0	0.26	ug/L			10/10/12 23:00	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/12 23:00	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/12 23:00	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/12 23:00	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/12 23:00	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/12 23:00	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/12 23:00	1
Chloroform	ND		1.0	0.34	ug/L			10/10/12 23:00	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/12 23:00	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/10/12 23:00	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/12 23:00	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/12 23:00	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/12 23:00	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/12 23:00	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/12 23:00	1
Methyl acetate	ND		1.0	0.50	ug/L			10/10/12 23:00	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/12 23:00	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/12 23:00	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/12 23:00	1
Styrene	ND		1.0	0.73	ug/L			10/10/12 23:00	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/12 23:00	1
Toluene	ND		1.0	0.51	ug/L			10/10/12 23:00	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/12 23:00	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/12 23:00	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/12 23:00	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/12 23:00	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/10/12 23:00	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/12 23:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/10/12 23:00*	*1*
Toluene-d8 (Surr)	*111*		*71 - 126*		*10/10/12 23:00*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*10/10/12 23:00*	*1*

Lab Sample ID: LCS 480-84845/4
Matrix: Water
Analysis Batch: 84845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	22.0		ug/L		88	71 - 129
1,1-Dichloroethene	25.0	19.9		ug/L		80	58 - 121
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 127
Benzene	25.0	23.7		ug/L		95	71 - 124
Chlorobenzene	25.0	25.6		ug/L		103	72 - 120
cis-1,2-Dichloroethene	25.0	22.1		ug/L		88	74 - 124

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-84845/4
Matrix: Water
Analysis Batch: 84845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	25.0	25.3		ug/L		101	77 - 123
Methyl tert-butyl ether	25.0	21.8		ug/L		87	64 - 127
Tetrachloroethene	25.0	25.0		ug/L		100	74 - 122
Toluene	25.0	25.7		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	22.5		ug/L		90	73 - 127
Trichloroethene	25.0	24.4		ug/L		97	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*
Toluene-d8 (Surr)	*112*		*71 - 126*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*

Lab Sample ID: MB 480-84884/5
Matrix: Water
Analysis Batch: 84884

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 09:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 09:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 09:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 09:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 09:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 09:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 09:25	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 09:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 09:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 09:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 09:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 09:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 09:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 09:25	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 09:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 09:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 09:25	1
Acetone	ND		10	3.0	ug/L			10/11/12 09:25	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 09:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 09:25	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 09:25	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 09:25	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 09:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 09:25	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 09:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 09:25	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 09:25	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 09:25	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 09:25	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 09:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 09:25	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 09:25	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-84884/5
Matrix: Water
Analysis Batch: 84884

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 09:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 09:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 09:25	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 09:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 09:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 09:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 09:25	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 09:25	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 09:25	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 09:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 09:25	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 09:25	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 09:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 09:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 09:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 09:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*10/11/12 09:25*	*1*
Toluene-d8 (Surr)	*104*		*71 - 126*		*10/11/12 09:25*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*10/11/12 09:25*	*1*

Lab Sample ID: LCS 480-84884/4
Matrix: Water
Analysis Batch: 84884

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	23.2		ug/L		93	71 - 129
1,1-Dichloroethene	25.0	19.5		ug/L		78	58 - 121
1,2-Dichlorobenzene	25.0	24.3		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 127
Benzene	25.0	24.2		ug/L		97	71 - 124
Chlorobenzene	25.0	23.9		ug/L		96	72 - 120
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	74 - 124
Ethylbenzene	25.0	24.3		ug/L		97	77 - 123
Methyl tert-butyl ether	25.0	20.8		ug/L		83	64 - 127
Tetrachloroethene	25.0	24.3		ug/L		97	74 - 122
Toluene	25.0	23.5		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	24.9		ug/L		99	73 - 127
Trichloroethene	25.0	23.3		ug/L		93	74 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 137*
Toluene-d8 (Surr)	*103*		*71 - 126*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-85043/5
Matrix: Water
Analysis Batch: 85043

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 21:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 21:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 21:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 21:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 21:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 21:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 21:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 21:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 21:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 21:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 21:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 21:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 21:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 21:36	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 21:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 21:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 21:36	1
Acetone	ND		10	3.0	ug/L			10/11/12 21:36	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 21:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 21:36	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 21:36	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 21:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 21:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 21:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 21:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 21:36	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 21:36	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 21:36	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 21:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 21:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 21:36	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 21:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 21:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 21:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 21:36	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 21:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 21:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 21:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 21:36	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 21:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 21:36	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 21:36	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 21:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 21:36	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 21:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 21:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 21:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 21:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-85043/5
Matrix: Water
Analysis Batch: 85043

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*10/11/12 21:36*	*1*
Toluene-d8 (Surr)	*111*		*71 - 126*		*10/11/12 21:36*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/11/12 21:36*	*1*

Lab Sample ID: LCS 480-85043/4
Matrix: Water
Analysis Batch: 85043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	25.0	26.3		ug/L		105	71 - 129
1,1-Dichloroethene	25.0	21.6		ug/L		87	58 - 121
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	26.3		ug/L		105	75 - 127
Benzene	25.0	27.1		ug/L		108	71 - 124
Chlorobenzene	25.0	25.6		ug/L		102	72 - 120
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	74 - 124
Ethylbenzene	25.0	26.6		ug/L		106	77 - 123
Methyl tert-butyl ether	25.0	24.3		ug/L		97	64 - 127
Tetrachloroethene	25.0	24.2		ug/L		97	74 - 122
Toluene	25.0	25.6		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	73 - 127
Trichloroethene	25.0	25.8		ug/L		103	74 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*
Toluene-d8 (Surr)	*105*		*71 - 126*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 480-84301/2
Matrix: Water
Analysis Batch: 84301

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	0.22	ug/L			10/08/12 07:58	1

Lab Sample ID: LCS 480-84301/3
Matrix: Water
Analysis Batch: 84301

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	7.69	7.94		ug/L		103	48 - 174

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCSD 480-84301/4
Matrix: Water
Analysis Batch: 84301

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			7.69	8.77		ug/L		114	48 - 174	10	50

Method: D516-90, 02 - Sulfate

Lab Sample ID: MB 480-84851/42
Matrix: Water
Analysis Batch: 84851

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.28	J	5.0	1.5	mg/L			10/10/12 19:25	1

Lab Sample ID: MB 480-84851/60
Matrix: Water
Analysis Batch: 84851

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.33	J	5.0	1.5	mg/L			10/10/12 20:05	1

Lab Sample ID: LCS 480-84851/41
Matrix: Water
Analysis Batch: 84851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			30.0	31.23		mg/L		104	90 - 110		

Lab Sample ID: LCS 480-84851/59
Matrix: Water
Analysis Batch: 84851

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			30.0	31.59		mg/L		105	90 - 110		

Lab Sample ID: 480-26196-8 MS
Matrix: Water
Analysis Batch: 84851

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	151	B	20.0	169.4	4	mg/L		93	60 - 128		

Lab Sample ID: 480-26196-8 DU
Matrix: Water
Analysis Batch: 84851

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	151	B	150.9		mg/L				0.1	20

Method: D516-90, 02 - Sulfate (Continued)

Lab Sample ID: MB 480-85267/40
Matrix: Water
Analysis Batch: 85267

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.31	J	5.0	1.5	mg/L			10/12/12 17:49	1

Lab Sample ID: MB 480-85267/54
Matrix: Water
Analysis Batch: 85267

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.47	J	5.0	1.5	mg/L			10/12/12 19:32	1

Lab Sample ID: MB 480-85267/9
Matrix: Water
Analysis Batch: 85267

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3.21	J	5.0	1.5	mg/L			10/12/12 15:01	1

Lab Sample ID: LCS 480-85267/39
Matrix: Water
Analysis Batch: 85267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.49		mg/L		102	90 - 110

Lab Sample ID: LCS 480-85267/53
Matrix: Water
Analysis Batch: 85267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.98		mg/L		103	90 - 110

Lab Sample ID: LCS 480-85267/8
Matrix: Water
Analysis Batch: 85267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	30.0	30.90		mg/L		103	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-86255/29
Matrix: Water
Analysis Batch: 86255

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		5.0	0.79	mg/L			10/09/12 13:28	1
Alkalinity, Bicarbonate	ND		5.0	0.79	mg/L			10/09/12 13:28	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 13:28	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 480-86255/30
Matrix: Water
Analysis Batch: 86255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	99.19		mg/L		99	90 - 110

Lab Sample ID: 480-26196-20 MS
Matrix: Water
Analysis Batch: 86255

Client Sample ID: PZ-13R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	495		100	537.4	4	mg/L		43	42 - 116

Lab Sample ID: 480-26196-11 DU
Matrix: Water
Analysis Batch: 86255

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total	234		234.6		mg/L		0.2	20
Alkalinity, Bicarbonate	234		234.6		mg/L		0.2	20
Alkalinity, Carbonate	ND		ND		mg/L		NC	20

Method: SM 5310D - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-84566/3
Matrix: Water
Analysis Batch: 84566

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.43	mg/L			10/08/12 18:07	1

Lab Sample ID: LCS 480-84566/4
Matrix: Water
Analysis Batch: 84566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	54.81		mg/L		91	90 - 110

Lab Sample ID: 480-26196-11 MS
Matrix: Water
Analysis Batch: 84566

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	3.9		20.0	23.46		mg/L		98	54 - 131

Lab Sample ID: 480-26196-8 DU
Matrix: Water
Analysis Batch: 84566

Client Sample ID: MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	2.7		2.45		mg/L		10	20

Method: SM 5310D - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: MB 480-84771/3
Matrix: Water
Analysis Batch: 84771

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.43	mg/L			10/09/12 17:13	1

Lab Sample ID: LCS 480-84771/4
Matrix: Water
Analysis Batch: 84771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	61.37		mg/L		102	90 - 110

GC/MS VOA

Analysis Batch: 84839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-1	TB-100412	Total/NA	Water	8260B	
480-26196-3	A1-PZ-2	Total/NA	Water	8260B	
480-26196-4	A2-PZ-1	Total/NA	Water	8260B	
480-26196-4 MS	A2-PZ-1	Total/NA	Water	8260B	
480-26196-4 MSD	A2-PZ-1	Total/NA	Water	8260B	
480-26196-6	MW-1	Total/NA	Water	8260B	
480-26196-7	MW-2	Total/NA	Water	8260B	
480-26196-8	MW-3	Total/NA	Water	8260B	
480-26196-9	MW-4	Total/NA	Water	8260B	
480-26196-10	MW-5	Total/NA	Water	8260B	
480-26196-11	MW-10	Total/NA	Water	8260B	
480-26196-14	MW-21	Total/NA	Water	8260B	
480-26196-15	PZ-5	Total/NA	Water	8260B	
480-26196-16	PZ-6	Total/NA	Water	8260B	
480-26196-17	PZ-7	Total/NA	Water	8260B	
480-26196-18	PZ-8	Total/NA	Water	8260B	
480-26196-19	PZ-11R	Total/NA	Water	8260B	
480-26196-20	PZ-13R	Total/NA	Water	8260B	
LCS 480-84839/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-84839/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 84845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-21	PZ-18	Total/NA	Water	8260B	
480-26196-22	PZ-26	Total/NA	Water	8260B	
LCS 480-84845/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-84845/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 84884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-2	DUP-100412	Total/NA	Water	8260B	
480-26196-5	A2-PZ-2	Total/NA	Water	8260B	
LCS 480-84884/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-84884/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 85043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-12	MW-18	Total/NA	Water	8260B	
480-26196-13	MW-20	Total/NA	Water	8260B	
480-26289-1	MW-14BR	Total/NA	Water	8260B	
480-26289-2	TB-100512	Total/NA	Water	8260B	
LCS 480-85043/4	Lab Control Sample	Total/NA	Water	8260B	
MB 480-85043/5	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 84301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-2	DUP-100412	Total/NA	Water	RSK-175	
480-26196-3	A1-PZ-2	Total/NA	Water	RSK-175	
480-26196-4	A2-PZ-1	Total/NA	Water	RSK-175	
480-26196-6	MW-1	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 84301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-8	MW-3	Total/NA	Water	RSK-175	
480-26196-11	MW-10	Total/NA	Water	RSK-175	
480-26196-20	PZ-13R	Total/NA	Water	RSK-175	
LCS 480-84301/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-84301/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
MB 480-84301/2	Method Blank	Total/NA	Water	RSK-175	

General Chemistry

Analysis Batch: 84174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-2	DUP-100412	Total/NA	Water	353.2	
480-26196-3	A1-PZ-2	Total/NA	Water	353.2	
480-26196-4	A2-PZ-1	Total/NA	Water	353.2	
480-26196-6	MW-1	Total/NA	Water	353.2	
480-26196-8	MW-3	Total/NA	Water	353.2	
480-26196-11	MW-10	Total/NA	Water	353.2	
480-26196-20	PZ-13R	Total/NA	Water	353.2	

Analysis Batch: 84566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-2	DUP-100412	Total/NA	Water	SM 5310D	
480-26196-3	A1-PZ-2	Total/NA	Water	SM 5310D	
480-26196-4	A2-PZ-1	Total/NA	Water	SM 5310D	
480-26196-6	MW-1	Total/NA	Water	SM 5310D	
480-26196-8	MW-3	Total/NA	Water	SM 5310D	
480-26196-8 DU	MW-3	Total/NA	Water	SM 5310D	
480-26196-11	MW-10	Total/NA	Water	SM 5310D	
480-26196-11 MS	MW-10	Total/NA	Water	SM 5310D	
LCS 480-84566/4	Lab Control Sample	Total/NA	Water	SM 5310D	
MB 480-84566/3	Method Blank	Total/NA	Water	SM 5310D	

Analysis Batch: 84771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-20	PZ-13R	Total/NA	Water	SM 5310D	
LCS 480-84771/4	Lab Control Sample	Total/NA	Water	SM 5310D	
MB 480-84771/3	Method Blank	Total/NA	Water	SM 5310D	

Analysis Batch: 84851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-2	DUP-100412	Total/NA	Water	D516-90, 02	
480-26196-3	A1-PZ-2	Total/NA	Water	D516-90, 02	
480-26196-8	MW-3	Total/NA	Water	D516-90, 02	
480-26196-8 DU	MW-3	Total/NA	Water	D516-90, 02	
480-26196-8 MS	MW-3	Total/NA	Water	D516-90, 02	
480-26196-20	PZ-13R	Total/NA	Water	D516-90, 02	
LCS 480-84851/41	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-84851/59	Lab Control Sample	Total/NA	Water	D516-90, 02	
MB 480-84851/42	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-84851/60	Method Blank	Total/NA	Water	D516-90, 02	

General Chemistry (Continued)

Analysis Batch: 85267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-4	A2-PZ-1	Total/NA	Water	D516-90, 02	
480-26196-6	MW-1	Total/NA	Water	D516-90, 02	
480-26196-11	MW-10	Total/NA	Water	D516-90, 02	
LCS 480-85267/39	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-85267/53	Lab Control Sample	Total/NA	Water	D516-90, 02	
LCS 480-85267/8	Lab Control Sample	Total/NA	Water	D516-90, 02	
MB 480-85267/40	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-85267/54	Method Blank	Total/NA	Water	D516-90, 02	
MB 480-85267/9	Method Blank	Total/NA	Water	D516-90, 02	

Analysis Batch: 86255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-26196-2	DUP-100412	Total/NA	Water	SM 2320B	
480-26196-3	A1-PZ-2	Total/NA	Water	SM 2320B	
480-26196-4	A2-PZ-1	Total/NA	Water	SM 2320B	
480-26196-6	MW-1	Total/NA	Water	SM 2320B	
480-26196-8	MW-3	Total/NA	Water	SM 2320B	
480-26196-11	MW-10	Total/NA	Water	SM 2320B	
480-26196-11 DU	MW-10	Total/NA	Water	SM 2320B	
480-26196-20	PZ-13R	Total/NA	Water	SM 2320B	
480-26196-20 MS	PZ-13R	Total/NA	Water	SM 2320B	
LCS 480-86255/30	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-86255/29	Method Blank	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: TB-100412

Lab Sample ID: 480-26196-1

Date Collected: 10/04/12 00:00

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/10/12 21:56	TRF	TAL BUF

Client Sample ID: DUP-100412

Lab Sample ID: 480-26196-2

Date Collected: 10/04/12 00:00

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84884	10/11/12 15:06	RL	TAL BUF
Total/NA	Analysis	RSK-175		10	1 mL	1.0 mL	84301	10/08/12 09:17	JM	TAL BUF
Total/NA	Analysis	353.2		1	1.0 mL	1.0 mL	84174	10/05/12 21:04	KS	TAL BUF
Total/NA	Analysis	SM 5310D		1	1.0 mL	1.0 mL	84566	10/08/12 22:41	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		20	2 mL	2 mL	84851	10/10/12 20:05	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	1.0 mL	25 mL	86255	10/09/12 14:08	JS	TAL BUF

Client Sample ID: A1-PZ-2

Lab Sample ID: 480-26196-3

Date Collected: 10/04/12 11:00

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/10/12 22:39	TRF	TAL BUF
Total/NA	Analysis	RSK-175		50	1 mL	1.0 mL	84301	10/08/12 10:13	JM	TAL BUF
Total/NA	Analysis	353.2		1	1.0 mL	1.0 mL	84174	10/05/12 21:05	KS	TAL BUF
Total/NA	Analysis	SM 5310D		1	1.0 mL	1.0 mL	84566	10/08/12 23:00	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		1	2 mL	2 mL	84851	10/10/12 19:25	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	1.0 mL	25 mL	86255	10/09/12 14:14	JS	TAL BUF

Client Sample ID: A2-PZ-1

Lab Sample ID: 480-26196-4

Date Collected: 10/04/12 12:00

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	5 mL	5 mL	84839	10/10/12 23:01	TRF	TAL BUF
Total/NA	Analysis	RSK-175		50	1 mL	1.0 mL	84301	10/08/12 10:30	JM	TAL BUF
Total/NA	Analysis	353.2		1	1.0 mL	1.0 mL	84174	10/05/12 21:06	KS	TAL BUF
Total/NA	Analysis	SM 5310D		1	1.0 mL	1.0 mL	84566	10/08/12 23:20	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		5	2 mL	2 mL	85267	10/12/12 15:09	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	1.0 mL	25 mL	86255	10/09/12 14:22	JS	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: A2-PZ-2

Lab Sample ID: 480-26196-5

Date Collected: 10/03/12 17:41
Matrix: Water
Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	84884	10/11/12 15:27	RL	TAL BUF

Client Sample ID: MW-1

Lab Sample ID: 480-26196-6

Date Collected: 10/04/12 16:15
Matrix: Water
Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/10/12 23:44	TRF	TAL BUF
Total/NA	Analysis	RSK-175		10	1 mL	1.0 mL	84301	10/08/12 10:58	JM	TAL BUF
Total/NA	Analysis	353.2		1	1.0 mL	1.0 mL	84174	10/05/12 21:44	KS	TAL BUF
Total/NA	Analysis	SM 5310D		1	1.0 mL	1.0 mL	84566	10/08/12 23:40	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		10	2 mL	2 mL	85267	10/12/12 17:52	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	1.0 mL	25 mL	86255	10/09/12 14:28	JS	TAL BUF

Client Sample ID: MW-2

Lab Sample ID: 480-26196-7

Date Collected: 10/03/12 15:05
Matrix: Water
Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 00:06	TRF	TAL BUF

Client Sample ID: MW-3

Lab Sample ID: 480-26196-8

Date Collected: 10/04/12 15:05
Matrix: Water
Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 00:27	TRF	TAL BUF
Total/NA	Analysis	RSK-175		1	1 mL	1.0 mL	84301	10/08/12 12:18	JM	TAL BUF
Total/NA	Analysis	353.2		1	1.0 mL	1.0 mL	84174	10/05/12 21:45	KS	TAL BUF
Total/NA	Analysis	SM 5310D		1	1.0 mL	1.0 mL	84566	10/08/12 23:59	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		10	2 mL	2 mL	84851	10/10/12 19:29	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	1.0 mL	25 mL	86255	10/09/12 14:36	JS	TAL BUF

Client Sample ID: MW-4

Lab Sample ID: 480-26196-9

Date Collected: 10/03/12 13:55
Matrix: Water
Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 00:49	TRF	TAL BUF

Client Sample ID: MW-5

Lab Sample ID: 480-26196-10

Date Collected: 10/02/12 15:20

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 01:10	TRF	TAL BUF

Client Sample ID: MW-10

Lab Sample ID: 480-26196-11

Date Collected: 10/04/12 13:30

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 01:32	TRF	TAL BUF
Total/NA	Analysis	RSK-175		20	1 mL	1.0 mL	84301	10/08/12 11:32	JM	TAL BUF
Total/NA	Analysis	353.2		1	1.0 mL	1.0 mL	84174	10/05/12 21:09	KS	TAL BUF
Total/NA	Analysis	SM 5310D		1	1.0 mL	1.0 mL	84566	10/09/12 00:38	KAC	TAL BUF
Total/NA	Analysis	D516-90, 02		10	2 mL	2 mL	85267	10/12/12 17:52	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	1.0 mL	25 mL	86255	10/09/12 14:53	JS	TAL BUF

Client Sample ID: MW-18

Lab Sample ID: 480-26196-12

Date Collected: 10/03/12 16:00

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	85043	10/12/12 00:05	TRF	TAL BUF

Client Sample ID: MW-20

Lab Sample ID: 480-26196-13

Date Collected: 10/02/12 14:55

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	85043	10/12/12 00:28	TRF	TAL BUF

Client Sample ID: MW-21

Lab Sample ID: 480-26196-14

Date Collected: 10/02/12 13:55

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 02:37	TRF	TAL BUF

Client Sample ID: PZ-5

Lab Sample ID: 480-26196-15

Date Collected: 10/02/12 17:48

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	5 mL	5 mL	84839	10/11/12 02:59	TRF	TAL BUF

Client Sample ID: PZ-6

Lab Sample ID: 480-26196-16

Date Collected: 10/02/12 17:30

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 03:20	TRF	TAL BUF

Client Sample ID: PZ-7

Lab Sample ID: 480-26196-17

Date Collected: 10/02/12 19:05

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 03:42	TRF	TAL BUF

Client Sample ID: PZ-8

Lab Sample ID: 480-26196-18

Date Collected: 10/03/12 12:45

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	84839	10/11/12 04:03	TRF	TAL BUF

Client Sample ID: PZ-11R

Lab Sample ID: 480-26196-19

Date Collected: 10/02/12 15:40

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 04:25	TRF	TAL BUF

Client Sample ID: PZ-13R

Lab Sample ID: 480-26196-20

Date Collected: 10/02/12 16:05

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84839	10/11/12 04:47	TRF	TAL BUF
Total/NA	Analysis	RSK-175		1	1 mL	1.0 mL	84301	10/08/12 12:35	JM	TAL BUF
Total/NA	Analysis	353.2		1	1.0 mL	1.0 mL	84174	10/05/12 21:11	KS	TAL BUF
Total/NA	Analysis	SM 5310D		1	1.0 mL	1.0 mL	84771	10/09/12 17:53	KC	TAL BUF
Total/NA	Analysis	D516-90, 02		5	2 mL	2 mL	84851	10/10/12 19:32	NH	TAL BUF
Total/NA	Analysis	SM 2320B		1	1.0 mL	25 mL	86255	10/09/12 15:07	JS	TAL BUF

Client Sample ID: PZ-18

Lab Sample ID: 480-26196-21

Date Collected: 10/03/12 11:45

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84845	10/11/12 03:52	LH	TAL BUF

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-26

Lab Sample ID: 480-26196-22

Date Collected: 10/03/12 16:50

Matrix: Water

Date Received: 10/05/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	84845	10/11/12 04:16	LH	TAL BUF

Client Sample ID: MW-14BR

Lab Sample ID: 480-26289-1

Date Collected: 10/05/12 16:05

Matrix: Water

Date Received: 10/06/12 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	85043	10/12/12 03:04	TRF	TAL BUF

Client Sample ID: TB-100512

Lab Sample ID: 480-26289-2

Date Collected: 10/05/12 00:00

Matrix: Water

Date Received: 10/06/12 10:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	85043	10/12/12 03:26	TRF	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAC	9	1169CA	09-30-12
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	06-30-13
Georgia	State Program	4	956	03-31-12
Illinois	NELAC	5	200003	09-30-12
Iowa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
Louisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-12
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-13
New Hampshire	NELAC	1	2337	11-17-12
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-31-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Tennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-13
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAC	3	460185	09-14-13
Washington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-13

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL BUF
RSK-175	Dissolved Gases (GC)	RSK	TAL BUF
353.2	Nitrate	EPA	TAL BUF
D516-90, 02	Sulfate	ASTM	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 5310D	Organic Carbon, Total (TOC)	SM	TAL BUF

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-28048-4020.1
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 1 of 3
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 wk			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: ~~NJ001010.0001~~ NJ001040.1.103			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, ~~Nitrate~~ Nitrate_Calc	SM5310D - Total Organic Carbon	D516 Sulfate	Special Instructions/Note:
TB-100412	10/4/12	NA	G	Water	2						
DUP-100412	10/4/12	NA	G	Water	3	2	1	1	2	1	
A1-PZ-2	10/4/12	1100	G	Water	3	2	1	1	2	1	
A2-PZ-1	10/4/12	1200	G	Water	3	2	1	1	2	1	
A2-PZ-2	10/3/12	1741	G	Water	3						
MW-1	10/4/12	1615	G	Water	3	2	1	1	2	1	
MW-2	10/3/12	1505	G	Water	3						
MW-3	10/4/12	1505	G	Water	3	2	1	1	2	1	
MW-4	10/3/12	1355	G	Water	3						
MW-5	10/2/12	1520	G	Water	3						
MW-10	10/4/12	1330	G	Water	3	2	1	1	2	1	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Report Results to J. Bousted.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/4/12 1745	Arcadis	[signature]	10/5/12 0900	TAB Buffalo

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.4 #2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-28048-4020.2
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 2 of 3
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 week			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: ~~NJ001016.0061~~ NJ001040.1.103			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, 9056, Nitrate_Calc	SM5310D - Total Organic Carbon	Sulfide (9056)	Special Instructions/Note:
MW-18	10/3/12	1600	G	Water	3						
MW-20	10/2/12	1455	G	Water	3						
MW-21	10/2/12	1355	G	Water	3						
PZ-5	10/2/12	1748	G	Water	3						
PZ-6	10/2/12	1730	G	Water	3						
PZ-7	10/2/12	1905	G	Water	3						
PZ-8	10/2 | 10/3	1730 | 1245	G	Water	3						
PZ-11R	10/2/12	1540	G	Water	3						
PZ-13R	10/2 → 10/4	1605, 1120, 1040	G	Water	3	2	1	1	2	1	(Collected Nitrate/Nitrite on 10/4/12) @ 1040
PZ-18	10/3/12	1145	G	Water	3						
PZ-26	10/3/12	1650	G	Water	3						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Remit Results to J. Bousteel

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/4/12 1745	Arcadis	[signature]	10/5/12 0900	TAB Wfalo

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.4 #2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-28048-4020.3
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 3 of 1
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2wk			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: ~~NJ001016.0005~~ NJ001040.1.103			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516_Nitrate_Calc	SM5310D - Total Organic Carbon	Special Instructions/Note:
MW-14BR	10/5/12	1605	G	Water	3					
TB-100512	10/5/12	—	G	Water	2					
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Report Results to J. Bousted

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 10/5/12 1700	Company: Arcadis	Received by:	Date/Time: 10/6/12 1025	Company:
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.4°C

Page 65 of 67

10/19/2012

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-26196-1

Login Number: 26196

List Source: TestAmerica Buffalo

List Number: 1

Creator: Robitaille, Zach L

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-26196-1

Login Number: 26289

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

APPENDIX F—
2012 GROUNDWATER SAMPLING LOGS

ARCADIS
infrastructure, environment, buildings

GROUNDWATER SAMPLING LOG

Well No. MW-1
Key No. 2537
PID Background (ppm) NA
Well Headspace (ppm) NA

Site Name LMC Utica
Sampling Personnel D.Zuck
Date 1/25/2012
Weather Overcast 32°F

WELL INFORMATION

Reference Point Marked? Y N
Height of Reference Point (-) Meas. From TOC
Well Diameter 4"
Screen Interval Depth 7-17' Meas. From TOC
Water Table Depth ~~8.21~~ 8.21 Meas. From TIC
Well Depth 17.28 Meas. From TIC
Length of Water Column 9.07
Volume of Water in Well 5.9
Intake Depth of Pump/Tubing 12.5 Meas. From TIC

Reference Point Identification:
TIC: Top of Inner (PVC) Casing
TOC: Top of Outer (Protective) Casing
Grade/BGS: Ground Surface

Re-develop? Y (N)

Well Inventory Form Completed? Y (N)

EVACUATION INFORMATION

Pump Start Time 1458
Pump Stop Time ~98
Minutes of Pumping 1625 ~~1625~~
Volume of Water Removed ~3.25
Did Well Go Dry? Y (N)

Sample Time 1620
Sample ID MW-1
Duplicate ID NA
MS/MSD NA
Split Sample ID NA

Required	Analytical Parameters:	Collected
(3)	VOCs (Standard List)	(3)
( )	VOCs (Expanded List)	( )
( )	SVOCs	( )
( )	PCBs (Unfiltered)	( )
( )	PCBs (Filtered)	( )
( )	Metals/Inorganics (Unfiltered)	( )
( )	Metals/Inorganics (Filtered)	( )
( )	Total Cyanide (Unfiltered)	( )
( )	Total Cyanide (Filtered)	( )
( )	PAC Cyanide (Filtered)	( )
(2)	Methane	(2)
(1)	Alkalinity	(1)
(1)	Nitrates	(1)
(1)	Sulfer	(1)

Evacuation Method: Bailer ( ) Bladder Pump ( )
Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )
Pump Type: ~~YSI 556 MPS~~ Geopump
Samples collected by same method as evacuation? Y N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS / HACH 2100P

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1505	0.250	—	8.21	6.64	7.59	1.067	2	4.60	-43.7
1510	0.250		—	7.28	7.57	1.058	—	4.10	-43.7
1515	0.250		8.61	6.92	7.54	1.067	1	3.85	-43.4
1520	0.250		—	7.08	7.53	1.044	—	4.06	-42.9
1525	0.250		8.85	7.32	7.51	1.019	1	4.24	-41.6
1530	0.250		—	7.14	7.52	1.013	—	4.12	-41.3
1535	0.250	↓	8.93	7.25	7.52	1.007	1	3.86	-40.8
1540	0.250	~1.5	—	7.29	7.53	1.006	—	3.66	-41.8

* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Fe: 0.01 mg/L

SAMPLE DESTINATION

Laboratory: Test America Amherst
Delivered Via: UPS Air
Airbill #:

Field Sampling Coordinator: D.Zuck

ARCADIS
infrastructure, environment, buildings

GROUNDWATER SAMPLING LOG

Well No. MW- 1

Site Name LMC Uica
Sampling Personnel D. Zuck
Date 1/ 25 /2012
Weather Overcast ~32°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1545	0.250	~1.5(+)	9.01	7.56	7.52	1.008	1	3.67	-42.5
1550	0.250		—	7.20	7.56	0.987	1	4.04	-41.0
1555	0.250		9.08	7.59	7.53	0.990	1	3.61	-41.0
1600	0.250		—	7.70	7.51	1.029	1	3.33	-41.8
1605	0.250		9.15	7.97	7.52	1.068	1	3.12	-41.9
1610	0.150		—	7.90	7.52	1.110	1	2.94	-42.6
1615	0.100	~2.8	9.20	7.80	7.52	1.123	1	2.90	-42.7

collected sample @ 1620

* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS * Correction 150 mL/min ; Sample Clear, No odor/turb.

ARCADIS
infrastructure, environment, buildings

GROUNDWATER SAMPLING LOG

Well No. MW-3
Key No. 2537
PID Background (ppm) NA
Well Headspace (ppm) NA

Site Name LMC Utica
Sampling Personnel D.Zuck
Date 1/ 25 /2012
Weather Overcast ~32°F

WELL INFORMATION

Reference Point Marked? (Y) N
Height of Reference Point (+) Meas. From TOC
Well Diameter 2"
Screen Interval Depth 3-13' Meas. From ~~TOC~~/BLS
Water Table Depth 10.75 Meas. From TIC
Well Depth 15.08 Meas. From TIC
Length of Water Column 4.33
Volume of Water in Well 0.69
Intake Depth of Pump/Tubing 13 Meas. From TIC

Reference Point Identification:
TIC: Top of Inner (PVC) Casing
TOC: Top of Outer (Protective) Casing
Grade/BGS: Ground Surface

Re-develop? Y (N)

Well Inventory Form Completed? Y (N)

EVACUATION INFORMATION

Pump Start Time 1314
Pump Stop Time 1435
Minutes of Pumping 81
Volume of Water Removed ~3.5
Did Well Go Dry? Y (N)

Sample Time 1425
Sample ID MW-3
Duplicate ID NA
MS/MSD NA
Split Sample ID NA

Required	Analytical Parameters:	Collected
(3)	VOCs (Standard List)	(3)
( )	VOCs (Expanded List)	( )
( )	SVOCs	( )
( )	PCBs (Unfiltered)	( )
( )	PCBs (Filtered)	( )
( )	Metals/Inorganics (Unfiltered)	( )
( )	Metals/Inorganics (Filtered)	( )
( )	Total Cyanide (Unfiltered)	( )
( )	Total Cyanide (Filtered)	( )
( )	PAC Cyanide (Filtered)	( )
(2)	Methane	(2)
(1)	Alkalinity	(1)
(1)	Nitrates	(1)
(1)	Sulfer	(1)

Evacuation Method: Bailer ( ) Bladder Pump ( )
Peristaltic Pump (X) Submersible Pump ( ) Other/Specify ( )
Pump Type: Geopump
Samples collected by same method as evacuation? Y N (specify)

Water Quality Meter Type(s) / Serial Numbers: YSI 556 MPS / 2100P HACH Turb. meter

Time	★ Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1315	0.250	—	10.75	6.70	7.48	0.862	33	7.44	-38.6
1320	0.250		—	6.88	7.49	0.851	—	7.36	-38.2
1325	0.250		11.34	7.26	7.47	0.853	3	6.10	-37.7
1330	0.250		—	7.54	7.45	0.936	—	5.27	-36.8
1335	0.250		11.61	7.91	7.44	1.046	1	4.08	-37.1
1340	0.250		—	7.75	7.45	1.153	—	3.13	-37.8
1345	0.250	↓	11.71	7.71	7.46	1.217	1	2.34	-38.7
1350	0.250	~1.5	—	7.89	7.48	1.273	—	2.00	-40.1

* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Fe: 0.00 mg/L

SAMPLE DESTINATION

Laboratory: Test America Amherst
Delivered Via: UPS Air
Airbill #:

Field Sampling Coordinator: D.Zuck

GROUNDWATER SAMPLING LOG

Well No. MW- 3

Site Name LMC Uica
Sampling Personnel D. Zuck
Date 1/ 25 /2012
Weather Overcast ~ 32°F

WELL INFORMATION - See Page 1

Time	Pump Rate (L/min.)	Total Gallons Removed	Water Level (ft TIC)	Temp. (Celsius) [3%]*	pH [0.1 units]*	Sp. Cond. (mS/cm) [3%]*	Turbidity (NTU) [10% or 1 NTU]*	DO (mg/l) [10% or 0.1 mg/l]*	ORP (mV) [10 mV]*
1355	0.250	~1.5(+)	11.76	7.81	7.50	1.316	1	1.79	-41.2
1400	0.250	—	—	7.68	7.50	1.341	1	1.58	-41.6
1405	0.250	—	11.82	7.70	7.53	1.370	0	1.33	-42.5
1410	0.250	—	—	7.63	7.53	1.394	1	1.21	-41.2
1415	0.250	—	11.87	7.73	7.55	1.413	2	1.06	-42.2
1420	0.250	—	—	7.72	7.55	1.428	1	1.02	-42.2
1425	0.250	~3	11.91	7.79	7.57	1.435	1	1.01	-42.9
				Sample collected @ 1425					

* The stabilization criteria for each field parameter (three consecutive readings collected at 3- to 5-minute intervals) is listed in each column heading.

OBSERVATIONS/SAMPLING METHOD DEVIATIONS Final Sample: Clear, no odor, No turbidity

* corrected 150 mL/min.

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0001.00100
Site Location: 525 French Road, Utica, NY | Date: 1/24/11
Well No.: A1-PZ-2 | Replicate No.: NA | Weather: Overcast ~ 39°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1540 End 1550

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	
Sounded Well Depth (ft bmp)	12.27
Depth to Water (ft bmp)	1.83
Water Column in Well (ft)	10.44
Casing Diameter	1"
Gallons in Well	~~0.43~~
Gallons Purged	
Prior to Sampling	3V = 1.29
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1119 End 1145

Field Parameters

Color	Lt Gray
Odor	None
Appearance	Turbid

	1	1V	2V	Sample -3V
Time	1119	1124	1134	1540
DTW (ft bmp)	1.83	3.98	6.86	3.79
pH (s.u.)	7.64	7.47	7.44	7.50
Conductivity (mS/cm) or (µmhos/cm) [1]	1.064	1.176	1.233	1.096
Temperature (°C)	6.73	8.26	7.35	4.76
DO (mg/L)	4.36	1.99	4.93	~~8.24~~
ORP (mV)	-65.2	-94.2	-88.0	-39.2
Turbidity (NTU)	42	902	71000	660

Remarks: Well Went Dry (Y) / (N), After approximetly (3) Volumes removed. @ 1143
Down Hole DO probe used for final reading
Fe: ~~NA~~ mg/L (2.74)

Parameter	Container	No.	Preservative
VOCs	40mL	3	HCl
Sulfide/Nitrate	250mL	2	None
methane/AIK	40mL/250	1/2	HCl/None

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0001.00100
Site Location: 525 French Road, Utica, NY | Date: 1/24/12
Well No.: A2-PZ-1 | Replicate No.: NA | Weather: Lt. Rain 37°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1300 End 1315

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	
Sounded Well Depth (ft bmp)	14.87
Depth to Water (ft bmp)	4.18
Water Column in Well (ft)	10.69
Casing Diameter	1"
Gallons in Well	0.44
Gallons Purged Prior to Sampling	3V = 1.32
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time Begin 1217 End 1247	

Field Parameters

Color: Lt Grey
Odor: Some chemical odor
Appearance: Turbid

	I	1V	2V	3V
Time	1217	1226	1235	1247
DTW (ft bmp)	4.18	6.19	7.78	8.06
pH (s.u.)	7.42	7.38	7.42	7.42
Conductivity (mS/cm) or	0.595	0.603	0.657	0.709
(µmhos/cm) [1]	~~0.595~~			
Temperature (°C)	5.97	5.80	6.080	5.04
DO (mg/L)	1.24	1.93	2.98	1.07
ORP (mV)	-99.5	-93.4	-102.8	-87.9
Turbidity (NTU)	61	831	984	799

Remarks: Well Went Dry (Y) / (N), After approximetly ( ) Volumes removed.
Down Hole DO probe used for final reading
Fe: 1.98 mg/L

Parameter	Container	No.	Preservative
VOCs	3	3	HCl
Sulfur/Nitrate	2	2	None
Methane/Alk	2/1	2/1	HCl/None

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0001.00100
Site Location: 525 French Road, Utica, NY | Date: 1/24/12 & 1/25/12 & 1/26/12
Well No.: PZ-5 | Replicate No.: NA | Weather: Indoors
Sampling Personnel: D. Zuck | Sampling Time: Begin 1745/1630 End 1800/1650

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	
Sounded Well Depth (ft bmp)	10.82
Depth to Water (ft bmp)	9.04
Water Column in Well (ft)	1.78
Casing Diameter	1"
Gallons in Well	0.07
Gallons Purged	
Prior to Sampling	3V = 0.21
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1658 End 1712

Field Parameters

Color: Gray
Odor: Strong Sulfer like
Appearance: Little turbid.

	1	1V	2V	Sample 3V
Time	1658			~~1733~~ 1745
DTW (ft bmp)	9.04			~~9.36~~ 10.42
pH (s.u.)	8.04			
Conductivity (mS/cm) or (µmhos/cm) [1]	1.193			
Temperature (°C)	17.53			18.8
DO (mg/L)	1.68			2.40
ORP (mV)	-88.3			
Turbidity (NTU)	25			

Remarks: Well Went Dry (Y) / (N), After approximetly (1.2) Volumes removed. @ 1712, DTW @ 1745, 2/100' of Down Hole DO probe used for final reading water on 1/26/12 following 24 hr Recharge. only Fe: mg/L 066 to collect 1 full vial.

Parameter	Container	No.	Preservative
VOCs	40 mL	3	HCl

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0001.00100
Site Location: 525 French Road, Utica, NY | Date: 1/24/12 + 1/25/12 + 1/26/12
Well No.: PZ-8 | Replicate No.: NA | Weather: Indoors
Sampling Personnel: D. Zuck | Sampling Time: Begin 1732/1610 | End 1745/1615

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	
Sounded Well Depth (ft bmp)	9.87
Depth to Water (ft bmp)	9.38
Water Column in Well (ft)	0.49
Casing Diameter	1"
Gallons in Well	0.01
Gallons Purged	
Prior to Sampling	0.03
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1635 End 1645

Field Parameters

Color: Lt Brown
Odor: None
Appearance: turbid

	1	1V	2V	Sample -3V
Time	1635			1732
DTW (ft bmp)	9.38			9.36
pH (s.u.)	7.43			
Conductivity (mS/cm) or (µmhos/cm) 1)	1.021			
Temperature (°C)	14.07			15.9
DO (mg/L)	—			1.58
ORP (mV)	-23.4			—
Turbidity (NTU)	305			>1000

Remarks: Well Went Dry (Y) / (N), After approximetly (1) Volumes removed @ 1645
Down Hole DO probe used for final reading NA Due to Recovery
Fe: NA mg/L

Parameter	Container	No.	Preservative
VOCs	40 mL	2	HCl

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0001.00100
Site Location: 525 French Road, Utica, NY | Date: 1/25/11
Well No.: PZ-11R | Replicate No.: 1 | Weather: 32°F overcast
Sampling Personnel: D. Zuck | Sampling Time: Begin 1645 End 1655

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	
Sounded Well Depth (ft bmp)	9.95
Depth to Water (ft bmp)	8.50
Water Column in Well (ft)	1.45
Casing Diameter	1"
Gallons in Well	0.05
Gallons Purged Prior to Sampling	1V
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time Begin	1145 End 1155

Field Parameters

Color: Lt Brownish orange
Odor: None
Appearance: Turbid

	1	1V	2V	Sample -3V
Time	1145			1645
DTW (ft bmp)	8.50			8.56
pH (s.u.)	7.56			
Conductivity (mS/cm) or (µmhos/cm) [1]	1.398			
Temperature (°C)	7.41			
DO (mg/L)	4.34			
ORP (mV)	-70.7			
Turbidity (NTU)	>1000			>1000

Remarks: Well Went Dry (Y) / (N), After approximetly (1v) Volumes removed. @ 1148
Down Hole DO probe used for final reading
Fe: NA mg/L Due to well volumes + turbidity

Parameter	Container	No.	Preservative
VOCs	40 mL	3	HCl

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0001.00100
Site Location: 525 French Road, Utica, NY | Date: 1/24/12 & 1/25/12
Well No.: PZ-13R | Replicate No.: NA | Weather: Lt Rain
Sampling Personnel: D. Zuck | Sampling Time: Begin 1200 End 1220

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	
Sounded Well Depth (ft bmp)	9.85
Depth to Water (ft bmp)	8.06
Water Column in Well (ft)	~~Very~~ 1.79
Casing Diameter	1"
Gallons in Well	0.07
Gallons Purged	
Prior to Sampling	1v (0.07)
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1444 End 1452

Field Parameters

Color	Lt Brown
Odor	none
Appearance	Turbid

	1	~~1V~~	~~2V~~	Sample ~~3V~~
Time	1444			1200
DTW (ft bmp)	8.06			8.61
pH (s.u.)	7.60			
Conductivity (mS/cm) or (µmhos/cm) [1]	2.762			
Temperature (°C)	7.35			
DO (mg/L)	5.74			2.46
ORP (mV)	-28.1			
Turbidity (NTU)	470			>1000

Remarks: Well Went Dry (Y) / (N), After approximetly (1) Volumes removed. Well DRY @ 1220 on 1/25/12 2nd Down Hole DO probe used for final reading Sample collected @ 1205, well DRY collected all samples except 1/2 of Fe: ~~NA~~ mg/L 3.30 ⇒ Turbidity May affect Reading. ~~Sample Not available for parameters Due to low Recov volume~~ Plastic.

Parameter	Container	No.	Preservative
VOCs	40 mL Vials	3	HCl
methane/ Alk	40mL/ 250 mL	2 / 0.5	HCl / none
Sulfur/ Nitrate	250 mL	2	none

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 4/24/12
Well No.: MW-19 | Replicate No.: NA | Weather: Overcast ~45°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1415 | End 1430

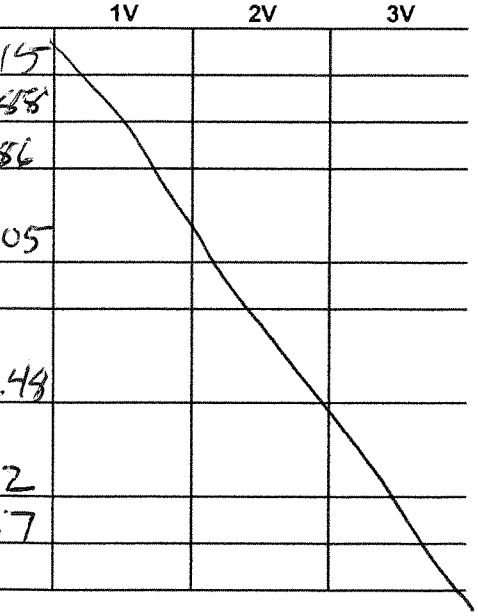
Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	~5→15'
Sounded Well Depth (ft bmp)	14.60
Depth to Water (ft bmp)	0.88'
Water Column in Well (ft)	13.72
Casing Diameter	2"
Gallons in Well	2.2
Gallons Purged	
Prior to Sampling	1 Bailer
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1415 End —

Field Parameters

Color	None
Odor	None
Appearance	Clear

	I	1V	2V	3V
Time	1415			
DTW (ft bmp)	0.88			
pH (s.u.)	7.86			
Conductivity (mS/cm) or (µmhos/cm) 1)	0.705			
Temperature (°C)	11.48			
DO (mg/L)	*0.2			
ORP (mV)	-1.7			
Turbidity (NTU)	4			



Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.
* Down Hole DO probe used for final reading
Fe: 0.01 mg/L Dissolved ~~Note: VOAs / effervest when Bottle~~

Parameter	Container	No.	Preservative
See COC			

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 4/24/12
Well No.: MW-20 | Replicate No.: NA | Weather: Overcast 2450F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1315 End 1335

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	~5 → 15'
Sounded Well Depth (ft bmp)	14.48
Depth to Water (ft bmp)	1.89
Water Column in Well (ft)	12.59
Casing Diameter	2"
Gallons in Well	2
Gallons Purged	
Prior to Sampling	1 Bailer Volume
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1315 End —

Field Parameters

		1	1V	2V	3V
Color		Orangish Brown			
Odor		Bio odor			
Appearance		Slt. turbidity			
Time		1315			
DTW (ft bmp)		1.89			
pH (s.u.)		6.27			
Conductivity					
(mS/cm) or		5.738			
(µmhos/cm) [1]					
Temperature (°C)		13.32			
DO (mg/L)		*0.3			
ORP (mV)		-17.1			
Turbidity (NTU)		130			

Remarks: Well Went Dry (Y) / (N), After approximetly (NA) Volumes removed.
* Down Hole DO probe used for final reading
Fe: 3.17mg/L Note: Bottles (VOAs) effervest when sampled.

Parameter	Container	No.	Preservative
8260 VOC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.0001.00001
Site Location: 525 French Road, Utica, NY | Date: 4/24/12 + 4/25/12
Well No.: PZ-2 | Replicate No.: NA | Weather: overcast ~45°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 4/24/12 1610 / 4/25/12 1445 | End 4/24/12 1620 / 4/25/12 1459

Purge Data

Measuring Point (describe)	TIC
Sounded Well Depth (ft bmp)	9.81
Depth to Water (ft bmp)	2.83
Water Column in Well (ft)	6.98
Casing Diameter	1.5"
Gallons in Well	0.64
Gallons Purged	
Prior to Sampling	1 V
Evacuation Method	Peristaltic
Sampling Method	Peristaltic / Bailer
Pump Intake	
Setting (ft bmp)	~7'
Pumping Rate (gpm)	0.2 L/min
Purge Time	Begin 1235 4/24/12 End 1241 4/24/12

Field Parameters

Color: Lt Brown
Odor: None
Appearance: Slt. Turbidity

	1	4/24/12 Sample 1V	4/25/12 Sample 2V	3V
Time	1235	1610	1445	
DTW (ft bmp)	2.83	4.68	4.58	
pH (s.u.)	7.77		6.38	
Conductivity (mS/cm) or (µmhos/cm) [1]	2.320		2.066	
Temperature (°C)	10.95		11.36	
DO (mg/L)	1.83		*1.3	
ORP (mV)	-37.6		-15.6	
Turbidity (NTU)	34	X	23	

Not enough Volume

Remarks: Well Dry after 1V Removed; only VOC, TOC, Methane collected on 4/24/12
* DO probe used for Final Reading (Downhole)
Dissolved Fe: 0.49 mg/L

Parameter	Container	No.	Preservative
See COCs			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.0001.00001
Site Location: 525 French Road, Utica, NY | Date: 4/24/12
Well No.: A1-PZ-1 | Replicate No.: NA | Weather: Overcast Lt Rain ~45°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1150 End 1205

Purge Data

Measuring Point (describe)	TIC
Sounded Well Depth (ft bmp)	11.47 (12.24 Final)
Depth to Water (ft bmp)	0.96
Water Column in Well (ft)	11.28
Casing Diameter	1"
Gallons in Well	0.46
Gallons Purged	
Prior to Sampling	3V
Evacuation Method	Bailer/Peristaltic
Sampling Method	peristaltic
Pump Intake	
Setting (ft bmp)	~8'
Pumping Rate (gpm)	0.2 L/min
Purge Time	Begin 1130 End 1145

Field Parameters

Color: Greenish Brown
Odor: None
Appearance: V. Turbid

	I	1V	2V	3V
Time	1130	1135	1140	1145
DTW (ft bmp)	0.96	—	—	—
pH (s.u.)	6.73	6.82	6.77	6.87
Conductivity (mS/cm) or (µmhos/cm) [1]	1.495	1.404	1.860	2.679
Temperature (°C)	11.39	11.65	11.18	10.64
DO (mg/L)	0.60	0.48	0.43	*1.1
ORP (mV)	-3.7	-4.9	-6.9	-25.6
Turbidity (NTU)	71000	>1000	>1000	>1000

Remarks:
* DO collected for final Reading from Down Hole probe
Dissolved Fe: 0.21 mg/L (filtered)
Note: Effervesce evident in VOAs during sample collection

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.0001.00001
Site Location: 525 French Road, Utica, NY | Date: 4/24/12
Well No.: A1-PZ-2 | Replicate No.: NA | Weather: P/C Lt. Rain ~ 48°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1530 End 1545

Purge Data

Measuring Point (describe)	TIC
Sounded Well Depth (ft bmp)	12.20
Depth to Water (ft bmp)	1.65
Water Column in Well (ft)	10.55
Casing Diameter	1"
Gallons in Well	0.43
Gallons Purged	
Prior to Sampling	~1.0
Evacuation Method	Peristaltic
Sampling Method	Peristaltic/Bailer
Pump Intake	
Setting (ft bmp)	~9'
Pumping Rate (gpm)	~0.2 L/min
Purge Time	Begin 1100 End 1115

Field Parameters

Color	Clear → Lt Brown
Odor	None
Appearance	Slt. Turb.

	I	1V	2V	Sample ~~IF~~
Time	1100	1106	1110	1530
DTW (ft bmp)	1.65	—	—	1.72
pH (s.u.)	7.14	7.06	7.06	7.51
Conductivity (mS/cm) or (µmhos/cm) [1]	1.083	1.444	1.511	2.086
Temperature (°C)	11.70	11.44	11.27	11.93
DO (mg/L)	1.24	0.97	0.87	* 4.5
ORP (mV)	-14.1	-11.5	-12.4	1.3
Turbidity (NTU)	>1000	>1000	528	23

Remarks: Well went Dry after 2V Removed
* Down Hole DO Collected for final Reading
Dissolved Fe: 0.15 mg/L

Parameter	Container	No.	Preservative
see COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

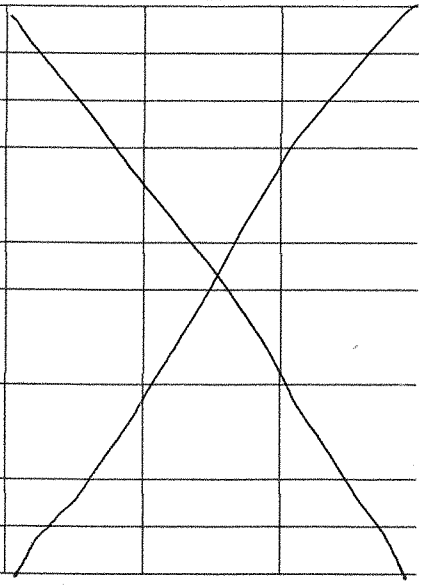
Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 5/9/12
Well No.: MW-19 | Replicate No.: NA | Weather: Overcast ~65°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1415 End 1430

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See table
Sounded Well Depth (ft bmp)	14.63
Depth to Water (ft bmp)	1.06
Water Column in Well (ft)	13.57
Casing Diameter	2"
Gallons in Well	2.17
Gallons Purged Prior to Sampling	1V
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1415 End 1416

Field Parameters

	Sample 1
Color	Nae
Odor	Nae
Appearance	Clear
Time	1415
DTW (ft bmp)	1.06
pH (s.u.)	7.48
Conductivity (mS/cm) or (µmhos/cm) [1]	0.926
Temperature (°C)	*8.6
DO (mg/L)	*0.31
ORP (mV)	63.6
Turbidity (NTU)	4



Remarks: Well Went Dry (Y) / (N), After approximetly (NA) Volumes removed.
* Down Hole DO probe used for final reading
Dissolved Fe: 0.00 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 5/9/12
Well No.: MW-20 | Replicate No.: NA | Weather: Overcast ~ 68°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1530 | End 1545

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See table
Sounded Well Depth (ft bmp)	14.48
Depth to Water (ft bmp)	1.39
Water Column in Well (ft)	13.09
Casing Diameter	2"
Gallons in Well	2.09
Gallons Purged	
Prior to Sampling	1 V
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	/
Pumping Rate (gpm)	/
Purge Time	Begin 1529 End 1530

Field Parameters

	Sample	1V	2V	3V
Color	Orangish Brown			
Odor	Bio odor			
Appearance	Clear			
Time	1530			
DTW (ft bmp)	1.39			
pH (s.u.)	5.88			
Conductivity (mS/cm) or	6.043			
(µmhos/cm) [1]	—			
Temperature (°C)	*8.1			
	*			
DO (mg/L)	0.65			
ORP (mV)	-15.6			
Turbidity (NTU)	16			

Remarks: Well Went Dry (Y) / (N), After approximetly (~~NA~~) Volumes removed.
*Down Hole DO probe used for final reading
Dissolved Fe: ~~XXX~~ mg/L → 2.73

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 5/9/12
Well No.: PZ-2 | Replicate No.: NA | Weather: Overcast ~64°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1230 End 1245

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See table
Sounded Well Depth (ft bmp)	9.80
Depth to Water (ft bmp)	3.55
Water Column in Well (ft)	6.25
Casing Diameter	1.5"
Gallons in Well	0.58
Gallons Purged	
Prior to Sampling	NA
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1225 End 1226

Field Parameters

Color	None
Odor	None
Appearance	Clear

	1	1V	2	2V	3	3V
Time	1225					
DTW (ft bmp)	3.55					
pH (s.u.)	6.94					
Conductivity (mS/cm) or	2.212					
(µmhos/cm) [1]	—					
Temperature (°C)	14.96					
DO (mg/L)	*0.32					
ORP (mV)	-13.2					
Turbidity (NTU)	8					

Remarks: Well Went Dry (Y) / (N), After approximetly (NA) Volumes removed.
* Down Hole DO probe used for final reading
Dissolved Fe: 0.14 mg/L Slight effervescence in VOA samples.

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 5/9/12
Well No.: AZ-PZ-1 | Replicate No.: NA | Weather: Overcast ~65°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1130 End 1145

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See table
Sounded Well Depth (ft bmp)	12.24
Depth to Water (ft bmp)	1.50
Water Column in Well (ft)	10.74
Casing Diameter	1"
Gallons in Well	0.44
Gallons Purged Prior to Sampling	~1.3
Evacuation Method	Peristaltic
Sampling Method	Peristaltic / Bailer
Pump Intake Setting (ft bmp)	~12.
Pumping Rate (gpm)	0.2 L/min
Purge Time	Begin 1100 End 1118

Field Parameters

Color: Brownish Gray
Odor: None
Appearance: V. Turbid

	1	1V	2V	3V
Time	1100	1106	1112	1118
DTW (ft bmp)	1.50	—	—	7.16
pH (s.u.)	6.70	6.65	6.59	6.62
Conductivity (mS/cm) or (µmhos/cm) [1]	1.191	1.241	1.685	2.146
Temperature (°C)	13.95	13.75	12.62	12.06
				*0.70
DO (mg/L)	0.94	0.72	0.53	0.58
ORP (mV)	-38.7	-51.0	-52.7	-51.7
Turbidity (NTU)	>1000	>1000	>1000	>1000

Remarks: Well Went Dry (Y) / (N), After approximetly (—) Volumes removed.
* Down Hole DO probe used for final reading
Dissolved Fe: 0.75 mg/L (Field Filtered)

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 5/9/12
Well No.: A2-PZ-2 | Replicate No.: NA | Weather: Overcast ~ 65°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1500 End 1510

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See table
Sounded Well Depth (ft bmp)	12.04
Depth to Water (ft bmp)	1.40
Water Column in Well (ft)	10.64
Casing Diameter	1"
Gallons in Well	0.44
Gallons Purged	
Prior to Sampling	1.3
Evacuation Method	Peristaltic
Sampling Method	Peristaltic / Bailer
Pump Intake	
Setting (ft bmp)	~11.5
Pumping Rate (gpm)	0.2 L/min.
Purge Time	Begin 1025 End 1037

Field Parameters

Color	Lt Gray
Odor	None
Appearance	Slt. Turb.

	1	1V	2V	Sample ~~3V~~
Time	1025	1030	1035	1500
DTW (ft bmp)	1.40	—	—	1.76
pH (s.u.)	6.24	6.35	6.37	7.11
Conductivity (mS/cm) or	1.660	1.550	1.949	1.879
(µmhos/cm) [1]				
Temperature (°C)	14.01	13.82	13.03	*8.9
DO (mg/L)	4.63	1.77	1.13	*1.01
ORP (mV)	25.6	-22.7	-31.3	-39.9
Turbidity (NTU)	22	9	27	50

Remarks: Well Went Dry (Y) / (N), After approximetly (2.5) Volumes removed.
*Down Hole DO probe used for final reading
Dissolved Fe: 1.00 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 6/5/12
Well No.: MW-19 | Replicate No.: NA | Weather: P/C ~ 65°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1600 End 1620

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.63
Depth to Water (ft bmp)	1.12
Water Column in Well (ft)	13.51
Casing Diameter	2"
Gallons in Well	2.16
Gallons Purged Prior to Sampling	NA
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1600 End 1620

Field Parameters

Color	None
Odor	None
Appearance	Clear

	I	1V	2V	3V
Time	1620			
DTW (ft bmp)	1.12			
pH (s.u.)	7.54			
Conductivity (mS/cm) or (µmhos/cm) [1]	0.751			
Temperature (°C)	15.0			
DO (mg/L)	*0.25			
ORP (mV)	-117.2			
Turbidity (NTU)	1.7			

Remarks: Well Went Dry (Y) / (N), After approximetly (NA) Volumes removed.
*Down Hole DO probe used for final reading
Dissolved Fe: 0.05 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1

Site Location: 525 French Road, Utica, NY | Date: 6/5/12

Well No.: MW-20 | Replicate No.: NA | Weather: P/C ~65°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1510 End 1535

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.48
Depth to Water (ft bmp)	2.08
Water Column in Well (ft)	12.4
Casing Diameter	2"
Gallons in Well	1.98
Gallons Purged Prior to Sampling	NA
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1510 End 1535

Field Parameters

Color	Greenish Brown
Odor	Strong BIO odor
Appearance	Slt. Turbidity

	I	1V	2V	3V
Time	1510			
DTW (ft bmp)	2.08			
pH (s.u.)	5.99			
Conductivity (mS/cm) or	—			
(µmhos/cm) [1]	6.770			
Temperature (°C)	15.7			
DO (mg/L)	# 0.30			
ORP (mV)	-95.8			
Turbidity (NTU)	45			

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.

Down Hole DO probe used for final reading

Dissolved Fe: 3.21 mg/L Note: Sample Effervests when added to HCl vials

Parameter See COC	Container	No.	Preservative

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1

Site Location: 525 French Road, Utica, NY | Date: 6/5/12

Well No.: PZ-2 | Replicate No.: NA | Weather: P/C ~ 65°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1420 | End 1445

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	9.80
Depth to Water (ft bmp)	3.65
Water Column in Well (ft)	6.15
Casing Diameter	1.5"
Gallons in Well	~0.5.6
Gallons Purged Prior to Sampling	NA
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1420 End 1445

Field Parameters

Color	Lt Brown
Odor	None
Appearance	Slt. Turb

	I	1V	2V	3V
Time	1420			
DTW (ft bmp)	3.65			
pH (s.u.)	7.46			
Conductivity (mS/cm) or	—			
(µmhos/cm) [1]	2.368			
Temperature (°C)	13.90			
DO (mg/L)	*0.38			
ORP (mV)	-28.1			
Turbidity (NTU)	34			

Remarks: Well Went Dry (Y) / (N), After approximetly (1) Volumes removed.

Down Hole DO probe used for final reading

Dissolved Fe: 3.3 mg/L → Max Reading Note: Samples effervesced when added to HCl Vials

Parameter See COC	Container	No.	Preservative

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1

Site Location: 525 French Road, Utica, NY | Date: 6/5/12

Well No.: A1-PZ-1 | Replicate No.: NA | Weather: ~65°F P/C

Sampling Personnel: D. Zuck | Sampling Time: Begin 1255 End 1305

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	12.24
Depth to Water (ft bmp)	1.70
Water Column in Well (ft)	10.54
Casing Diameter	1"
Gallons in Well	~ 0.432
Gallons Purged Prior to Sampling	3V
Evacuation Method	Peristaltic
Sampling Method	Peristaltic / Bailer
Pump Intake Setting (ft bmp)	7 → 12'
Pumping Rate (gpm)	~300mL
Purge Time	Begin 1235 End 1250

Field Parameters

Color	Gray
Odor	trace Bio like
Appearance	V. turbid

	I	1V	2V	3V
Time	1235	1240	1245	1250
DTW (ft bmp)	1.70	—	—	5.17
pH (s.u.)	7.16	7.01	6.97	7.00
Conductivity (mS/cm) or (µmhos/cm) [1]	1.341	1.242	1.197	1.259
Temperature (°C)	15.94	16.11	15.76	15.67
DO (mg/L)	1.40	0.53	0.33	0.02 *
ORP (mV)	+24.1	~119	-126.3	-141.3
Turbidity (NTU)	170	>1000	>1000	>1000

Remarks: Well Went Dry (Y) / (N); After approximetly (3) Volumes removed.

* Down Hole DO probe used for final reading

Dissolved Fe: 2.14 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001035.1.1
Site Location: 525 French Road, Utica, NY | Date: 6/5/12
Well No.: A1-PZ-2 | Replicate No.: NA | Weather: Overcast ~ 65°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1635 End 1645

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	12.04
Depth to Water (ft bmp)	2.05
Water Column in Well (ft)	9.99
Casing Diameter	1"
Gallons in Well	0.41
Gallons Purged	
Prior to Sampling	~1.2
Evacuation Method	Peristaltic
Sampling Method	Peristaltic/Bailer
Pump Intake	
Setting (ft bmp)	~7 → 12'
Pumping Rate (gpm)	300mL
Purge Time	Begin 1200 End 1215

Field Parameters

Color: Lt Gray
Odor: trace
Appearance: turbid, sheen on surface of P. water

	I	1V	2V	3V
Time	1200	1205	1210	1215
DTW (ft bmp)	2.05	—	—	Dry
pH (s.u.)	7.07	7.08	7.10	7.04
Conductivity (mS/cm) or (µmhos/cm) [1]	1.280	1.215	1.173	1.456
Temperature (°C)	15.47	15.91	17.08	16.63
DO (mg/L)	0.71	0.68	0.42	*3.31
ORP (mV)	-139.6	-139.0	-138.3	-142.2
Turbidity (NTU)	121	400	450	458 (36) ↓ Final

Remarks: Well Went Dry (Y) / (N), After approximetly (3) Volumes removed.
*Down Hole DO probe used for final reading @1635
Dissolved Fe: 2.16mg/L Final sample collected @ 1635

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0.102
Site Location: 525 French Road, Utica, NY | Date: 7/12/12
Well No.: AJ-PZ-1 | Replicate No.: NA | Weather: Clear 80°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1045 End 1100

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	8.10 (12.24)
Depth to Water (ft bmp)	2.60
Water Column in Well (ft)	5.50
Casing Diameter	1"
Gallons in Well	0.23
Gallons Purged Prior to Sampling	3V = 0.69
Evacuation Method	Peristaltic
Sampling Method	Peristaltic
Pump Intake Setting (ft bmp)	7.0
Pumping Rate (gpm)	~0.046 [175mL/min]
Purge Time	Begin 1015 End 1038

Field Parameters

Color	Gray
Odor	None
Appearance	V. Turbid

	I	1V	2V	3V
Time	1015 ~~Purge~~	1023	1033	1038
DTW (ft bmp)	2.60			7.16
pH (s.u.)	7.29	7.21	7.42	7.25
Conductivity (mS/cm) or ~~(µmhos/cm)~~ [1]	1.334	1.368	1.220	1.362
Temperature (°C)	22.51	22.85	20.75	*(18.8) 19.47
DO (mg/L)	0.68	0.24	0.10	*(0.06) 0.05
ORP (mV)	114.2	123.3	141.4	-153.6
Turbidity (NTU)	>1000	>1000	>1000	>1000

Remarks:
Well Went Dry (Y) / (N) After approximetly (3) Volumes removed. Note: Sample effervesce when added to HCL.
Down Hole DO probe used for final reading ~~0.3~~ @ [18.8°C] 0.06 mg/L
Dissolved Fe: 3.30 mg/L Note: Elevated turbidity may impact reading

Parameter	Container	No.	Preservative
See COC	40mL Vials	9	8-HCl 1-H2SO4
	125mL Plastic	3	UNP
	250mL Plastic	1	Nitric Acid

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica — Project No.: NJ001040.0.102

Site Location: 525 French Road, Utica, NY — Date: 7/12/12

Well No.: A1-PZ-2 — Replicate No.: NA — Weather: Clear ~80°F

Sampling Personnel: D. Zuck — Sampling Time: Begin 1400 — End 1525

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	12.22 [12.05]
Depth to Water (ft bmp)	2.77
Water Column in Well (ft)	9.45
Casing Diameter	1"
Gallons in Well	0.39
Gallons Purged Prior to Sampling	3V = 1.17
Evacuation Method	Peristaltic
Sampling Method	Peristaltic
Pump Intake Setting (ft bmp)	11.5 → 12.22
Pumping Rate (gpm)	~200 mL
Purge Time	Begin 0940 End 0959

Field Parameters

Color: Clear → Lt Grey

Odor: None

Appearance: Clear → st. turbidity

	I	1V	2V	~~3V~~ Sample
Time	0940	0946	0958	1400
DTW (ft bmp)	2.77	—	—	5.11
pH (s.u.)	6.86	6.91	6.94	7.25
Conductivity (mS/cm) or	1.986	2.019	2.173	1.828
(µmhos/cm) 1)	—	—	—	—
Temperature (°C)	20.04	21.13	21.22	(21.2) 21.66
DO (mg/L)	0.34	0.30	0.25	(0.16) 3.31
ORP (mV)	-111.8	-105.5	-104.0	-63.1
Turbidity (NTU)	52.2	>1000	>1000	638

Remarks: Well Went Dry (Y) / (N), After approximetly (2) Volumes removed. Dry @ 0959

Down Hole DO probe used for final reading

Dissolved Fe: 0.77 mg/L

Parameter	Container	No.	Preservative
See COC	40 mL Vials	9	8-HCl 1-UNP
	125 mL Plastic	3	UNP
	250 mL Plastic	1	Nitric Acid

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0.102
Site Location: 525 French Road, Utica, NY | Date: 7/12/12
Well No.: MW-19 | Replicate No.: NA | Weather: Clear 88°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1330 End 1345

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.63
Depth to Water (ft bmp)	1.69
Water Column in Well (ft)	13.01
Casing Diameter	2"
Gallons in Well	2.12
Gallons Purged Prior to Sampling	N/A
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	N/A
Pumping Rate (gpm)	N/A
Purge Time	Begin 1320 End 1325

Field Parameters

Color: Grayish-Clear
Odor: None
Appearance: Slightly Murky

	I	1V	2V	3V
Time	1320			
DTW (ft bmp)	1.69			
pH (s.u.)	7.63			
Conductivity (mS/cm) or (µmhos/cm) [1]	0.984			
Temperature (°C)	*(20.1) 25.02			
DO (mg/L)	*(0.26) 1.09			
ORP (mV)	128.2			
Turbidity (NTU)	18			

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed
*Down Hole DO probe used for final reading 0.26 mg/L [20.1 °C]
Dissolved Fe: 0.04 mg/L Depth to bottom: 14.57 ft

Parameter	Container	No.	Preservative
See COC	40 mL VOAs	9	8 HCl Temp
	125 mL Plastic	3	Temp
	250 mL Plastic	1	Nitric Acid

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.0.102

Site Location: 525 French Road, Utica, NY | Date: 7/12/12

Well No.: MW-20 | Replicate No.: NA | Weather: Clear ~ 88°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1345 End 1357

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.48
Depth to Water (ft bmp)	2.90
Water Column in Well (ft)	11.58
Casing Diameter	2"
Gallons in Well	1.85
Gallons Purged Prior to Sampling	3V=5.5gal
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1335 End 1340

Field Parameters

Color	Yellowish Brown
Odor	Slight Bio odor
Appearance	Clear → Slt. Turb.

	I	1V	2V	3V
Time	1335			
DTW (ft bmp)	2.90			
pH (s.u.)	6.24			
Conductivity (mS/cm) or	8.130			
(µmhos/cm) 1)	—			
	*(183)			
Temperature (°C)	26.04			
	*(0.55)			
DO (mg/L)	0.49			
ORP (mV)	-100.0			
Turbidity (NTU)	16			

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.

* Down Hole DO probe used for final reading

Dissolved Fe: 3.30 mg/L (Limit of Quant)

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica — Project No.: NJ001040.0.102

Site Location: 525 French Road, Utica, NY — Date: 7/12/12

Well No.: PZ-2 — Replicate No.: NA — Weather: Clear ~80°F

Sampling Personnel: D. Zuck — Sampling Time: Begin 1125 — End 1140

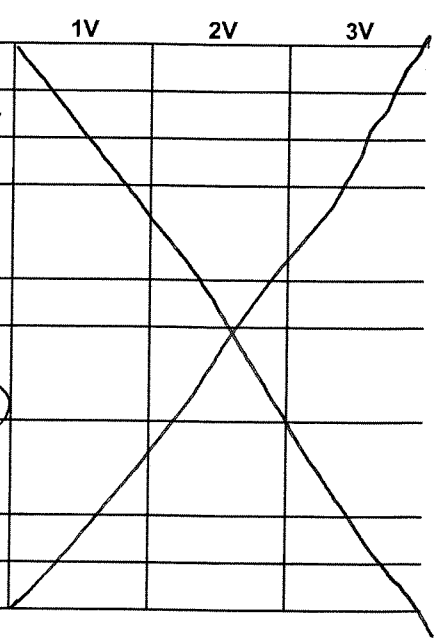
Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	9.80 [9.80]
Depth to Water (ft bmp)	4.78
Water Column in Well (ft)	5.02
Casing Diameter	1.25 (ID)
Gallons in Well	0.32
Gallons Purged Prior to Sampling	NA
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1120 End 1125

Field Parameters

Color	Clear → Lt Brown
Odor	None
Appearance	St. Turbidity

	1(1)	1V	2V	3V
Time	1120			
DTW (ft bmp)	4.78			
pH (s.u.)	7.15			
Conductivity (mS/cm) or	2.806			
(µmhos/cm) 1)	—			
Temperature (°C)	*17.6 (22.28)			
DO (mg/L)	*0.86 (1.53)			
ORP (mV)	-154.5			
Turbidity (NTU)	10.9			



Remarks: Well Went Dry (Y) / (N) After approximetly (—) Volumes removed. Approval from J. Bousted to collect initial sample.
* Down Hole DO probe used for final reading [17.6°C] 0.86 mg/L
Dissolved Fe: 2.28 mg/L (1) Well has history of Going Dry after 1V and very low Recharge Rate.

Parameter	Container	No.	Preservative
See COC	40mL vials	9	8-HCl 1-UNP
	125mL plastic	3	UNP
	500mL plastic	1	Nitric Acid

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/1/12 & 10/4/12

Well No.: A1-PZ-2 | Replicate No.: NA | Weather: Overcast 62°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 10/4/12 (1100) End 10/4/12 (1100)

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	12.09
Depth to Water (ft bmp)	2.08'
Water Column in Well (ft)	10'
Casing Diameter	1"
Gallons in Well	0.41
Gallons Purged Prior to Sampling	~0.8
Evacuation Method	Peristaltic
Sampling Method	Peristaltic
Pump Intake Setting (ft bmp)	Bottom
Pumping Rate (gpm)	200mL
Purge Time	Begin 1435 End 1442

Field Parameters

Color: Pale

Odor: Pale

Appearance: Clear

	1	1V	~~2V~~	Sample ~~3V~~
Time	1435	1442	NA	1100
DTW (ft bmp)	2.08	NA		2.30
pH (s.u.)	6.96	7.04		7.25
Conductivity (mS/cm) or (µmhos/cm) [1]	1.198	1.258		1.214
Temperature (°C)	17.59	18.22		17.93
DO (mg/L)	1.55	1.12		*0.1
ORP (mV)	-116.9	-144.2		~~-190.7~~
Turbidity (NTU)	>1000	>1000		109

Remarks: Well Went Dry (Y) / (N), After approximetly (1.8) Volumes removed.

* Down Hole DO probe used for final reading

Dissolved Fe: 0.53mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/4/12

Well No.: A2-PZ-1 | Replicate No.: NA | Weather: Lt Rain ~64°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1200 End 1203

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.40
Depth to Water (ft bmp)	4.10
Water Column in Well (ft)	10.7
Casing Diameter	1"
Gallons in Well	0.43
Gallons Purged	
Prior to Sampling	3V=1.3
Evacuation Method	Peristaltic
Sampling Method	Peristaltic
Pump Intake	
Setting (ft bmp)	Bottom
Pumping Rate (gpm)	~200ml
Purge Time	Begin 1127 End 1157

Field Parameters

Color	Lt Gray
Odor	Strong chemical like odor
Appearance	Vitreous

	1	1V	2V	3V
Time	1127	1137	1147	1157
DTW (ft bmp)	4.10	—	—	7.78
pH (s.u.)	6.99	6.93	6.94	6.95
Conductivity (mS/cm) or (µmhos/cm) [1]	1.225	1.066	1.042	1.097
Temperature (°C)	13.77	13.76	13.76	13.64
DO (mg/L)	1.53	1.69	0.95	0.8*
ORP (mV)	-192.4	-189.9	-203.9	-208.2
Turbidity (NTU)	>1000	>1000	226	>1000

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.

*Down Hole DO probe used for final reading

Dissolved Fe: 1.71 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/3/12

Well No.: A2-PZ-2 | Replicate No.: NA | Weather: Overcast ~ 640p

Sampling Personnel: D. Zuck | Sampling Time: Begin 1741 End 1746

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.79
Depth to Water (ft bmp)	6.08
Water Column in Well (ft)	8.71
Casing Diameter	1"
Gallons in Well	0.34
Gallons Purged Prior to Sampling	~1
Evacuation Method	Peristaltic
Sampling Method	Peristaltic
Pump Intake Setting (ft bmp)	Bottom
Pumping Rate (gpm)	~200mL
Purge Time	Begin 1720 End 1741

Field Parameters

Color: Lt Grey

Odor: Slt. chemical like

Appearance: V. Turbid

	I	1V	2V	3V
Time	1720	1726	1734	1741
DTW (ft bmp)	6.04	—	—	11.15
pH (s.u.)	6.96	6.88	6.87	6.94
Conductivity (mS/cm) or (µmhos/cm) [1]	1.134	1.141	1.164	1.134
Temperature (°C)	14.15	14.41	14.32	14.08
				*(1.4)
DO (mg/L)	5.42	4.94	2.93	3.12
ORP (mV)	-10.2	82.5	12.6	-16.8
Turbidity (NTU)	160	116	929	>1000

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.

*Down Hole DO probe used for final reading

Dissolved Fe: 0.00 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Low-Flow Groundwater Sampling Log

Project: LMC Utica
Project Number: NJ001040.0001.00103
Site Location: 525 French Rd
Well ID: MW-1
Date: 10/4/12
Sampled By: D.Zuck
Sampling Time: 1615
Recorded By: D.Zuck
Weather: P/C ~68°F
Coded Replicate No.: NA

Instrument Identification: Meter(s) Model: YSI 650MDS/Comette 2020/HACH DR-890 Serial #: YSI:(02F0013AC)

Casing Material: PVC
Casing Diameter: 4"
Sounded Depth (ft bmp): 17.32
Depth to Water (ft bmp): 8.53
Well Volume (Gal): (8.79") 5.6 gal

Purge Method: Geopump
Screen Interval (ft bmp): Top ____ Bottom ____
Pump Intake Depth (ft bmp): Initial ~12.5 Final ~12.5
Purge Time: Start 1510 Finish 1610

Field Parameter Measurements During Purging

Time	Minutes Elasped	Flow Rate (mL/min)	Volume Purged	Temp (°C)	pH (s.u.)	Conductivity (umhos or mS/cm) [1]	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft bmp)	Notes
1510	0	~~0.22~~ 250	0.25 gal	15.57	7.09	1.261	-183.2	1.87	1	8.53	
1515	5	/	/	15.49	7.06	1.216	-198.2	0.99	/	8.75	
1520	10	/	/	15.53	7.04	1.182	-201.6	0.78	/	/	
1525	15	~250	~1 gal	15.57	7.03	1.174	-203.4	0.68	2	9.07	
1530	20	/	/	15.59	7.03	1.172	-209.4	0.62	/	/	
1535	25	/	/	15.63	7.03	1.170	-213.7	0.58	/	/	
1540	30	~250	1.75	15.68	7.03	1.166	-216.0	0.53	2	9.32	
1545	35	/	/	15.69	7.03	1.164	-216.1	0.54	/	/	
1550	40	/	/	15.72	7.03	1.162	-216.4	0.53	/	/	
1555	45	~250	2.5	15.72	7.03	1.155	-212.2	0.61	2	9.43	
1600	50	/	/	15.71	7.03	1.154	-206.3	0.78	2	/	
1605	55	/	/	15.71	7.03	1.162	-204.0	0.86	2	/	
1610	60	~250	~2.5	15.77	7.03	1.173	-203.6	0.90	2	9.52	

Collect sample @1615

Collected Sample Condition Color None Odor None Appearance Clear

Parameter	Container	No. Collected	Preservative

Comments: Fe: 0.00 mg/L

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/3/12

Well No.: MW-2 | Replicate No.: NA | Weather: Overcast ~ 64°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1505 End 1510

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	16.19
Depth to Water (ft bmp)	5.72
Water Column in Well (ft)	10.47
Casing Diameter	4" ~~2"~~
Gallons in Well	6.83
Gallons Purged Prior to Sampling	20.5
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1429 End 1502

Field Parameters

Color: Lt Brown

Odor: None

Appearance: Slt. Turb.

	I	1V	2V	3V
Time	1429	1441	1451	1502
DTW (ft bmp)	5.72	✓	✓	6.05
pH (s.u.)	7.21	7.29	7.32	7.30
Conductivity (mS/cm) or (µmhos/cm) [1]	2.073 ✓	2.046 ✓	2.011 ✓	2.003 ✓
Temperature (°C)	16.93	16.60	16.49	16.47
DO (mg/L)	2.62	1.90	2.02	* 0.2
ORP (mV)	-36.7	-105.6	-107.9	-108.0
Turbidity (NTU)	55	28	29	22

Remarks: Well Went Dry (Y) / (N), After approximetly (NA) Volumes removed.

* Down Hole DO probe used for final reading

Dissolved Fe: 0.28 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Low-Flow Groundwater Sampling Log

Project: LMC Utica
Project Number: NJ001040.0001.00103
Site Location: 525 French Rd
Well ID: MW-13
Date: 10/4/12
Sampled By: D.Zuck
Sampling Time: 1505
Recorded By: D.Zuck
Weather: Overcast ~65°F
Coded Replicate No.: NA

Instrument Identification: Meter(s) Model: YSI 650 MDS/Lamotte 2020/HACH DR-890 Serial #: YSI (02F0013#C)

Casing Material: PVC
Casing Diameter: 2"
Sounded Depth (ft bmp): 15.03
Depth to Water (ft bmp): 10.93
Well Volume (Gal): (4.1') = 0.656

Purge Method: Geopump
Screen Interval (ft bmp): Top ____ Bottom ____
Pump Intake Depth (ft bmp): Initial ~13' Final 13'
Purge Time: Start 1400 Finish 1500

Field Parameter Measurements During Purging

Time	Minutes Elasped	Flow Rate (mL/min)	Volume Purged	Temp (°C)	pH (s.u.)	Conductivity (umhos or mS/cm) [1]	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft bmp)	Notes
1400	0	~250	0.25	15.67	7.05	0.874	-174.3	4.65	21	10.93	
1405	5	"	"	15.49	6.90	0.800	-171.1	3.76	"	11.44	
1410	10	"	"	15.48	6.90	0.855	-174.5	3.28	"	"	
1415	15	~250	~1gal	15.48	6.96	1.022	-183.2	2.27	3	11.76	
1420	20	"	"	15.45	7.00	1.111	-189.3	1.73	"	"	
1425	25	~175	"	15.48	7.03	1.154	-194.6	1.41	"	11.94	
1430	30	175	1.75	15.53	7.06	1.211	-200.3	1.13	1	11.95	
1435	35	"	"	15.52	7.08	1.227	-202.5	0.98	"	11.98	
1440	40	"	"	15.53	7.09	1.248	-205.8	0.88	"	12.01	
1445	45	~175	~2.5	15.53	7.11	1.262	-209.9	0.84	1	12.05	
1450	50	"	"	15.56	7.13	1.280	-215.6	0.72	1	12.09	
1455	55	"	"	15.57	7.15	1.297	-216.7	0.67	1	12.11	
1500	60	~175	~3.25	15.56	7.15	1.299	-216.6	0.68	1	12.12	
								End of Purge			

Collected Sample Condition: Color None Odor None Appearance Clear

Parameter	Container	No. Collected	Preservative
VOCs	40 mL Vials	3	HCl
Methane	40 mL Vials	2	HCl
TOC	40 mL Vials	2	HCl
NO3	125 mL plastic	1	UNP
Sulfate	125 mL plastic	1	UNP
Nitrate/Nitrite	125 mL plastic	1	UNP

Comments: Fe: 0.00 mg/L

1) Circle one unit type

C:\Users\dzuck\Documents\Field Docs\lowflowsampforms.xls - Sheet1

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/3/12

Well No.: MW-4 | Replicate No.: NA | Weather: Overcast ~ 60°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1355 End 1359

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.56
Depth to Water (ft bmp)	10.93
Water Column in Well (ft)	3.63
Casing Diameter	2"
Gallons in Well	0.58
Gallons Purged Prior to Sampling	~1.75
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1338 End

Field Parameters

Color	None
Odor	None
Appearance	Clear → Slt Turb

	I	1V	2V	3V
Time	1338	1344	1348	1354
DTW (ft bmp)	10.93	✓	✓	13.53
pH (s.u.)	6.71	6.94	7.01	7.11
Conductivity (mS/cm) or (µmhos/cm) [1]	2.121 ✓	2.150 ✓	2.160 ✓	2.164 ✓
Temperature (°C)	16.62	16.31	16.31	16.28
DO (mg/L)	2.88	3.61	2.36	2.97 (0.4)*
ORP (mV)	112.1	-47.8	-49.9	-53.0*
Turbidity (NTU)	20	10	8	4

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.

* Down Hole DO probe used for final reading

Dissolved Fe: 0.08 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/1/12 & 10/2/12

Well No.: MW-5 | Replicate No.: NA | Weather: Overcast 65°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 10/2/12 (1520) End 10/2/12 (1525)

Purge Data

Measuring Point (describe)	TOC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	5.98
Depth to Water (ft bmp)	4.21
Water Column in Well (ft)	1.77
Casing Diameter	2"
Gallons in Well	0.28
Gallons Purged Prior to Sampling	~0.5
Evacuation Method	Peristaltic
Sampling Method	
Pump Intake Setting (ft bmp)	Bottom
Pumping Rate (gpm)	~200mL
Purge Time	Begin 1520 End 1538

Field Parameters

Color	None
Odor	None
Appearance	Clear

	I	1V	Dry ~~2V~~	Sample ~~3V~~
Time	1520	1529	NA	1520
DTW (ft bmp)	4.21	NA		4.64
pH (s.u.)	7.25	7.28		7.17
Conductivity (mS/cm) or (µmhos/cm) [1]	2.996	3.215		5.004
Temperature (°C)	16.77	17.99		16.95
				#(0.22)
DO (mg/L)	2.89	2.94		2.81
ORP (mV)	-99.3	-106.2		-97.2
Turbidity (NTU)	>1000	7(000	↓	14

Remarks: Well Went Dry (Y) / (N), After approximetly (1.9) Volumes removed.

Down Hole DO probe used for final reading

Dissolved Fe: 1.42mg/L

Parameter See COC	Container	No.	Preservative

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Low-Flow Groundwater Sampling Log

Project	LMC Utica				
Project Number	NJ001040.0001.00103	Site Location	525 French Rd	Well ID	MW-10
Date	10/4/12	Sampled By	D.Zuck		
Sampling Time	1330	Recorded By	D.Zuck		
Weather	Overcast ~64°F	Coded Replicate No.	DUP-100412		
Instrument Identification:	Meter(s) Model:	YSI 650 MDS / Lamotte 2020 / HACH DR-890	Serial #	YSI: 02 F00134C	
Casing Material:	PVC				
Casing Diameter:	2"	Purge Method:	Geopump		
Sounded Depth (ft bmp)	12.63	Screen Interval (ft bmp):	Top	Bottom	
Depth to Water (ft bmp)	5.16	Pump Intake Depth (ft bmp):	Initial ~8'	Final ~8'	
Well Volume (Gal)	(7.47') ~1.2 gal	Purge Time:	Start 1225	Finish 1325	

Field Parameter Measurements During Purging

Time	Minutes Elasped	Flow Rate (mL/min)	Volume Purged	Temp (°C)	pH (s.u.)	Conductivity (umhos or mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Depth to Water (ft bmp)	Notes
1225	0	~250	0.25	17.11	7.15	8.204	-230.8	1.30	64	5.16	
1230	5	"	"	16.98	7.26	4.513	-237.3	0.90	"	5.26	
1235	10	"	"	16.92	7.24	3.108	-239.6	0.66	"	5.27	
1240	15	~250	~1.25	16.91	7.20	3.007	-242.1	0.54	12	5.28	
1245	20	"	"	16.92	7.28	2.970	-245.5	0.41	"	5.28	
1250	25	"	"	16.91	7.29	2.944	-247.0	0.36	"	5.28	
1255	30	~250	~2.25	16.91	7.30	2.906	-247.7	0.33	2	5.28	
1300	35	"	"	16.91	7.31	2.869	-250.8	0.32	"	5.28	
1305	40	"	"	16.90	7.32	2.829	-253.3	0.30	"	5.28	
1310	45	~250	~3.25	16.90	7.32	2.801	-253.7	0.27	1	5.28	
1315	50	"	"	16.90	7.33	2.774	-254.0	0.21	1	5.28	
1320	55	"	"	16.91	7.33	2.735	-254.1	0.21	1	5.28	
1325	60	~250	~4.25	16.92	7.33	2.722	-254.2	0.20	1	5.28	
						End of Parameters					

Collected Sample Condition — Color None — Odor None — Appearance Clear

Parameter	Container	No. Collected	Preservative
VOCs	3 VOAs	~~8~~ 6	HCl
TOC	2 VOAs	~~6~~ 4	HCl
Methane	2 VOAs	4	HCl
Alk	1) 125 Plastic	2	UNP
Sulfide	1) 125 Plastic	2	UNP
Nitrate/Nitrites	1) 125 Plastic UNP	2	UNP

Comments: Fe: 3.01 mg/L

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/4/12

Well No.: MW-14BR | Replicate No.: NA | Weather: Overcast ~65°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1605 End 1610

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	66.94
Depth to Water (ft bmp)	41.77
Water Column in Well (ft)	~~66.94~~ 25.17
Casing Diameter	2"
Gallons in Well	4.02
Gallons Purged	(~5.25) Removed
Prior to Sampling	3V = 12.08
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1046 End 1124

Field Parameters

Color	Orange/Brown
Odor	None
Appearance	V. turbid

	1	1V	Dry@1.25 vol. 2V	sample 3V
Time	1046	1109	1124	1605
DTW (ft bmp)	41.77	62.90		65.06
pH (s.u.)	7.05	7.35		~~13.95~~ 7.64
Conductivity (mS/cm) or	10.72	10.87		11.57
(µmhos/cm) [1]	—	—		—
Temperature (°C)	13.45	12.55		13.95
DO (mg/L)	1.82	1.92		4.17
ORP (mV)	-175.1	-189.2		-254.5
Turbidity (NTU)	51	321		>1000

Remarks: Well Went Dry (Y) / (N), After approximetly (1.25) Volumes removed.
Down Hole DO probe used for final reading NA: Due to Depth
Dissolved Fe: 2.55 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103
Site Location: 525 French Road, Utica, NY | Date: 10/3/12
Well No.: MW-18 | Replicate No.: NA | Weather: Overcast ~64°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1600 | End 1605

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.45
Depth to Water (ft bmp)	3.35
Water Column in Well (ft)	11.1
Casing Diameter	2"
Gallons in Well	1.78
Gallons Purged Prior to Sampling	25.3
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1540 End 1555

Field Parameters

Color: Lt → Med Grey
Odor: None
Appearance: V. Turbid

	I	1V	2V	3V
Time	1540	1546	1551	1555
DTW (ft bmp)	3.35	/	/	11.94
pH (s.u.)	7.37	7.32	7.33	7.50
Conductivity (mS/cm) or (µmhos/cm) [1]	0.746	0.402	0.839	0.759
Temperature (°C)	15.48	14.98	14.72	14.42
DO (mg/L)	2.28	2.35	2.06	*0.2
ORP (mV)	-57.4	-95.8	-96.4	-73.8
Turbidity (NTU)	8	548	>1000	>1000

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.
*Down Hole DO probe used for final reading
Dissolved Fe: 0.17 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103
Site Location: 525 French Road, Utica, NY | Date: 10/12/12
Well No.: MW-20 | Replicate No.: NA | Weather: Overcast
Sampling Personnel: D. Zuck | Sampling Time: Begin 1455 End 1459

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.48
Depth to Water (ft bmp)	3.20
Water Column in Well (ft)	11.28
Casing Diameter	2"
Gallons in Well	~1.8
Gallons Purged Prior to Sampling	~5.4
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1430 End 1450

Field Parameters

Color: Gray
Odor: Bio Odor
Appearance: V. turbid

	I	1V	2V	3V
Time	1430	1436	1442	1450
DTW (ft bmp)	3.20	—	—	10.00
pH (s.u.)	6.73	6.72	6.74	6.85
Conductivity (mS/cm) or (µmhos/cm) [1]	6.776	7.020	7.130	5.737
Temperature (°C)	18.18	17.52	16.99	16.01
DO (mg/L)	2.81	1.92	1.16	0.62 *(2.69)
ORP (mV)	-104.7	-99.5	-123.4	-160.6
Turbidity (NTU)	39	>1000	>1000	>1000

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed. Note VOAs Effervescence when filled
* Down Hole DO probe used for final reading
Dissolved Fe: 2.90 mg/L

Parameter See COC	Container	No.	Preservative

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/12/12

Well No.: MW-21 | Replicate No.: NA | Weather: Overcast ~ 65°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1355 End 1359

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	14.39
Depth to Water (ft bmp)	2.92
Water Column in Well (ft)	11.47
Casing Diameter	2
Gallons in Well	1.84
Gallons Purged Prior to Sampling	5.5
Evacuation Method	Peristaltic/Bailer
Sampling Method	Peristaltic Bailer
Pump Intake Setting (ft bmp)	Bottom/NA
Pumping Rate (gpm)	500mL/NA
Purge Time	Begin 1325 End 1345

Field Parameters

Color: Reddish Brown

Odor: None

Appearance: V. turbid

	1	1V	2V	3V
Time	1325	1332	1341	1345
DTW (ft bmp)	2.92	—	—	6.01
pH (s.u.)	7.41	7.63	7.47	7.23
Conductivity (mS/cm) or (µmhos/cm) [1]	6.407	2.733	5.384	12.150
Temperature (°C)	19.15	19.01	19.02	18.84
DO (mg/L)	2.38	3.20	1.53	*0.89 1.36
ORP (mV)	-146.9	-123.6	-128.6	-112.7
Turbidity (NTU)	52	487	>1000	>1000

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.

* Down Hole DO probe used for final reading

Dissolved Fe: 0.73 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103
Site Location: 525 French Road, Utica, NY | Date: 10/2/12
Well No.: PZ-5 | Replicate No.: NA | Weather: Overcast 64°F
Sampling Personnel: D. Zuck | Sampling Time: Begin 1748 End 1802

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	10.75
Depth to Water (ft bmp)	8.96
Water Column in Well (ft)	
Casing Diameter	1.25"
Gallons in Well	
Gallons Purged	
Prior to Sampling	NA
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin NA End NA

Field Parameters

Color	Lt Grey
Odor	Slight Bio like
Appearance	Slt. Turb.

	1	1V	2V	3V
Time	1748			
DTW (ft bmp)	8.96			
pH (s.u.)	7.59			
Conductivity (mS/cm) or (µmhos/cm) [1]	1.533 —			
Temperature (°C)	17.31			
DO (mg/L)	*0.68			
ORP (mV)	-132.0			
Turbidity (NTU)	75			

Remarks: Well Went Dry (Y) / (N), After approximetly (1V) Volumes removed.
*Down Hole DO probe used for final reading
Dissolved Fe: 0.68 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/2/12

Well No.: PZ-6 | Replicate No.: NA | Weather: Overcast 64°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 1730 End 1740

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	10.42
Depth to Water (ft bmp)	9.26
Water Column in Well (ft)	
Casing Diameter	1.25
Gallons in Well	
Gallons Purged Prior to Sampling	
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time Begin	NA End NA

Field Parameters

Color	Lt Brown
Odor	None
Appearance	Slt. turb.

	1	1V	2V	3V
Time	1740			
DTW (ft bmp)	9.26			
pH (s.u.)	7.82			
Conductivity (mS/cm) or	1.774			
(µmhos/cm) [1]				
Temperature (°C)	16.32			
DO (mg/L)	*0.89			
ORP (mV)	-58.6			
Turbidity (NTU)	70			

Remarks: Well Went Dry (Y) / (N), After approximetly (1V) Volumes removed.

*Down Hole DO probe used for final reading

Dissolved Fe: 0.09 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/2/12

Well No.: PZ-7 | Replicate No.: NA | Weather: Overcast 64°

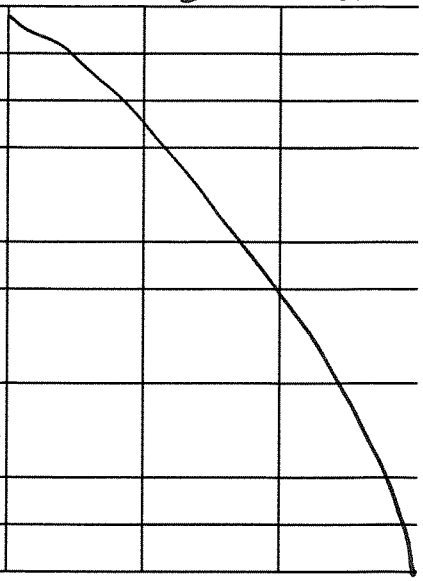
Sampling Personnel: D. Zuck | Sampling Time: Begin 1905 | End 1915

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	10.48
Depth to Water (ft bmp)	8.97
Water Column in Well (ft)	
Casing Diameter	1.25"
Gallons in Well	
Gallons Purged	
Prior to Sampling	NA
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin NA End NA

Field Parameters

	1	1V	2V	3V
Color	Reddish Brown			
Odor	None			
Appearance	Turbid			
Time	1915			
DTW (ft bmp)	8.97			
pH (s.u.)	7.13			
Conductivity (mS/cm) or	1.220			
(µmhos/cm) [1]	—			
Temperature (°C)	19.10			
DO (mg/L)	#0.75			
ORP (mV)	-88.0			
Turbidity (NTU)	461			



Remarks: Well Went Dry (Y) / (N), After approximetly (1V) Volumes removed.

Down Hole DO probe used for final reading

Dissolved Fe: 1.11 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/2/12 & 10/3/12

Well No.: PZ-8 | Replicate No.: NA | Weather: Overcast ~64°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 10/2/12 1730; 10/3/12 1245 | End 10/2/12 1736; 10/3/12 1245

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	9.80
Depth to Water (ft bmp)	9.40
Water Column in Well (ft)	0.4'
Casing Diameter	1"
Gallons in Well	0.0
Gallons Purged Prior to Sampling	NA
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time Begin	NA End NA

Field Parameters

	(1 VOC) sample	(2nd VOA) sample 10/3/12	10/5/12	
	+	+1V	2V	3V
Color	Lt Brown			
Odor	None			
Appearance	Turbid			
Time	1730	1245	1410	
DTW (ft bmp)	9.40	9.48	9.43	
pH (s.u.)				
Conductivity (mS/cm) or (µmhos/cm) [1]				
Temperature (°C)			14.1	
DO (mg/L)			2.3	
ORP (mV)				
Turbidity (NTU)				

Remarks: Well Went Dry (Y) / (N), After approximetly (NA) Volumes removed. Collected sample from well w/o Purging

Down Hole DO probe used for final reading

Dissolved Fe: NA mg/L

Parameter	Container	No.	Preservative
See COC 1 VOA Filled 10/2/12			
1 VOA Filled 10/3/12			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/1/12 & 10/2/12

Well No.: ~~PZ~~-11R | Replicate No.: NA | Weather: PC ~62°F

Sampling Personnel: D. Zuck | Sampling Time: Begin 10/2/12 (1540) End 10/2/12 (1546)

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	9.90
Depth to Water (ft bmp)	8.55
Water Column in Well (ft)	1.35
Casing Diameter	1"
Gallons in Well	0.055
Gallons Purged	
Prior to Sampling	~0.05
Evacuation Method	Peristaltic
Sampling Method	Peristaltic
Pump Intake	
Setting (ft bmp)	Bottom
Pumping Rate (gpm)	~200mL
Purge Time	Begin 1635 End 1640

Field Parameters

	Color	Odor	Appearance
	None	~~Odor~~ None	Slt. Turb.

	1	Dry ~~1V~~	2V	Sample ~~3V~~
Time	1635	NA		1546
DTW (ft bmp)	8.55			8.58
pH (s.u.)	7.04			7.07
Conductivity (mS/cm) or	3.175			2.867
(µmhos/cm) [1]	—			—
Temperature (°C)	19.18			16.68
DO (mg/L)	5.04			*2.91
ORP (mV)	45.1			-2.0
Turbidity (NTU)	61			125

Remarks: Well Went Dry (Y) / (N), After approximetly (1V) Volumes removed.

*Down Hole DO probe used for final reading

Dissolved Fe: 004 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	$1^{1/4}$" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	$1^{1/2}$" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/1/12 & 10/2/12

Well No.: PZ~~MW~~-13R | Replicate No.: NA | Weather: Overcast

Sampling Personnel: D. Zuck | Sampling Time: Begin 1605 (10/2/12); 1120 (10/3/12); 1040 (10/4/12) End 1610 (10/2/12); 1130 (10/3/12); 1041 (10/4/12)

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	9.85
Depth to Water (ft bmp)	8.08
Water Column in Well (ft)	1.77
Casing Diameter	1"
Gallons in Well	0.07
Gallons Purged Prior to Sampling	~0.07
Evacuation Method	Peristaltic
Sampling Method	Peristaltic
Pump Intake Setting (ft bmp)	Bottom
Pumping Rate (gpm)	~200mL
Purge Time Begin	16:55 End ~1700

Field Parameters

Color: None

Odor: None

Appearance: clear

	1	~~1V~~	~~2V~~	Sample 3V	
Time	1655	NA		1605 (10/2)	(10/4 1041
DTW (ft bmp)	8.08			8.16	8.13
pH (s.u.)	6.85			Not Enough Volume	
Conductivity (mS/cm) or	6.601				
(µmhos/cm) [1]					
Temperature (°C)	14.47				
DO (mg/L)	3.56			0.8*	
ORP (mV)	-18.5				
Turbidity (NTU)	109				

Remarks: Well Went Dry (Y) / (N), After approximetly (1V) Volumes removed. ; 10/2/12 : well Dry after (VOC, MAM, TOC)

Down Hole DO probe used for final reading (0.8); DTW 8.12 10/3/12 : (Salt, Alk @ 1120)

Dissolved Fe: 1.01 mg/L

Parameter See COC	Container	No.	Preservative

PID Reading NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 10/2/12

Well No.: PZ-16 | Replicate No.: NA | Weather: Overcast ~ 60°F

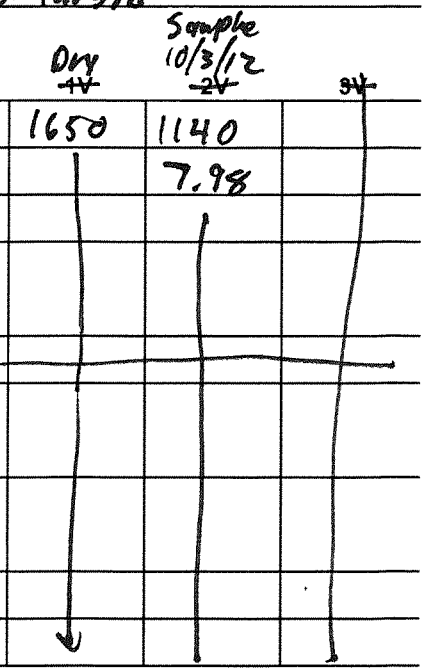
Sampling Personnel: D. Zuck | Sampling Time: Begin 10/3/12 (~~1145~~) End 10/3/12 (1149)

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	7.97
Depth to Water (ft bmp)	8.79
Water Column in Well (ft)	0.82
Casing Diameter	1"
Gallons in Well	0.03
Gallons Purged	
Prior to Sampling	0.03
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake	
Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1645 End 1650

Field Parameters

		1	Dry ~~1V~~	Sample 10/3/12 ~~2V~~	~~3V~~
Color		Brown			
Odor		None			
Appearance		V. Turbid			
Time		1645	1650	1140	
DTW (ft bmp)		7.97		7.98	
pH (s.u.)		6.90			
Conductivity					
(mS/cm) or		3.062			
(µmhos/cm) [1]					
Temperature (°C)		16.64			
DO (mg/L)		4.34			
ORP (mV)		-48.4			
Turbidity (NTU)		>1000			



Remarks: Well Went Dry (Y) / (N), After approximetly (1V) Volumes removed.

Down Hole DO probe used for final reading (0.15 mg/L)

Dissolved Fe: 0.25 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

ARCADIS
Infrastructure, environment, facilities

Water Sampling Log

Project: LMC Utica | Project No.: NJ001040.1.103

Site Location: 525 French Road, Utica, NY | Date: 12/3/12

Well No.: PZ-26 | Replicate No.: NA | Weather: Overcast

Sampling Personnel: D. Zuck | Sampling Time: Begin 1650 End 1655

Purge Data

Measuring Point (describe)	TIC
Screen Setting (BLS)	See Table
Sounded Well Depth (ft bmp)	23.72
Depth to Water (ft bmp)	9.31
Water Column in Well (ft)	23.72 - 9.31 = 14.41
Casing Diameter	1"
Gallons in Well	0.55
Gallons Purged Prior to Sampling	~1.86
Evacuation Method	Bailer
Sampling Method	Bailer
Pump Intake Setting (ft bmp)	NA
Pumping Rate (gpm)	NA
Purge Time	Begin 1615 End 1645

Field Parameters

Color: Lt → Med Grey

Odor: None

Appearance: V. turbid

	1	1V	2V	3V
Time	1615	1626	1635	1645
DTW (ft bmp)	9.31	✓	✓	14.65
pH (s.u.)	7.54	7.61	7.60	7.66
Conductivity (mS/cm) or	0.669	0.687	0.685	0.670
(µmhos/cm) [1]				
Temperature (°C)	13.51	14.07	13.58	14.12
DO (mg/L)	1.70	2.53	2.61	#0.2
ORP (mV)	-135.7	-119.0	-62.0	-27.8
Turbidity (NTU)	514	472	>1000	>1000

Remarks: Well Went Dry (Y) / (N) After approximetly (NA) Volumes removed.

#Down Hole DO probe used for final reading

Dissolved Fe: 0.45 mg/L

Parameter	Container	No.	Preservative
See COC			

PID Reading: NA

Well Casing Volumes: Gal./Ft. (L/ft)

1/4" = 0.003 (0.01)	3/4"= 0.023 (0.087)	1 1/4" = 0.064	2" = 0.163	3" = 0.367	4" = 0.653
1/2" = 0.01 (0.039)	1"= 0.041 (0.154)	1 1/2" = 0.092	2-½" = 0.26	3-½" = 0.50	6" = 1.469

1) Circle one unit type

APPENDIX G—
DATA USABILITY SUMMARY REPORT (On Attached CD)

Lockheed Martin Corporation

Data Usability Summary Report

UTICA, NEW YORK

Volatiles, Dissolved Gasses, Misc. Analyses

SDG#480-15487

Analyses Performed By:
TestAmerica Laboratories, Inc

Report: #15679R
Review Level: Tier III
Project: NJ001040.0001.00300

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 480-15487 for samples collected in association with the Lockheed Martin Utica Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
MW-1	480-15487-1	Water	1/25/2012		X				X
MW-3	480-15487-2	Water	1/25/2012		X				X
PZ-5	480-15487-3	Water	1/25/2012		X				
PZ-8	480-15487-4	Water	1/25/2012		X				
PZ-11R	480-15487-5	Water	1/25/2012		X				
PZ-13R	480-15487-6	Water	1/25/2012		X				X
A1-PZ-2	480-15487-7	Water	1/24/2012		X				X
AZ-PZ-1	480-15487-8	Water	1/24/2012		X				X
Trip Blank	480-15487-9	Water	1/24/2012		X				

Note: The matrix spike/matrix spike duplicate for VOCs was performed on sample AZ-PZ-1.

ANALYTICAL DATA PACKAGE DOCUMENTATION

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 methods 8260 and RSK-175. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOPs and NYSDEC ASP 2005.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to 4°C±2°C; preserved to a pH of less than 2.
	Soil	14 days from collection to analysis	Cool to 4°C±2°C.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-1 MW-3 PZ-5 PZ-8 PZ-11R PZ-13R A1-PZ-2 AZ-PZ-1 TB	CCV %D	Dichlorodifluoromethane	29.9%
		Trichlorofluoromethane	43.6%
		1,1,2-Trichloro-1,2,2-trifluoroethane	21.6%
		1,1,1-Trichloroethane	24.3%
		Cyclohexane	25.4%
		Carbon Tetrachloride	33.3%
		Tetrachloroethene	22.5%
		2-Hexanone	-28.0%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
AZ-PZ-1	cis-1,2-Dichloroethene	<10%	<10%
	Trichloroethene	<LL but >10%	<LL but >10%

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J

Control Limit	Sample Result	Qualification
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected in association with this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
PZ-5	Tetrachloroethene	230 E	170 D	170 D
AZ-PZ-1	cis-1,2-Dichloroethene	37000 E	42000 D	42000 D

U Nondetected

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

DISSOLVED GASES (METHANE) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
RSK-175 (Methane)	Water	14 days from collection to analysis	Cooled @ 4 °C; preserved to a pH of less than 2 s.u.

s.u. Standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the reporting limit (RL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. No qualification of the sample results was required.

3. Mass Spectrometer Tuning

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

A maximum RSD of 20% is allowed or a correlation coefficient greater than 0.99.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (15%).

All calibration criteria were within the control limits.

5. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A matrix spike/ matrix spike duplicate was not analyzed in association with this SDG.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

7. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

A field duplicate was not collected in association with this SDG.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
A1-PZ-2	Methane	--	2400 D	2400 D
AZ-PZ-1		--	2600 D	2600 D

U Not Detected

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METHANE

Methane; RSK-175	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY (GC/FID)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)					X
Surrogate Spike Recoveries					X
Column (%D)					X
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSDs		X		X	
Continuing calibration %Ds		X		X	
System performance and column resolution		X		X	
Compound identification and quantitation					
A. Quantitation Reports		X		X	
B. RT of sample compounds within the established RT windows		X		X	
C. Pattern identification		X		X	
D. Transcription/calculation errors present	X			X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD – relative standard deviation, %R - percent recovery, RPD - relative percent difference, %D – difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to (United States Environmental Protection Agency) EPA Methods 353.2, standard methods (SM)D516-90, and (SM)2320B. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within control limits.

    * Duplicate analysis is not within control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Nitrate-N by EPA 353.2	Water	48 hours from collection to analysis	Cool to 4°C±2°C.
Sulfate by SMD516-90	Water	14 days from collection to analysis	Cool to 4°C+2°C.
Alkalinity by SM 2320B	Water	14 days from collection to analysis	Cool to 4°C±2°C.

The analyses that exceeded the holding time are presented in the following table.

Sample Locations	Holding Time	Criteria
MW-1 MW-3 PZ-13R A1-PZ-2 AZ-PZ-1	2 days	<2 Days

Sample results associated with sample locations analyzed by analytical EPA method 353.2 were qualified, as specified in the table below. All other holding times were met.

Criteria	Qualification	
	Detected Analytes	Non-detect Analytes
Analysis completed less than two times holding time	J	UJ

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All calibration standard recoveries were within the control limit.

4. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed.

The MS analysis was not performed on a sample location within this SDG.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

The laboratory duplicate was not performed on a sample location within this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected in association with this sample set.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS/LCSD analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA 9012A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X	X		
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R					X
Matrix Spike Duplicate(MSD) %R					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (RPD)					X
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data		X		X	
Transcription/calculation errors present				X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD – relative standard deviation, %R - percent recovery, RPD - relative percent difference, %D – difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
480-15487	1/25/2012	SW-846	MW-1	Water	No	--	--	--	No	VOC-CCV%D MISC-Nitrate hold time
480-15487	1/25/2012	SW-846	MW-3	Water	No	--	--	--	No	VOC-CCV%D MISC-Nitrate hold time
480-15487	1/25/2012	SW-846	PZ-5	Water	No	--	--	--	Yes	VOC-CCV%D
480-15487	1/25/2012	SW-846	PZ-8	Water	No	--	--	--	Yes	VOC-CCV%D
480-15487	1/25/2012	SW-846	PZ-11R	Water	No	--	--	--	Yes	VOC-CCV%D
480-15487	1/25/2012	SW-846	PZ-13R	Water	No	--	--	--	No	VOC-CCV%D MISC-Nitrate hold time
480-15487	1/24/2012	SW-846	A1-PZ-2	Water	No	--	--	--	No	VOC-CCV%D MISC-Nitrate hold time
480-15487	1/24/2012	SW-846	AZ-PZ-1	Water	No	--	--	--	No	VOC-CCV%D, MS/MSD %R MISC-Nitrate hold time
480-15487	1/24/2012	SW-846	Trip Blank	Water	No	--	--	--	Yes	VOC-CCV%D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Mary Ann Doyle

SIGNATURE: 

DATE: February 28, 2012

PEER REVIEW BY: Dennis Capria

DATE: March 6, 2012

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

15679R

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: MW-1

Lab Sample ID: 480-15487-1
Client Matrix: Water

Date Sampled: 01/25/2012 1620
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5306.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1559			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1559				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	3.8		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND	J	1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	35		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	78	J	0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	23		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: **MW-1**

Lab Sample ID: 480-15487-1
Client Matrix: Water

Date Sampled: 01/25/2012 1620
Date Received: 01/26/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5306.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1559			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1559				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	1.5		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
Toluene-d8 (Surr)	108		71 - 126
4-Bromofluorobenzene (Surr)	103		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: MW-3

Lab Sample ID: 480-15487-2
Client Matrix: Water

Date Sampled: 01/25/2012 1425
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5307.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1622			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1622				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	4.4		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND	J	1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	40		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	22	J	0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	1.1		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	24		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: MW-3

Lab Sample ID: 480-15487-2
Client Matrix: Water

Date Sampled: 01/25/2012 1425
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5307.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1622			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1622				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	3.8		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
Toluene-d8 (Surr)	110		71 - 126
4-Bromofluorobenzene (Surr)	104		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-5

Lab Sample ID: 480-15487-3
Client Matrix: Water

Date Sampled: 01/25/2012 1745
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5308.D
Dilution:	2.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1645			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1645				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		1.6	1.6
1,1-Dichloroethane	ND		0.76	0.76
1,2-Dichlorobenzene	ND		1.6	1.6
1,3-Dichlorobenzene	ND		1.6	1.6
1,4-Dichlorobenzene	ND		1.7	1.7
Benzene	ND		0.82	0.82
Chlorobenzene	ND		1.5	1.5
Chloroethane	ND		0.64	0.64
cis-1,2-Dichloroethene	50		1.6	1.6
Ethylbenzene	ND		1.5	1.5
m-Xylene & p-Xylene	ND		1.3	2.0
o-Xylene	ND		1.5	1.5
Tetrachloroethene	170 ~~230~~	D EJ	0.72	0.72
Toluene	ND		1.0	1.0
trans-1,2-Dichloroethene	1.8		1.8	1.8
Trichloroethene	71		0.92	0.92
Vinyl chloride	ND		1.8	2.0
Xylenes, Total	ND		1.3	2.0
cis-1,3-Dichloropropene	ND		0.72	2.0
Carbon disulfide	ND		0.38	2.0
Bromoform	ND		0.52	2.0
1,2-Dichloroethane	ND		0.42	2.0
1,2-Dichloropropane	ND		1.4	2.0
1,1,2-Trichloroethane	ND		0.46	2.0
Acetone	12	J	6.0	20
Methyl acetate	ND		1.0	2.0
Dichlorodifluoromethane	ND		1.4	2.0
4-Methyl-2-pentanone (MIBK)	ND		4.2	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.62	2.0
Methylene Chloride	ND		0.88	2.0
Chloromethane	ND		0.70	2.0
Bromomethane	ND		1.4	2.0
Dibromochloromethane	ND		0.64	2.0
1,2,4-Trichlorobenzene	ND		0.82	2.0
1,2-Dibromo-3-Chloropropane	ND		0.78	2.0
Methyl tert-butyl ether	ND		0.32	2.0
Styrene	ND		1.5	2.0
1,1,2,2-Tetrachloroethane	ND		0.42	2.0
1,1-Dichloroethene	ND		0.58	2.0
2-Hexanone	ND J		2.5	10
2-Butanone (MEK)	ND		2.6	20
Isopropylbenzene	ND		1.6	2.0
Methylcyclohexane	ND		0.32	2.0
Trichlorofluoromethane	ND		1.8	2.0
Cyclohexane	ND		0.36	2.0
trans-1,3-Dichloropropene	ND		0.74	2.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-5

Lab Sample ID: 480-15487-3
Client Matrix: Water

Date Sampled: 01/25/2012 1745
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5308.D
Dilution:	2.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1645			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1645				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.68	2.0
1,2-Dibromoethane	ND		1.5	2.0
Carbon tetrachloride	ND		0.54	2.0
Bromodichloromethane	ND		0.78	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		66 - 137
4-Bromofluorobenzene (Surr)	104		73 - 120
Toluene-d8 (Surr)	108		71 - 126

Client: ARCADIS U.S., Inc. Job Number: 480-15487-1

Client Sample ID: PZ-5

Lab Sample ID: 480-15487-3 Date Sampled: 01/25/2012 1745
Client Matrix: Water Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49783	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5323.D
Dilution:	4.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 2313	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 2313				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		3.3	3.3
1,1-Dichloroethane	ND		1.5	1.5
1,2-Dichlorobenzene	ND		3.2	3.2
1,3-Dichlorobenzene	ND		3.1	3.1
1,4-Dichlorobenzene	ND		3.4	3.4
Benzene	ND		1.6	1.6
Chlorobenzene	ND		3.0	3.0
Chloroethane	ND		1.3	1.3
cis-1,2-Dichloroethene	41		3.2	3.2
Ethylbenzene	ND		3.0	3.0
m-Xylene & p-Xylene	ND		2.6	4.0
o-Xylene	ND		3.0	3.0
Tetrachloroethene	170		1.4	1.4
Toluene	ND		2.0	2.0
trans-1,2-Dichloroethene	ND		3.6	3.6
Trichloroethene	52		1.8	1.8
Vinyl chloride	ND		3.6	4.0
Xylenes, Total	ND		2.6	4.0
cis-1,3-Dichloropropene	ND		1.4	4.0
Carbon disulfide	ND		0.76	4.0
Bromoform	ND		1.0	4.0
1,2-Dichloroethane	ND		0.84	4.0
1,2-Dichloropropane	ND		2.9	4.0
1,1,2-Trichloroethane	ND		0.92	4.0
Acetone	16	J	12	40
Methyl acetate	ND		2.0	4.0
Dichlorodifluoromethane	ND		2.7	4.0
4-Methyl-2-pentanone (MIBK)	ND		8.4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.2	4.0
Methylene Chloride	ND		1.8	4.0
Chloromethane	ND		1.4	4.0
Bromomethane	ND		2.8	4.0
Dibromochloromethane	ND		1.3	4.0
1,2,4-Trichlorobenzene	ND		1.6	4.0
1,2-Dibromo-3-Chloropropane	ND		1.6	4.0
Methyl tert-butyl ether	ND		0.64	4.0
Styrene	ND		2.9	4.0
1,1,2,2-Tetrachloroethane	ND		0.84	4.0
1,1-Dichloroethene	ND		1.2	4.0
2-Hexanone	ND		5.0	20
2-Butanone (MEK)	ND		5.3	40
Isopropylbenzene	ND		3.2	4.0
Methylcyclohexane	ND		0.64	4.0
Trichlorofluoromethane	ND		3.5	4.0
Cyclohexane	ND		0.72	4.0
trans-1,3-Dichloropropene	ND		1.5	4.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-5

Lab Sample ID: 480-15487-3
Client Matrix: Water

Date Sampled: 01/25/2012 1745
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49783	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5323.D
Dilution:	4.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 2313	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 2313				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		1.4	4.0
1,2-Dibromoethane	ND		2.9	4.0
Carbon tetrachloride	ND		1.1	4.0
Bromodichloromethane	ND		1.6	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		66 - 137
4-Bromofluorobenzene (Surr)	103		73 - 120
Toluene-d8 (Surr)	110		71 - 126

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-8

Lab Sample ID: 480-15487-4
Client Matrix: Water

Date Sampled: 01/25/2012 1732
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5309.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1708			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1708				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		4.1	4.1
1,1-Dichloroethane	5.4		1.9	1.9
1,2-Dichlorobenzene	ND		4.0	4.0
1,3-Dichlorobenzene	ND		3.9	3.9
1,4-Dichlorobenzene	ND		4.2	4.2
Benzene	ND		2.1	2.1
Chlorobenzene	ND		3.8	3.8
Chloroethane	ND		1.6	1.6
cis-1,2-Dichloroethene	91		4.1	4.1
Ethylbenzene	ND		3.7	3.7
m-Xylene & p-Xylene	ND		3.3	5.0
o-Xylene	ND		3.8	3.8
Tetrachloroethene	470	J	1.8	1.8
Toluene	ND		2.6	2.6
trans-1,2-Dichloroethene	ND		4.5	4.5
Trichloroethene	410		2.3	2.3
Vinyl chloride	ND		4.5	5.0
Xylenes, Total	ND		3.3	5.0
cis-1,3-Dichloropropene	ND		1.8	5.0
Carbon disulfide	ND		0.95	5.0
Bromoform	ND		1.3	5.0
1,2-Dichloroethane	ND		1.1	5.0
1,2-Dichloropropane	ND		3.6	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
Acetone	ND		15	50
Methyl acetate	ND		2.5	5.0
Dichlorodifluoromethane	ND		3.4	5.0
4-Methyl-2-pentanone (MIBK)	ND		11	25
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.6	5.0
Methylene Chloride	ND		2.2	5.0
Chloromethane	ND		1.8	5.0
Bromomethane	ND		3.5	5.0
Dibromochloromethane	ND		1.6	5.0
1,2,4-Trichlorobenzene	ND		2.1	5.0
1,2-Dibromo-3-Chloropropane	ND		2.0	5.0
Methyl tert-butyl ether	ND		0.80	5.0
Styrene	ND		3.7	5.0
1,1,2,2-Tetrachloroethane	ND		1.1	5.0
1,1-Dichloroethene	ND		1.5	5.0
2-Hexanone	ND	H	6.2	25
2-Butanone (MEK)	ND		6.6	50
Isopropylbenzene	ND		4.0	5.0
Methylcyclohexane	ND		0.80	5.0
Trichlorofluoromethane	ND		4.4	5.0
Cyclohexane	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		1.9	5.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-8

Lab Sample ID: 480-15487-4
Client Matrix: Water

Date Sampled: 01/25/2012 1732
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5309.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1708			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1708				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		1.7	5.0
1,2-Dibromoethane	ND		3.7	5.0
Carbon tetrachloride	ND		1.4	5.0
Bromodichloromethane	ND		2.0	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
4-Bromofluorobenzene (Surr)	105		73 - 120
Toluene-d8 (Surr)	111		71 - 126

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-11R

Lab Sample ID: 480-15487-5
Client Matrix: Water

Date Sampled: 01/25/2012 1645
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5310.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1731			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1731				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	0.82
1,1-Dichloroethane	ND		0.38	0.38
1,2-Dichlorobenzene	ND		0.79	0.79
1,3-Dichlorobenzene	ND		0.78	0.78
1,4-Dichlorobenzene	ND		0.84	0.84
Benzene	ND		0.41	0.41
Chlorobenzene	ND		0.75	0.75
Chloroethane	ND		0.32	0.32
cis-1,2-Dichloroethene	3.3		0.81	0.81
Ethylbenzene	ND		0.74	0.74
m-Xylene & p-Xylene	ND		0.66	1.0
o-Xylene	ND		0.76	0.76
Tetrachloroethene	2.2	J	0.36	0.36
Toluene	ND		0.51	0.51
trans-1,2-Dichloroethene	0.97		0.90	0.90
Trichloroethene	4.2		0.46	0.46
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Carbon disulfide	ND		0.19	1.0
Bromoform	ND		0.26	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
Acetone	ND		3.0	10
Methyl acetate	ND		0.50	1.0
Dichlorodifluoromethane	ND		0.68	1.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
Methylene Chloride	ND		0.44	1.0
Chloromethane	ND		0.35	1.0
Bromomethane	ND		0.69	1.0
Dibromochloromethane	ND		0.32	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Styrene	ND		0.73	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1-Dichloroethene	ND		0.29	1.0
2-Hexanone	ND	J	1.2	5.0
2-Butanone (MEK)	ND		1.3	10
Isopropylbenzene	ND		0.79	1.0
Methylcyclohexane	ND		0.16	1.0
Trichlorofluoromethane	ND		0.88	1.0
Cyclohexane	ND		0.18	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-11R

Lab Sample ID: 480-15487-5
Client Matrix: Water

Date Sampled: 01/25/2012 1645
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5310.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1731			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1731				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
1,2-Dibromoethane	ND		0.73	1.0
Carbon tetrachloride	ND		0.27	1.0
Bromodichloromethane	ND		0.39	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
4-Bromofluorobenzene (Surr)	101		73 - 120
Toluene-d8 (Surr)	110		71 - 126

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-13R

Lab Sample ID: 480-15487-6
Client Matrix: Water

Date Sampled: 01/25/2012 1200
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5311.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1754			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1754				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND	J	1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	1.1		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	0.98	J	0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	3.7		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-13R

Lab Sample ID: 480-15487-6
Client Matrix: Water

Date Sampled: 01/25/2012 1200
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5311.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1754			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1754				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
Toluene-d8 (Surr)	109		71 - 126
4-Bromofluorobenzene (Surr)	104		73 - 120

Client: ARCADIS U.S., Inc. 2/27/12

Job Number: 480-15487-1

Client Sample ID: ~~AI-PZ-2~~ A1 - PZ-2

Lab Sample ID: 480-15487-7

Client Matrix: Water

Date Sampled: 01/24/2012 1540

Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5312.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1817			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1817				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	0.48	J	0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND	J	1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	22		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc. Q 2/27/12

Job Number: 480-15487-1

Client Sample ID: ~~A1-PZ-2~~ A1-PZ-2

Lab Sample ID: 480-15487-7

Client Matrix: Water

Date Sampled: 01/24/2012 1540

Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5312.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1817			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1817				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	11		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
Toluene-d8 (Surr)	112		71 - 126
4-Bromofluorobenzene (Surr)	103		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-15487-8
Client Matrix: Water

Date Sampled: 01/24/2012 1300
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5313.D
Dilution:	250			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1841			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1841				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		210	250
1,1,2,2-Tetrachloroethane	ND		53	250
1,1,2-Trichloroethane	ND		58	250
1,1,2-Trichloro-1,2,2-trifluoroethane	1900	J	78	250
1,1-Dichloroethane	2800		95	250
1,1-Dichloroethene	ND		73	250
1,2,4-Trichlorobenzene	ND		100	250
1,2-Dibromo-3-Chloropropane	ND		98	250
1,2-Dibromoethane	ND		180	250
1,2-Dichlorobenzene	ND		200	250
1,2-Dichloroethane	ND		53	250
1,2-Dichloropropane	ND		180	250
1,3-Dichlorobenzene	ND		200	250
1,4-Dichlorobenzene	ND		210	250
2-Hexanone	ND	J	310	1300
2-Butanone (MEK)	ND		330	2500
4-Methyl-2-pentanone (MIBK)	ND		530	1300
Acetone	ND		750	2500
Benzene	ND		100	250
Bromodichloromethane	ND		98	250
Bromoform	ND		65	250
Bromomethane	ND		170	250
Carbon disulfide	ND		48	250
Carbon tetrachloride	ND		68	250
Chlorobenzene	ND		190	250
Dibromochloromethane	ND		80	250
Chloroethane	ND		80	250
Chloroform	ND		85	250
Chloromethane	ND		88	250
cis-1,2-Dichloroethene	42,000 ~~37000~~	D & J	200	250
cis-1,3-Dichloropropene	ND		90	250
Cyclohexane	ND		45	250
Dichlorodifluoromethane	1200	J	170	250
Ethylbenzene	ND		190	250
Isopropylbenzene	ND		200	250
Methyl acetate	ND		130	250
Methyl tert-butyl ether	ND		40	250
Methylcyclohexane	ND		40	250
Methylene Chloride	ND		110	250
Styrene	ND		180	250
Tetrachloroethene	ND		90	250
Toluene	ND		130	250
trans-1,2-Dichloroethene	ND		230	250
trans-1,3-Dichloropropene	ND		93	250
Trichloroethene	2300	J	120	250
Trichlorofluoromethane	ND		220	250

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: **AZ-PZ-1**

Lab Sample ID: 480-15487-8
Client Matrix: Water

Date Sampled: 01/24/2012 1300
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5313.D
Dilution:	250			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1841			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1841				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	1800		230	250
Xylenes, Total	ND		170	500

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		66 - 137
Toluene-d8 (Surr)	109		71 - 126
4-Bromofluorobenzene (Surr)	105		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-15487-8

Client Matrix: Water

Date Sampled: 01/24/2012 1300

Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49783	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5324.D
Dilution:	500			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 2337	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 2337				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		410	500
1,1,2,2-Tetrachloroethane	ND		110	500
1,1,2-Trichloroethane	ND		120	500
1,1,2-Trichloro-1,2,2-trifluoroethane	7600		160	500
1,1-Dichloroethane	2700		190	500
1,1-Dichloroethene	ND		150	500
1,2,4-Trichlorobenzene	ND		210	500
1,2-Dibromo-3-Chloropropane	ND		200	500
1,2-Dibromoethane	ND		370	500
1,2-Dichlorobenzene	ND		400	500
1,2-Dichloroethane	ND		110	500
1,2-Dichloropropane	ND		360	500
1,3-Dichlorobenzene	ND		390	500
1,4-Dichlorobenzene	ND		420	500
2-Hexanone	ND		620	2500
2-Butanone (MEK)	ND		660	5000
4-Methyl-2-pentanone (MIBK)	ND		1100	2500
Acetone	ND		1500	5000
Benzene	ND		210	500
Bromodichloromethane	ND		200	500
Bromoform	ND		130	500
Bromomethane	ND		350	500
Carbon disulfide	ND		95	500
Carbon tetrachloride	ND		140	500
Chlorobenzene	ND		380	500
Dibromochloromethane	ND		160	500
Chloroethane	ND		160	500
Chloroform	ND		170	500
Chloromethane	ND		180	500
cis-1,2-Dichloroethene	42000		410	500
cis-1,3-Dichloropropene	ND		180	500
Cyclohexane	ND		90	500
Dichlorodifluoromethane	6300		340	500
Ethylbenzene	ND		370	500
Isopropylbenzene	ND		400	500
Methyl acetate	ND		250	500
Methyl tert-butyl ether	ND		80	500
Methylcyclohexane	ND		80	500
Methylene Chloride	ND		220	500
Styrene	ND		370	500
Tetrachloroethene	ND		180	500
Toluene	ND		260	500
trans-1,2-Dichloroethene	ND		450	500
trans-1,3-Dichloropropene	ND		190	500
Trichloroethene	6100		230	500
Trichlorofluoromethane	ND		440	500

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-15487-8
Client Matrix: Water

Date Sampled: 01/24/2012 1300
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49783	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5324.D
Dilution:	500			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 2337	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 2337				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	2100		450	500
Xylenes, Total	ND		330	1000

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
Toluene-d8 (Surr)	110		71 - 126
4-Bromofluorobenzene (Surr)	104		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: TB

Lab Sample ID: 480-15487-9TB
Client Matrix: Water

Date Sampled: 01/24/2012 0000
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5314.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1904			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	0.82
1,1-Dichloroethane	ND		0.38	0.38
1,2-Dichlorobenzene	ND		0.79	0.79
1,3-Dichlorobenzene	ND		0.78	0.78
1,4-Dichlorobenzene	ND		0.84	0.84
Benzene	ND		0.41	0.41
Chlorobenzene	ND		0.75	0.75
Chloroethane	ND		0.32	0.32
cis-1,2-Dichloroethene	ND		0.81	0.81
Ethylbenzene	ND		0.74	0.74
m-Xylene & p-Xylene	ND		0.66	1.0
o-Xylene	ND		0.76	0.76
Tetrachloroethene	ND		0.36	0.36
Toluene	ND		0.51	0.51
trans-1,2-Dichloroethene	ND		0.90	0.90
Trichloroethene	ND		0.46	0.46
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Carbon disulfide	ND		0.19	1.0
Bromoform	ND		0.26	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
Acetone	ND		3.0	10
Methyl acetate	ND		0.50	1.0
Dichlorodifluoromethane	ND		0.68	1.0
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
Methylene Chloride	ND		0.44	1.0
Chloromethane	ND		0.35	1.0
Bromomethane	ND		0.69	1.0
Dibromochloromethane	ND		0.32	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Styrene	ND		0.73	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1-Dichloroethene	ND		0.29	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
Isopropylbenzene	ND		0.79	1.0
Methylcyclohexane	ND		0.16	1.0
Trichlorofluoromethane	ND		0.88	1.0
Cyclohexane	ND		0.18	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0

Client: ARCADIS U.S., Inc. Job Number: 480-15487-1

Client Sample ID: TB

Lab Sample ID: 480-15487-9TB
Client Matrix: Water

Date Sampled: 01/24/2012 0000
Date Received: 01/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-49678	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N5314.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	01/30/2012 1904			Final Weight/Volume:	5 mL
Prep Date:	01/30/2012 1904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Chloroform	ND		0.34	1.0
1,2-Dibromoethane	ND		0.73	1.0
Carbon tetrachloride	ND		0.27	1.0
Bromodichloromethane	ND		0.39	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		66 - 137
4-Bromofluorobenzene (Surr)	102		73 - 120
Toluene-d8 (Surr)	107		71 - 126

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: MW-1

Lab Sample ID: 480-15487-1
Client Matrix: Water

Date Sampled: 01/25/2012 1620
Date Received: 01/28/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-49929	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	02/01/2012 1021			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	110	B	0.22	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: MW-3

Lab Sample ID: 480-15487-2
Client Matrix: Water

Date Sampled: 01/25/2012 1425
Date Received: 01/28/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-49929	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	02/01/2012 1038			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	120	B	0.22	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: PZ-13R

Lab Sample ID: 480-15487-6
Client Matrix: Water

Date Sampled: 01/25/2012 1200
Date Received: 01/28/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-49929	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	1.0			Final Weight/Volume:	1.0 mL
Analysis Date:	02/01/2012 1112			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	41	B	0.22	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: AI-PZ-2

Lab Sample ID: 480-15487-7
Client Matrix: Water

Date Sampled: 01/24/2012 1540
Date Received: 01/26/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-49929	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	100			Final Weight/Volume:	1.0 mL
Analysis Date:	02/01/2012 1213			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	2400	D	22	100

Client: ARCADIS U.S., Inc.

Job Number: 480-15487-1

Client Sample ID: AZ-PZ-1

Lab Sample ID: 480-15487-8
Client Matrix: Water

Date Sampled: 01/24/2012 1300
Date Received: 01/28/2012 0900

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-49929	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	100			Final Weight/Volume:	1.0 mL
Analysis Date:	02/01/2012 1155			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	2600	D	22	100

General Chemistry

Client Sample ID: **MW-1**

Lab Sample ID: 480-15487-1
Client Matrix: Water

Date Sampled: 01/25/2012 1620
Date Received: 01/28/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	1.9	J N	mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-49646	Analysis Date: 01/28/2012 1506						
Sulfate	116		mg/L	7.5	25.0	5.0	D516-90, 02
Analysis Batch: 480-50470	Analysis Date: 02/04/2012 0909						
Alkalinity, Total	304		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50051	Analysis Date: 02/01/2012 1455						
Alkalinity, Bicarbonate	304		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50051	Analysis Date: 02/01/2012 1455						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50051	Analysis Date: 02/01/2012 1455						
Hydroxide Alkalinity	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50051	Analysis Date: 02/01/2012 1455						

General Chemistry

Client Sample ID: **MW-3**

Lab Sample ID: 480-15487-2 Date Sampled: 01/25/2012 1425
Client Matrix: Water Date Received: 01/28/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	0.33	J N	mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-49646	Analysis Date: 01/28/2012 1509						
Sulfate	87.9		mg/L	7.5	25.0	5.0	D516-90, 02
Analysis Batch: 480-50470	Analysis Date: 02/04/2012 0909						
Alkalinity, Total	300		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50051	Analysis Date: 02/01/2012 1455						
Alkalinity, Bicarbonate	300		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50051	Analysis Date: 02/01/2012 1455						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50051	Analysis Date: 02/01/2012 1455						
Hydroxide Alkalinity	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50051	Analysis Date: 02/01/2012 1455						

General Chemistry

Client Sample ID: PZ-13R

Lab Sample ID: 480-15487-6 Date Sampled: 01/25/2012 1200
Client Matrix: Water Date Received: 01/28/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	0.13	J N	mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-49646	Analysis Date: 01/28/2012 1510						
Sulfate	115		mg/L	7.5	25.0	5.0	D516-90, 02
Analysis Batch: 480-50470	Analysis Date: 02/04/2012 0909						
Alkalinity, Total	404		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Alkalinity, Bicarbonate	404		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Hydroxide Alkalinity	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						

General Chemistry

Client Sample ID: **AI-PZ-2**

Lab Sample ID: 480-15487-7 Date Sampled: 01/24/2012 1540
Client Matrix: Water Date Received: 01/28/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	0.81	J ~~H~~	mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-49646	Analysis Date: 01/28/2012 1511						
Sulfate	38.8		mg/L	7.5	25.0	5.0	D516-90, 02
Analysis Batch: 480-50470	Analysis Date: 02/04/2012 0909						
Alkalinity, Total	204		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Alkalinity, Bicarbonate	204		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Hydroxide Alkalinity	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						

General Chemistry

Client Sample ID: **AZ-PZ-1**

Lab Sample ID: 480-15487-8 Date Sampled: 01/24/2012 1300
Client Matrix: Water Date Received: 01/28/2012 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	ND	J N	mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-49646	Analysis Date: 01/28/2012 1440						
Sulfate	39.8		mg/L	1.5	5.0	1.0	D516-90, 02
Analysis Batch: 480-50470	Analysis Date: 02/04/2012 0851						
Alkalinity, Total	456		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Alkalinity, Bicarbonate	456		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						
Hydroxide Alkalinity	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-50576	Analysis Date: 02/06/2012 1530						

Lab Project#: 4800282

ARCADIS
Infrastructure · Water · Environment · Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Jeff Bonsteel	Telephone: 518-452-7826
Address: 465 New Karner Rd	Fax: 518-452-4398
City: Albany State: NY Zip: 12205	E-mail Address: Jeffrey_Bonsteel@Arcadis-us.com
Project Name/Location (City, State): LMC Utica NY	Project #: NJ001040.V-1
Sampler's Printed Name: Dan Zuck	Sampler's Signature: [signature]

Preservative	HCl	HCl	None	None
Filtered (✓)				
# of Containers	21	10	5	9.5
Container Information	Vial	Vial	Plastic	Plastic

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil, W - Water, SL - Sludge, SW - Sample Wipe, T - Tissue, A - Air, Other: _____

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VOCs 8260B	Methane	Alkalinity	Sulfer/Nitrates				REMARKS
MW-1	1/25/12	1620		X	GW	3	2	1	2				
MW-3		1425		X		3	2	1	2				
~~MW-13SO~~ 03													
PZ-5		1745		X		1							
PZ-8		1732		X		2							
PZ-11R		1645		X		3							
PZ-13R		1200		X		3	2	1	1.5				
~~A1-PZ-2~~ A1-PZ-2	1/24/12	1540		X		3	2	1	2				
A2-PZ-1	1/24/12	1300		X		3	2	1	2				
TB			—		W	2							

2/27/12

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America Amherst	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Daniel Zuck	Printed Name: RE English	Printed Name: RE English	Printed Name: [signature]
☒ Cooler packed with ice (✓)		Signature: [signature]	Signature: RE	Signature: RE	Signature:
Specify Turnaround Requirements: Zuk	Sample Receipt:	Firm: Arcadis	Firm/Courier: TA Syr	Firm/Courier: TA Syr	Firm: TAL
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 1/27/12 1345	Date/Time: 01-27-12, 13:45	Date/Time: 01-27-12, 19:00	Date/Time: 1/28/12 0900

07/09/2012

20730826 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Doyle, Mary Ann

From: Bonsteel, Jeffrey
Sent: Monday, February 27, 2012 1:25 PM
To: Doyle, Mary Ann
Subject: Re: LMC GW DV

1

Sent from my iPhone

On Feb 27, 2012, at 11:59 AM, "Doyle, Mary Ann" <MaryAnn.Doyle@arcadis-us.com> wrote:

> Jeff,
>
> Is GW sample out at LMC named AI-PZ-2 OR A1-PZ-2 ?
>
> ---
>
> **From:** Bonsteel, Jeffrey
> **Sent:** Monday, February 27, 2012 10:46 AM
> **To:** Doyle, Mary Ann
> **Subject:** Re: LMC GW DV
>
> Yes.
>
> Need long list of VOCS for 5 &8
>
> Sent from my iPhone
>
> On Feb 27, 2012, at 10:21 AM, "Doyle, Mary Ann" <MaryAnn.Doyle@arcadis-us.com> wrote:
>
> > Please confirm project number
> >
> > NJ001030.0001.00004
> >
> > **Please Note:**
> > **The ARCADIS Albany, NY office has moved to Clifton Park, NY.**
> >
> > **Mary Ann Doyle** | Staff Scientist | maryann.doyle@arcadis-us.com
> >
> > ARCADIS U.S., Inc. | 855 Route 146, Suite 210 | Clifton Park, NY 12065
> > 518-250-7386 (direct) | 518 339 7837 (cell)
> > www.arcadis-us.com
> >
> > ARCADIS, Imagine the result
> >
> > Please consider the environment before printing this email.

Lockheed Martin Corporation

Data Usability Summary Report

UTICA, NEW YORK

Volatiles

SDG#480-18456

Analyses Performed By:
TestAmerica Laboratories

Report: #16657R
Review Level: Tier III
Project: NJ001037.0001.00005

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 480-18456 for samples collected in association with the Former Lockheed Martin Site, Utica, New York. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
TRIP BLANK_041012	480-18456-1	Water	4/10/2012		X				
PZ-5_041012	480-18456-10	Water	4/10/2012		X				
AZ-PZ-2_041012	480-18456-11	Water	4/10/2012		X				
MW-21_041012	480-18456-12	Water	4/10/2012		X				
PZ-11R_041012	480-18456-13	Water	4/10/2012		X				
MW-5_041012	480-18456-14	Water	4/10/2012		X				
PZ-13R_041112	480-18456-15	Water	4/11/2012		X				
DUP-041112	480-18456-2	Water	4/11/2012	AZ-PZ-1_041112	X				
MW-1_041112	480-18456-3	Water	4/11/2012		X				
MW-3_041112	480-18456-4	Water	4/11/2012		X				
AZ-PZ-1_041112	480-18456-5	Water	4/11/2012		X				
PZ-13R_041012	480-18456-6	Water	4/10/2012		X				
MW-18_041112	480-18456-7	Water	4/11/2012		X				
PZ-7_041012	480-18456-8	Water	4/10/2012		X				
PZ-6_041012	480-18456-9	Water	4/10/2012		X				

Note: Only VOCs were evaluated as part of this Data Validation.

ANALYTICAL DATA PACKAGE DOCUMENTATION

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 methods 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOPs and NYSDEC ASP 2005.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to 4°C±2°C; preserved to a pH of less than 2.
	Soil	14 days from collection to analysis	Cool to 4°C±2°C.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
PZ-13R PZ-7	CCV%D	Chloroethane	-20.8
		1,2,4-Trichlorobenzene	-21.6
Trip Blank DUP-041112 MW-18 PZ-6 PZ-5 AZ-PZ-2	CCV%D	Bromomethane	-31.3
		1,2-Dibromo-3-Chloropropane	-22.4
		Bromoform	-20.4
MW-21 PZ-11R MW-5	CCV%D	Bromoform	-20.4

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

An MS/MSD was not performed on a sample location within this sample data group (SDG).

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
AZ-PZ-1_041112/ DUP-041112	1,1,2-Trichloro-1,2,2-Trifluoroethane	1300	1100	16.6 %
	1,1,2-Trichloroethane	250 U	1.7	AC
	1,1-Dichloroethane	1900	2300	19.0 %
	1,1-Dichloroethene	250 U	23	AC
	1,2-Dichloroethane	250 U	3.0	AC
	Acetone	2500 U	14	AC
	CIS-1,2-Dichloroethylene	24000	28000	15.3 %
	Dichlorodifluoromethane	830	740	11.4 %
	Methyl isobutyl Ketone (4-Methyl-2-Pentanone)	1300 U	5.0	AC
	Methylene Chloride	250 U	14	AC
	Tetrachloroethylene(PCE)	250 U	5.3	AC
	Toluene	250 U	4.6	AC
	Trans-1,2-Dichloroethene	250 U	11	AC
	Trichloroethylene (TCE)	4100	4800	15.7 %
	Vinyl Chloride	940	1300	32.1 %

AC Acceptable
NC Not compliant
U Not Detected

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

Several samples were diluted due to the presence of target compounds in high concentration. Elevated reporting limits were reported as a result for the samples.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
DUP-04111	1,1,2-Trichloro-1,2,2-trifluoromethane	810 E	1100 D	1100 D
	1,1,-Dichloroethane	900 E	2300 D	2300 D
	Cis-1,2-Dichloroethene	2800 E	28000 D	28000 D

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
	Dichlorofluoromethane	510 E	740 D	740 D
	Trichloroethene	1500 E	4800 D	4800 D
MW-18	Cis-1,2-Dichloroethene	420 E	420 D	420 D
	Trichloroethene	150 E	120 D	120 D
AZ-PZ-2	Cis-1,2-Dichloroethene	190 E	210 D	210 D
	Tetrachloroethene	1200 D	2300 D	2300 D
	Trichloroethene	590 E	740 D	740 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)					X
Matrix Spike Duplicate(MSD)					X
MS/MSD Precision (RPD)					X
Field Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
480-18456-1	4/10/2012	SW-846	TRIP BLANK_041012	Water	No	--	--	--	--	VOC-CCV%D
480-18456-10	4/10/2012	SW-846	PZ-5_041012	Water	No	--	--	--	--	VOC-CCV%D
480-18456-11	4/10/2012	SW-846	AZ-PZ-2_041012	Water	No	--	--	--	--	VOC-CCV%D
480-18456-12	4/10/2012	SW-846	MW-21_041012	Water	No	--	--	--	--	VOC-CCV%D
480-18456-13	4/10/2012	SW-846	PZ-11R_041012	Water	No	--	--	--	--	VOC-CCV%D
480-18456-14	4/10/2012	SW-846	MW-5_041012	Water	No	--	--	--	--	VOC-CCV%D
480-18456-15	4/11/2012	SW-846	PZ-13R_041112	Water	Yes	--	--	--	--	
480-18456-2	4/11/2012	SW-846	DUP-041112	Water	No	--	--	--	--	VOC-CCV%D
480-18456-3	4/11/2012	SW-846	MW-1_041112	Water	Yes	--	--	--	--	
480-18456-4	4/11/2012	SW-846	MW-3_041112	Water	Yes	--	--	--	--	
480-18456-5	4/11/2012	SW-846	AZ-PZ-1_041112	Water	Yes	--	--	--	--	
480-18456-6	4/10/2012	SW-846	PZ-13R_041012	Water	No	--	--	--	--	VOC-CCV%D
480-18456-7	4/11/2012	SW-846	MW-18_041112	Water	No	--	--	--	--	VOC-CCV%D
480-18456-8	4/10/2012	SW-846	PZ-7_041012	Water	No	--	--	--	--	VOC-CCV%D
480-18456-9	4/10/2012	SW-846	PZ-6_041012	Water	No	--	--	--	--	VOC-CCV%D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added

qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Mary Ann Doyle

SIGNATURE: 

DATE: July 15, 2012

PEER REVIEW BY: Dennis Capria

DATE: July 18, 2012

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 480-18456-1TB
Client Matrix: Water

Date Sampled: 04/10/2012 0000
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9093.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0240			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0240				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND	J	0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND	J	0.26	1.0
Bromomethane	ND	J	0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 480-18456-1TB
Client Matrix: Water

Date Sampled: 04/10/2012 0000
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9093.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0240			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0240				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	120		66 - 137
Toluene-d8 (Surr)	100		71 - 126
4-Bromofluorobenzene (Surr)	94		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **DUP-041112**

Lab Sample ID: 480-18456-2
Client Matrix: Water

Date Sampled: 04/11/2012 0000
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9094.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0305			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0305				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	1.7		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1100 ~~810~~	D ~~E~~	0.31	1.0
1,1-Dichloroethane	2300 ~~900~~	D ~~E~~	0.38	1.0
1,1-Dichloroethene	23		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND	J	0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	3.0		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	5.0		2.1	5.0
Acetone	14		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND	J	0.26	1.0
Bromomethane	ND	J	0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	28000 ~~2800~~	D ~~E~~	0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	740 ~~510~~	D ~~E~~	0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	14		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	5.3		0.36	1.0
Toluene	4.6		0.51	1.0
trans-1,2-Dichloroethene	11		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	4800 ~~1500~~	D ~~E~~	0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc. Job Number: 480-18456-1

Client Sample ID: **DUP-041112**

Lab Sample ID: 480-18456-2 Date Sampled: 04/11/2012 0000
Client Matrix: Water Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9094.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0305			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0305				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	820	E	0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
Toluene-d8 (Surr)	96		71 - 126
4-Bromofluorobenzene (Surr)	88		73 - 120

Client: ARCADIS U.S., Inc. Job Number: 480-18456-1

Client Sample ID: **DUP-041112**

Lab Sample ID: 480-18456-2 Date Sampled: 04/11/2012 0000
Client Matrix: Water Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59736	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S13094.D
Dilution:	400			Initial Weight/Volume:	5 mL
Analysis Date:	04/16/2012 1520	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	04/16/2012 1520				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		330	400
1,1,2,2-Tetrachloroethane	ND		84	400
1,1,2-Trichloroethane	ND		92	400
1,1,2-Trichloro-1,2,2-trifluoroethane	1100		120	400
1,1-Dichloroethane	2300		150	400
1,1-Dichloroethene	ND		120	400
1,2,4-Trichlorobenzene	ND		160	400
1,2-Dibromo-3-Chloropropane	ND		160	400
1,2-Dibromoethane	ND		290	400
1,2-Dichlorobenzene	ND		320	400
1,2-Dichloroethane	ND		84	400
1,2-Dichloropropane	ND		290	400
1,3-Dichlorobenzene	ND		310	400
1,4-Dichlorobenzene	ND		340	400
2-Hexanone	ND		500	2000
2-Butanone (MEK)	ND		530	4000
4-Methyl-2-pentanone (MIBK)	ND		840	2000
Acetone	ND		1200	4000
Benzene	ND		160	400
Bromodichloromethane	ND		160	400
Bromoform	ND		100	400
Bromomethane	ND		280	400
Carbon disulfide	ND		76	400
Carbon tetrachloride	ND		110	400
Chlorobenzene	ND		300	400
Dibromochloromethane	ND		130	400
Chloroethane	ND		130	400
Chloroform	ND		140	400
Chloromethane	ND		140	400
cis-1,2-Dichloroethene	28000		320	400
cis-1,3-Dichloropropene	ND		140	400
Cyclohexane	ND		72	400
Dichlorodifluoromethane	740		270	400
Ethylbenzene	ND		300	400
Isopropylbenzene	ND		320	400
Methyl acetate	ND		200	400
Methyl tert-butyl ether	ND		64	400
Methylcyclohexane	ND		64	400
Methylene Chloride	ND		180	400
Styrene	ND		290	400
Tetrachloroethene	ND		140	400
Toluene	ND		200	400
trans-1,2-Dichloroethene	ND		360	400
trans-1,3-Dichloropropene	ND		150	400
Trichloroethene	4800		180	400
Trichlorofluoromethane	ND		350	400

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **DUP-041112**

Lab Sample ID: 480-18456-2
Client Matrix: Water

Date Sampled: 04/11/2012 0000
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59736	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S13094.D
Dilution:	400			Initial Weight/Volume:	5 mL
Analysis Date:	04/16/2012 1520	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	04/16/2012 1520				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	1300		360	400
Xylenes, Total	ND		260	800

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	115		66 - 137
Toluene-d8 (Surr)	118		71 - 126
4-Bromofluorobenzene (Surr)	111		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-1**

Lab Sample ID: 480-18456-3
Client Matrix: Water

Date Sampled: 04/11/2012 1545
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59736	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S13095.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/16/2012 1541			Final Weight/Volume:	5 mL
Prep Date:	04/16/2012 1541				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	4.2		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	34		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	50		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	18		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-1**

Lab Sample ID: 480-18456-3
Client Matrix: Water

Date Sampled: 04/11/2012 1545
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59736	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S13095.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/16/2012 1541			Final Weight/Volume:	5 mL
Prep Date:	04/16/2012 1541				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	1.7		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		66 - 137
Toluene-d8 (Surr)	117		71 - 126
4-Bromofluorobenzene (Surr)	110		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-3**

Lab Sample ID: 480-18456-4
Client Matrix: Water

Date Sampled: 04/11/2012 1705
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59736	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S13096.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/16/2012 1603			Final Weight/Volume:	5 mL
Prep Date:	04/16/2012 1603				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	3.6		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	21		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	8.2		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	10		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-3**

Lab Sample ID: 480-18456-4
Client Matrix: Water

Date Sampled: 04/11/2012 1705
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59736	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S13096.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/16/2012 1603			Final Weight/Volume:	5 mL
Prep Date:	04/16/2012 1603				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	8.4		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		66 - 137
Toluene-d8 (Surr)	116		71 - 126
4-Bromofluorobenzene (Surr)	110		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **AZ-PZ-1**

Lab Sample ID: 480-18456-5
Client Matrix: Water

Date Sampled: 04/11/2012 1255
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-60309	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6761.D
Dilution:	250			Initial Weight/Volume:	5 mL
Analysis Date:	04/18/2012 2307			Final Weight/Volume:	5 mL
Prep Date:	04/18/2012 2307				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		210	250
1,1,2,2-Tetrachloroethane	ND		53	250
1,1,2-Trichloroethane	ND		58	250
1,1,2-Trichloro-1,2,2-trifluoroethane	1300		78	250
1,1-Dichloroethane	1900		95	250
1,1-Dichloroethene	ND		73	250
1,2,4-Trichlorobenzene	ND		100	250
1,2-Dibromo-3-Chloropropane	ND		98	250
1,2-Dibromoethane	ND		180	250
1,2-Dichlorobenzene	ND		200	250
1,2-Dichloroethane	ND		53	250
1,2-Dichloropropane	ND		180	250
1,3-Dichlorobenzene	ND		200	250
1,4-Dichlorobenzene	ND		210	250
2-Hexanone	ND		310	1300
2-Butanone (MEK)	ND		330	2500
4-Methyl-2-pentanone (MIBK)	ND		530	1300
Acetone	ND		750	2500
Benzene	ND		100	250
Bromodichloromethane	ND		98	250
Bromoform	ND		65	250
Bromomethane	ND		170	250
Carbon disulfide	ND		48	250
Carbon tetrachloride	ND		68	250
Chlorobenzene	ND		190	250
Dibromochloromethane	ND		80	250
Chloroethane	ND		80	250
Chloroform	ND		85	250
Chloromethane	ND		88	250
cis-1,2-Dichloroethene	24000		200	250
cis-1,3-Dichloropropene	ND		90	250
Cyclohexane	ND		45	250
Dichlorodifluoromethane	830		170	250
Ethylbenzene	ND		190	250
Isopropylbenzene	ND		200	250
Methyl acetate	ND		130	250
Methyl tert-butyl ether	ND		40	250
Methylcyclohexane	ND		40	250
Methylene Chloride	ND		110	250
Styrene	ND		180	250
Tetrachloroethene	ND		90	250
Toluene	ND		130	250
trans-1,2-Dichloroethene	ND		230	250
trans-1,3-Dichloropropene	ND		93	250
Trichloroethene	4100		120	250
Trichlorofluoromethane	ND		220	250

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **AZ-PZ-1**

Lab Sample ID: 480-18456-5
Client Matrix: Water

Date Sampled: 04/11/2012 1255
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-60309	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6761.D
Dilution:	250			Initial Weight/Volume:	5 mL
Analysis Date:	04/18/2012 2307			Final Weight/Volume:	5 mL
Prep Date:	04/18/2012 2307				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	940		230	250
Xylenes, Total	ND		170	500

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		66 - 137
Toluene-d8 (Surr)	97		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-13R**

Lab Sample ID: 480-18456-6
Client Matrix: Water

Date Sampled: 04/10/2012 1520
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-60138	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6733.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/18/2012 1127			Final Weight/Volume:	5 mL
Prep Date:	04/18/2012 1127				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND	J	0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND	J	0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	1.2		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	0.75	J	0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	3.9		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-13R**

Lab Sample ID: 480-18456-6
Client Matrix: Water

Date Sampled: 04/10/2012 1520
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-60138	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6733.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/18/2012 1127			Final Weight/Volume:	5 mL
Prep Date:	04/18/2012 1127				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		66 - 137
Toluene-d8 (Surr)	90		71 - 126
4-Bromofluorobenzene (Surr)	96		73 - 120

Client: ARCADIS U.S., Inc. Job Number: 480-18456-1

Client Sample ID: **MW-18**

Lab Sample ID: 480-18456-7 Date Sampled: 04/11/2012 1155
Client Matrix: Water Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9099.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0509			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0509				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	1.2		0.31	1.0
1,1-Dichloroethane	23		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND J		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND J		0.26	1.0
Bromomethane	ND J		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	420 ~~420~~	D ~~E~~	0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	0.91	J	0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	87		0.36	1.0
Toluene	1.9		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	120 ~~150~~	D ~~E~~	0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-18**

Lab Sample ID: 480-18456-7
Client Matrix: Water

Date Sampled: 04/11/2012 1155
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9099.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0509			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0509				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	5.5		0.90	1.0
Xylenes, Total	1.3	J	0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	96		71 - 126
4-Bromofluorobenzene (Surr)	93		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: MW-18

Lab Sample ID: 480-18456-7
Client Matrix: Water

Date Sampled: 04/11/2012 1155
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59413	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9119.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 1343	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 1343				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		4.1	5.0
1,1,2,2-Tetrachloroethane	ND		1.1	5.0
1,1,2-Trichloroethane	ND		1.2	5.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.6	5.0
1,1-Dichloroethane	20		1.9	5.0
1,1-Dichloroethene	ND		1.5	5.0
1,2,4-Trichlorobenzene	ND		2.1	5.0
1,2-Dibromo-3-Chloropropane	ND		2.0	5.0
1,2-Dibromoethane	ND		3.7	5.0
1,2-Dichlorobenzene	ND		4.0	5.0
1,2-Dichloroethane	ND		1.1	5.0
1,2-Dichloropropane	ND		3.6	5.0
1,3-Dichlorobenzene	ND		3.9	5.0
1,4-Dichlorobenzene	ND		4.2	5.0
2-Hexanone	ND		6.2	25
2-Butanone (MEK)	ND		6.6	50
4-Methyl-2-pentanone (MIBK)	ND		11	25
Acetone	ND		15	50
Benzene	ND		2.1	5.0
Bromodichloromethane	ND		2.0	5.0
Bromoform	ND		1.3	5.0
Bromomethane	ND		3.5	5.0
Carbon disulfide	ND		0.95	5.0
Carbon tetrachloride	ND		1.4	5.0
Chlorobenzene	ND		3.8	5.0
Dibromochloromethane	ND		1.6	5.0
Chloroethane	ND		1.6	5.0
Chloroform	ND		1.7	5.0
Chloromethane	ND		1.8	5.0
cis-1,2-Dichloroethene	420		4.1	5.0
cis-1,3-Dichloropropene	ND		1.8	5.0
Cyclohexane	ND		0.90	5.0
Dichlorodifluoromethane	ND		3.4	5.0
Ethylbenzene	ND		3.7	5.0
Isopropylbenzene	ND		4.0	5.0
Methyl acetate	ND		2.5	5.0
Methyl tert-butyl ether	ND		0.80	5.0
Methylcyclohexane	ND		0.80	5.0
Methylene Chloride	ND		2.2	5.0
Styrene	ND		3.7	5.0
Tetrachloroethene	64		1.8	5.0
Toluene	ND		2.6	5.0
trans-1,2-Dichloroethene	ND		4.5	5.0
trans-1,3-Dichloropropene	ND		1.9	5.0
Trichloroethene	120		2.3	5.0
Trichlorofluoromethane	ND		4.4	5.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-18**

Lab Sample ID: 480-18456-7
Client Matrix: Water

Date Sampled: 04/11/2012 1155
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59413	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9119.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 1343	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 1343				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		4.5	5.0
Xylenes, Total	ND		3.3	10

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
Toluene-d8 (Surr)	95		71 - 126
4-Bromofluorobenzene (Surr)	92		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-7**

Lab Sample ID: 480-18456-8
Client Matrix: Water

Date Sampled: 04/10/2012 1335
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-60138	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6734.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/18/2012 1151			Final Weight/Volume:	5 mL
Prep Date:	04/18/2012 1151				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	0.69	J	0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND	J	0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	4.2	J	3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND	J	0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	0.55	J	0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-7**

Lab Sample ID: 480-18456-8
Client Matrix: Water

Date Sampled: 04/10/2012 1335
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-60138	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6734.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/18/2012 1151			Final Weight/Volume:	5 mL
Prep Date:	04/18/2012 1151				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		66 - 137
Toluene-d8 (Surr)	92		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-6**

Lab Sample ID: 480-18456-9
Client Matrix: Water

Date Sampled: 04/10/2012 1320
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9101.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0559			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0559				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND	J	0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	3.8	J	3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND	J	0.26	1.0
Bromomethane	ND	J	0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	58		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	49		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	44		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-6**

Lab Sample ID: 480-18456-9
Client Matrix: Water

Date Sampled: 04/10/2012 1320
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9101.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0559			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0559				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	4.9		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
Toluene-d8 (Surr)	94		71 - 126
4-Bromofluorobenzene (Surr)	88		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: PZ-5

Lab Sample ID: 480-18456-10
Client Matrix: Water

Date Sampled: 04/10/2012 1305
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9102.D
Dilution:	4.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0623			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0623				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		3.3	4.0
1,1,2,2-Tetrachloroethane	ND		0.84	4.0
1,1,2-Trichloroethane	ND		0.92	4.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.2	4.0
1,1-Dichloroethane	ND		1.5	4.0
1,1-Dichloroethene	ND		1.2	4.0
1,2,4-Trichlorobenzene	ND		1.6	4.0
1,2-Dibromo-3-Chloropropane	ND	J	1.6	4.0
1,2-Dibromoethane	ND		2.9	4.0
1,2-Dichlorobenzene	ND		3.2	4.0
1,2-Dichloroethane	ND		0.84	4.0
1,2-Dichloropropane	ND		2.9	4.0
1,3-Dichlorobenzene	ND		3.1	4.0
1,4-Dichlorobenzene	ND		3.4	4.0
2-Hexanone	ND		5.0	20
2-Butanone (MEK)	ND		5.3	40
4-Methyl-2-pentanone (MIBK)	ND		8.4	20
Acetone	ND		12	40
Benzene	ND		1.6	4.0
Bromodichloromethane	ND		1.6	4.0
Bromoform	ND	J	1.0	4.0
Bromomethane	ND	J	2.8	4.0
Carbon disulfide	ND		0.76	4.0
Carbon tetrachloride	ND		1.1	4.0
Chlorobenzene	ND		3.0	4.0
Dibromochloromethane	ND		1.3	4.0
Chloroethane	ND		1.3	4.0
Chloroform	ND		1.4	4.0
Chloromethane	ND		1.4	4.0
cis-1,2-Dichloroethene	41		3.2	4.0
cis-1,3-Dichloropropene	ND		1.4	4.0
Cyclohexane	ND		0.72	4.0
Dichlorodifluoromethane	ND		2.7	4.0
Ethylbenzene	ND		3.0	4.0
Isopropylbenzene	ND		3.2	4.0
Methyl acetate	ND		2.0	4.0
Methyl tert-butyl ether	ND		0.64	4.0
Methylcyclohexane	ND		0.64	4.0
Methylene Chloride	ND		1.8	4.0
Styrene	ND		2.9	4.0
Tetrachloroethene	290		1.4	4.0
Toluene	ND		2.0	4.0
trans-1,2-Dichloroethene	ND		3.6	4.0
trans-1,3-Dichloropropene	ND		1.5	4.0
Trichloroethene	61		1.8	4.0
Trichlorofluoromethane	ND		3.5	4.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-5**

Lab Sample ID: 480-18456-10
Client Matrix: Water

Date Sampled: 04/10/2012 1305
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9102.D
Dilution:	4.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0623			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0623				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		3.6	4.0
Xylenes, Total	ND		2.6	8.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	94		71 - 126
4-Bromofluorobenzene (Surr)	88		73 - 120

Client: ARCADIS U.S., Inc. Job Number: 480-18456-1

Client Sample ID: **AZ-PZ-2**

Lab Sample ID: 480-18456-11 Date Sampled: 04/10/2012 1755
Client Matrix: Water Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9103.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0648			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0648				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	12		0.38	1.0
1,1-Dichloroethene	1.5		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND	J	0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND	J	0.26	1.0
Bromomethane	ND	J	0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	~~190~~ 210	~~D E~~ D	0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	9.0		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	~~1200~~ 2300	~~D E~~ D	0.36	1.0
Toluene	0.84	J	0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	~~590~~ 740	~~D E~~ D	0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **AZ-PZ-2**

Lab Sample ID: 480-18456-11
Client Matrix: Water

Date Sampled: 04/10/2012 1755
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59350	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9103.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 0648			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 0648				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	14		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		66 - 137
Toluene-d8 (Surr)	94		71 - 126
4-Bromofluorobenzene (Surr)	88		73 - 120

Client: ARCADIS U.S., Inc. Job Number: 480-18456-1

Client Sample ID: **AZ-PZ-2**

Lab Sample ID: 480-18456-11 Date Sampled: 04/10/2012 1755
Client Matrix: Water Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59736	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S13097.D
Dilution:	40			Initial Weight/Volume:	5 mL
Analysis Date:	04/16/2012 1624	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	04/16/2012 1624				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		33	40
1,1,2,2-Tetrachloroethane	ND		8.4	40
1,1,2-Trichloroethane	ND		9.2	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		12	40
1,1-Dichloroethane	ND		15	40
1,1-Dichloroethene	ND		12	40
1,2,4-Trichlorobenzene	ND		16	40
1,2-Dibromo-3-Chloropropane	ND		16	40
1,2-Dibromoethane	ND		29	40
1,2-Dichlorobenzene	ND		32	40
1,2-Dichloroethane	ND		8.4	40
1,2-Dichloropropane	ND		29	40
1,3-Dichlorobenzene	ND		31	40
1,4-Dichlorobenzene	ND		34	40
2-Hexanone	ND		50	200
2-Butanone (MEK)	ND		53	400
4-Methyl-2-pentanone (MIBK)	ND		84	200
Acetone	ND		120	400
Benzene	ND		16	40
Bromodichloromethane	ND		16	40
Bromoform	ND		10	40
Bromomethane	ND		28	40
Carbon disulfide	ND		7.6	40
Carbon tetrachloride	ND		11	40
Chlorobenzene	ND		30	40
Dibromochloromethane	ND		13	40
Chloroethane	ND		13	40
Chloroform	ND		14	40
Chloromethane	ND		14	40
cis-1,2-Dichloroethene	210		32	40
cis-1,3-Dichloropropene	ND		14	40
Cyclohexane	ND		7.2	40
Dichlorodifluoromethane	ND		27	40
Ethylbenzene	ND		30	40
Isopropylbenzene	ND		32	40
Methyl acetate	ND		20	40
Methyl tert-butyl ether	ND		6.4	40
Methylcyclohexane	ND		6.4	40
Methylene Chloride	ND		18	40
Styrene	ND		29	40
Tetrachloroethene	2300		14	40
Toluene	ND		20	40
trans-1,2-Dichloroethene	ND		36	40
trans-1,3-Dichloropropene	ND		15	40
Trichloroethene	740		18	40
Trichlorofluoromethane	ND		35	40

Client: ARCADIS U.S., Inc. Job Number: 480-18456-1

Client Sample ID: **AZ-PZ-2**

Lab Sample ID: 480-18456-11 Date Sampled: 04/10/2012 1755
Client Matrix: Water Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59736	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S13097.D
Dilution:	40			Initial Weight/Volume:	5 mL
Analysis Date:	04/16/2012 1624	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	04/16/2012 1624				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		36	40
Xylenes, Total	ND		26	80

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		66 - 137
Toluene-d8 (Surr)	117		71 - 126
4-Bromofluorobenzene (Surr)	112		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-21**

Lab Sample ID: 480-18456-12
Client Matrix: Water

Date Sampled: 04/10/2012 1645
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59413	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9121.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 1433			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 1433				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND	J	0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-21**

Lab Sample ID: 480-18456-12
Client Matrix: Water

Date Sampled: 04/10/2012 1645
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59413	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9121.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 1433			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 1433				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	9.3		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	98		71 - 126
4-Bromofluorobenzene (Surr)	94		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-11R**

Lab Sample ID: 480-18456-13
Client Matrix: Water

Date Sampled: 04/10/2012 1455
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59413	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9122.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 1457			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 1457				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND	J	0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	1.9		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	2.7		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	4.5		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **PZ-11R**

Lab Sample ID: 480-18456-13
Client Matrix: Water

Date Sampled: 04/10/2012 1455
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59413	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9122.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 1457			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 1457				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		66 - 137
Toluene-d8 (Surr)	99		71 - 126
4-Bromofluorobenzene (Surr)	75		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-5**

Lab Sample ID: 480-18456-14
Client Matrix: Water

Date Sampled: 04/10/2012 1430
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59413	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9123.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 1522			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 1522				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-18456-1

Client Sample ID: **MW-5**

Lab Sample ID: 480-18456-14
Client Matrix: Water

Date Sampled: 04/10/2012 1430
Date Received: 04/12/2012 0740

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-59413	Instrument ID:	HP5973P
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	P9123.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	04/13/2012 1522			Final Weight/Volume:	5 mL
Prep Date:	04/13/2012 1522				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		66 - 137
Toluene-d8 (Surr)	93		71 - 126
4-Bromofluorobenzene (Surr)	89		73 - 120

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-23596-4020.1
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 1 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 week			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: 40.1.10! NJ001016.0001			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516, Nitrate_Calc	TOC (SM-5310C)										Total Number of containers	Special Instructions/Note:
			Preservation Code:			A	A	A	N	A											
Trip Blank	—	—	—	Water		X														2	
Dup-04112	4/10/12	—	G	Water		X														2	
MW-1	4/10/12	1545	G	Water		3	2	1	2	2										10	
MW-3	4/10/12	1705	G	Water		3	2	1	2	2										10	
AZ-PZ-1	4/11/12	1255	G	Water		3	2	1	2	2										10	
PZ-13R	4/10/12	1520	G	Water		3	2	1	2*	2										10	* Note: Nitrate-Nitrate collected on 4/11/12 1355.
MW-18	4/11/12	1155	G	Water		3														3	
PZ-7	4/10/12	1335	G	Water		3														3	
PZ-6	4/10/12	1320	G	Water		1														1	Low Volume
PZ-5	4/10/12	1305	G	Water		1														1	Low Volume
AZ-PZ-2	4/10/12	1755	G	Water		3														3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Please Report Results to J. Bonstead

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
D. Zuck	4/11/12 1730	Arcadis		4/12/12 746	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 2.7 #1

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5/01/2012

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-23596-4020.2
Client Contact: Mr. Dan Zuck	Phone: 516-368-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 2 of 7
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): Zuck			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: NJ0010~~16.0001~~ 40.1.01			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)		8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516, Nitrate_Calc	Total Number of Containers	Special Instructions/Note:
			Preservation Code				A	A	N	N		
MW-21	4/10/12	1645	G	Water			3					
PZ-11R	4/10/12	1455	G	Water			3					
MW-5	4/10/12	1430	G	Water			3					
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: D. Zuck	Date/Time: 4/11/12 1730	Company: Arcadis	Received by: D. Zuck-Ex	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 4/12/12 140	Company: [signature]
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.7 #1

05/01/2012

Lockheed Martin Corporation

Data Usability Summary Report

UTICA, NEW YORK

Volatiles Analyses

SDG 480-22467

Analyses Performed By:
TestAmerica, Buffalo, NY

Report: #16991R
Review Level: Tier III
Project: NJ001037.0001.00005

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 480-22467 for samples collected in association with the Lockheed Martin Site, Utica, New York. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
PZ-11R	480-22467-1	Water	7/11/2012		X				
TB-071012	480-22467-10	Water	7/10/2012		X				
DUP-071112	480-22467-11	Water	7/11/2012	MW-3	X				
PZ-13R	480-22467-2	Water	7/10/2012		X				
PZ-13R	480-22467-3	Water	7/11/2012		X				
MW-18	480-22467-4	Water	7/10/2012		X				
MW-21	480-22467-5	Water	7/10/2012		X				
MW-1	480-22467-6	Water	7/11/2012		X				
MW-3	480-22467-7	Water	7/11/2012		X				
A2-PZ-2	480-22467-8	Water	7/11/2012		X				
A2-PZ-1	480-22467-9	Water	7/11/2012		X				

Notes: Only VOC analysis (8260B) was evaluated as part of this validation request.
The matrix spike/matrix spike duplicate was performed on sample A2-PZ-2.

ANALYTICAL DATA PACKAGE DOCUMENTATION

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 methods 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOPs and NYSDEC ASP 2005.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to 4°C±2°C; preserved to a pH of less than 2.
	Soil	14 days from collection to analysis	Cool to 4°C±2°C.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, no other qualification of the sample results was required.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibited recoveries within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-3/DUP-071112	1,1-Dichloroethane	4.3	4.1	AC
	cis-1,2-Dichloroethene	23	23	0 %
	Tetrachloroethene	12	12	0 %
	trans-1,2-Dichloroethene	1.1	1.0	AC
	Trichloroethene	12	11	8.6 %
	Vinyl chloride	13	13	0 %

AC Acceptable
NC Not compliant

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

Samples A2-PZ-1 and A2-PZ-2 were diluted due to the presence of target compounds in high concentration. Elevated reporting limits were reported as a result for the samples.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW-18	cis-1,2-Dichloroethene	790 E	890 D	890 D
	Trichloroethene	200 E	220 D	220 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X	X		
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)		X		X	
Matrix Spike Duplicate(MSD)		X		X	
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
D. Transcription/calculation errors present				X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
480-22467-1	7/11/2012	SW-846	PZ-11R	Water	Yes	--	--	--	--	
480-22467-10	7/10/2012	SW-846	TB-071012	Water	Yes	--	--	--	--	
480-22467-11	7/11/2012	SW-846	DUP-071112	Water	Yes	--	--	--	--	
480-22467-2	7/10/2012	SW-846	PZ-13R	Water	Yes	--	--	--	--	
480-22467-3	7/11/2012	SW-846	PZ-13R	Water	Yes	--	--	--	--	
480-22467-4	7/10/2012	SW-846	MW-18	Water	Yes	--	--	--	--	
480-22467-5	7/10/2012	SW-846	MW-21	Water	Yes	--	--	--	--	
480-22467-6	7/11/2012	SW-846	MW-1	Water	Yes	--	--	--	--	
480-22467-7	7/11/2012	SW-846	MW-3	Water	Yes	--	--	--	--	
480-22467-8	7/11/2012	SW-846	A2-PZ-2	Water	Yes	--	--	--	--	
480-22467-9	7/11/2012	SW-846	A2-PZ-1	Water	Yes	--	--	--	--	

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

ALIDATION PERFORMED BY: Mary Ann Doyle

SIGNATURE: 

DATE: August 28, 2012

PEER REVIEW BY: Joseph C. Houser

DATE: September 13, 2012

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

16991

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **PZ-11R**

Lab Sample ID: 480-22467-1
Client Matrix: Water

Date Sampled: 07/11/2012 1055
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72377	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13026.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/14/2012 0004			Final Weight/Volume:	5 mL
Prep Date:	07/14/2012 0004				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	9.4	J	3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	2.4		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	5.2		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	8.7		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **PZ-11R**

Lab Sample ID: 480-22467-1
Client Matrix: Water

Date Sampled: 07/11/2012 1055
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72377	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13026.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/14/2012 0004			Final Weight/Volume:	5 mL
Prep Date:	07/14/2012 0004				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111		66 - 137
Toluene-d8 (Surr)	107		71 - 126
4-Bromofluorobenzene (Surr)	104		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **PZ-13R**

Lab Sample ID: 480-22467-2
Client Matrix: Water

Date Sampled: 07/10/2012 1652
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13052.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1358			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1358				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	9.3	J	3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	1.7		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	1.1		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	4.3		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **PZ-13R**

Lab Sample ID: 480-22467-2
Client Matrix: Water

Date Sampled: 07/10/2012 1652
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13052.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1358			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1358				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112		66 - 137
Toluene-d8 (Surr)	108		71 - 126
4-Bromofluorobenzene (Surr)	106		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-18**

Lab Sample ID: 480-22467-4
Client Matrix: Water

Date Sampled: 07/10/2012 1320
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13053.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1421			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1421				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	37		0.38	1.0
1,1-Dichloroethene	1.3		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	9.1	J	3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	890 ~~790~~	D ~~E~~	0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	1.4		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	57		0.36	1.0
Toluene	1.4		0.51	1.0
trans-1,2-Dichloroethene	2.6		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	220 ~~200~~	D ~~E~~	0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-18**

Lab Sample ID: 480-22467-4
Client Matrix: Water

Date Sampled: 07/10/2012 1320
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13053.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1421			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1421				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	7.6		0.90	1.0
Xylenes, Total	1.0	J	0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113		66 - 137
Toluene-d8 (Surr)	110		71 - 126
4-Bromofluorobenzene (Surr)	108		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-18**

Lab Sample ID: 480-22467-4
Client Matrix: Water

Date Sampled: 07/10/2012 1320
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72475	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13082.D
Dilution:	20			Initial Weight/Volume:	5 mL
Analysis Date:	07/16/2012 1313	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	07/16/2012 1313				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		16	20
1,1,2,2-Tetrachloroethane	ND		4.2	20
1,1,2-Trichloroethane	ND		4.6	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.2	20
1,1-Dichloroethane	40		7.6	20
1,1-Dichloroethene	ND		5.8	20
1,2,4-Trichlorobenzene	ND		8.2	20
1,2-Dibromo-3-Chloropropane	ND		7.8	20
1,2-Dibromoethane	ND		15	20
1,2-Dichlorobenzene	ND		16	20
1,2-Dichloroethane	ND		4.2	20
1,2-Dichloropropane	ND		14	20
1,3-Dichlorobenzene	ND		16	20
1,4-Dichlorobenzene	ND		17	20
2-Hexanone	ND		25	100
2-Butanone (MEK)	ND		26	200
4-Methyl-2-pentanone (MIBK)	ND		42	100
Acetone	ND		60	200
Benzene	ND		8.2	20
Bromodichloromethane	ND		7.8	20
Bromoform	ND		5.2	20
Bromomethane	ND		14	20
Carbon disulfide	ND		3.8	20
Carbon tetrachloride	ND		5.4	20
Chlorobenzene	ND		15	20
Dibromochloromethane	ND		6.4	20
Chloroethane	ND		6.4	20
Chloroform	ND		6.8	20
Chloromethane	ND		7.0	20
cis-1,2-Dichloroethene	890		16	20
cis-1,3-Dichloropropene	ND		7.2	20
Cyclohexane	ND		3.6	20
Dichlorodifluoromethane	ND		14	20
Ethylbenzene	ND		15	20
Isopropylbenzene	ND		16	20
Methyl acetate	ND		10	20
Methyl tert-butyl ether	ND		3.2	20
Methylcyclohexane	ND		3.2	20
Methylene Chloride	ND		8.8	20
Styrene	ND		15	20
Tetrachloroethene	62		7.2	20
Toluene	ND		10	20
trans-1,2-Dichloroethene	ND		18	20
trans-1,3-Dichloropropene	ND		7.4	20
Trichloroethene	220		9.2	20
Trichlorofluoromethane	ND		18	20

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-18**

Lab Sample ID: 480-22467-4
Client Matrix: Water

Date Sampled: 07/10/2012 1320
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72475	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13082.D
Dilution:	20			Initial Weight/Volume:	5 mL
Analysis Date:	07/16/2012 1313	Run Type:	DL	Final Weight/Volume:	5 mL
Prep Date:	07/16/2012 1313				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		18	20
Xylenes, Total	ND		13	40

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114		66 - 137
Toluene-d8 (Surr)	109		71 - 126
4-Bromofluorobenzene (Surr)	107		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-21**

Lab Sample ID: 480-22467-5
Client Matrix: Water

Date Sampled: 07/10/2012 1435
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13054.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1444			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1444				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	8.8	J	3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-21**

Lab Sample ID: 480-22467-5
Client Matrix: Water

Date Sampled: 07/10/2012 1435
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13054.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1444			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1444				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	6.5		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		66 - 137
Toluene-d8 (Surr)	113		71 - 126
4-Bromofluorobenzene (Surr)	110		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-1**

Lab Sample ID: 480-22467-6
Client Matrix: Water

Date Sampled: 07/11/2012 1220
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13055.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1507			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1507				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	5.9		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	8.8	J	3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	40		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	36		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	1.4		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	14		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-1**

Lab Sample ID: 480-22467-6
Client Matrix: Water

Date Sampled: 07/11/2012 1220
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13055.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1507			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1507				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	4.3		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113		66 - 137
Toluene-d8 (Surr)	106		71 - 126
4-Bromofluorobenzene (Surr)	102		73 - 120

Client: ARCADIS U.S., Inc. Job Number: 480-22467-1

Client Sample ID: **MW-3**

Lab Sample ID: 480-22467-7 Date Sampled: 07/11/2012 1245
Client Matrix: Water Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13056.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1530			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1530				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	4.3		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	23		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	12		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	1.1		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	12		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-3**

Lab Sample ID: 480-22467-7
Client Matrix: Water

Date Sampled: 07/11/2012 1245
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13056.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1530			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1530				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	13		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		66 - 137
Toluene-d8 (Surr)	111		71 - 126
4-Bromofluorobenzene (Surr)	108		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **A2-PZ-2**

Lab Sample ID: 480-22467-8
Client Matrix: Water

Date Sampled: 07/11/2012 1435
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72475	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13083.D
Dilution:	10			Initial Weight/Volume:	5 mL
Analysis Date:	07/16/2012 1336			Final Weight/Volume:	5 mL
Prep Date:	07/16/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		8.2	10
1,1,2,2-Tetrachloroethane	ND		2.1	10
1,1,2-Trichloroethane	ND		2.3	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.1	10
1,1-Dichloroethane	ND		3.8	10
1,1-Dichloroethene	ND		2.9	10
1,2,4-Trichlorobenzene	ND		4.1	10
1,2-Dibromo-3-Chloropropane	ND		3.9	10
1,2-Dibromoethane	ND		7.3	10
1,2-Dichlorobenzene	ND		7.9	10
1,2-Dichloroethane	ND		2.1	10
1,2-Dichloropropane	ND		7.2	10
1,3-Dichlorobenzene	ND		7.8	10
1,4-Dichlorobenzene	ND		8.4	10
2-Hexanone	ND		12	50
2-Butanone (MEK)	ND		13	100
4-Methyl-2-pentanone (MIBK)	ND		21	50
Acetone	ND		30	100
Benzene	ND		4.1	10
Bromodichloromethane	ND		3.9	10
Bromoform	ND		2.6	10
Bromomethane	ND		6.9	10
Carbon disulfide	ND		1.9	10
Carbon tetrachloride	ND		2.7	10
Chlorobenzene	ND		7.5	10
Dibromochloromethane	ND		3.2	10
Chloroethane	ND		3.2	10
Chloroform	ND		3.4	10
Chloromethane	ND		3.5	10
cis-1,2-Dichloroethene	130		8.1	10
cis-1,3-Dichloropropene	ND		3.6	10
Cyclohexane	ND		1.8	10
Dichlorodifluoromethane	ND		6.8	10
Ethylbenzene	ND		7.4	10
Isopropylbenzene	ND		7.9	10
Methyl acetate	ND		5.0	10
Methyl tert-butyl ether	ND		1.6	10
Methylcyclohexane	ND		1.6	10
Methylene Chloride	ND		4.4	10
Styrene	ND		7.3	10
Tetrachloroethene	810		3.6	10
Toluene	ND		5.1	10
trans-1,2-Dichloroethene	ND		9.0	10
trans-1,3-Dichloropropene	ND		3.7	10
Trichloroethene	360		4.6	10
Trichlorofluoromethane	ND		8.8	10

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **A2-PZ-2**

Lab Sample ID: 480-22467-8
Client Matrix: Water

Date Sampled: 07/11/2012 1435
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72475	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13083.D
Dilution:	10			Initial Weight/Volume:	5 mL
Analysis Date:	07/16/2012 1336			Final Weight/Volume:	5 mL
Prep Date:	07/16/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		9.0	10
Xylenes, Total	ND		6.6	20

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	117		66 - 137
Toluene-d8 (Surr)	108		71 - 126
4-Bromofluorobenzene (Surr)	104		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **A2-PZ-1**

Lab Sample ID: 480-22467-9
Client Matrix: Water

Date Sampled: 07/11/2012 1520
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13058.D
Dilution:	250			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1616			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1616				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		210	250
1,1,2,2-Tetrachloroethane	ND		53	250
1,1,2-Trichloroethane	ND		58	250
1,1,2-Trichloro-1,2,2-trifluoroethane	940		78	250
1,1-Dichloroethane	1100		95	250
1,1-Dichloroethene	ND		73	250
1,2,4-Trichlorobenzene	ND		100	250
1,2-Dibromo-3-Chloropropane	ND		98	250
1,2-Dibromoethane	ND		180	250
1,2-Dichlorobenzene	ND		200	250
1,2-Dichloroethane	ND		53	250
1,2-Dichloropropane	ND		180	250
1,3-Dichlorobenzene	ND		200	250
1,4-Dichlorobenzene	ND		210	250
2-Hexanone	ND		310	1300
2-Butanone (MEK)	ND		330	2500
4-Methyl-2-pentanone (MIBK)	ND		530	1300
Acetone	ND		750	2500
Benzene	ND		100	250
Bromodichloromethane	ND		98	250
Bromoform	ND		65	250
Bromomethane	ND		170	250
Carbon disulfide	ND		48	250
Carbon tetrachloride	ND		68	250
Chlorobenzene	ND		190	250
Dibromochloromethane	ND		80	250
Chloroethane	ND		80	250
Chloroform	ND		85	250
Chloromethane	ND		88	250
cis-1,2-Dichloroethene	17000		200	250
cis-1,3-Dichloropropene	ND		90	250
Cyclohexane	ND		45	250
Dichlorodifluoromethane	ND		170	250
Ethylbenzene	ND		190	250
Isopropylbenzene	ND		200	250
Methyl acetate	ND		130	250
Methyl tert-butyl ether	ND		40	250
Methylcyclohexane	ND		40	250
Methylene Chloride	ND		110	250
Styrene	ND		180	250
Tetrachloroethene	ND		90	250
Toluene	ND		130	250
trans-1,2-Dichloroethene	ND		230	250
trans-1,3-Dichloropropene	ND		93	250
Trichloroethene	2600		120	250
Trichlorofluoromethane	ND		220	250

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **A2-PZ-1**

Lab Sample ID: 480-22467-9
Client Matrix: Water

Date Sampled: 07/11/2012 1520
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13058.D
Dilution:	250			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1616			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1616				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	830		230	250
Xylenes, Total	ND		170	500

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	106		71 - 126
4-Bromofluorobenzene (Surr)	103		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **TB-071012**

Lab Sample ID: 480-22467-10TB
Client Matrix: Water

Date Sampled: 07/10/2012 0000
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13059.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1638			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1638				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	ND		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	ND		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	ND		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	ND		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	ND		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **TB-071012**

Lab Sample ID: 480-22467-10TB
Client Matrix: Water

Date Sampled: 07/10/2012 0000
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13059.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1638			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1638				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	ND		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114		66 - 137
Toluene-d8 (Surr)	108		71 - 126
4-Bromofluorobenzene (Surr)	104		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **DUP-071112**

Lab Sample ID: 480-22467-11
Client Matrix: Water

Date Sampled: 07/11/2012 0000
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13060.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1701			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1701				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	1.0
1,1,2,2-Tetrachloroethane	ND		0.21	1.0
1,1,2-Trichloroethane	ND		0.23	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.31	1.0
1,1-Dichloroethane	4.1		0.38	1.0
1,1-Dichloroethene	ND		0.29	1.0
1,2,4-Trichlorobenzene	ND		0.41	1.0
1,2-Dibromo-3-Chloropropane	ND		0.39	1.0
1,2-Dibromoethane	ND		0.73	1.0
1,2-Dichlorobenzene	ND		0.79	1.0
1,2-Dichloroethane	ND		0.21	1.0
1,2-Dichloropropane	ND		0.72	1.0
1,3-Dichlorobenzene	ND		0.78	1.0
1,4-Dichlorobenzene	ND		0.84	1.0
2-Hexanone	ND		1.2	5.0
2-Butanone (MEK)	ND		1.3	10
4-Methyl-2-pentanone (MIBK)	ND		2.1	5.0
Acetone	ND		3.0	10
Benzene	ND		0.41	1.0
Bromodichloromethane	ND		0.39	1.0
Bromoform	ND		0.26	1.0
Bromomethane	ND		0.69	1.0
Carbon disulfide	ND		0.19	1.0
Carbon tetrachloride	ND		0.27	1.0
Chlorobenzene	ND		0.75	1.0
Dibromochloromethane	ND		0.32	1.0
Chloroethane	ND		0.32	1.0
Chloroform	ND		0.34	1.0
Chloromethane	ND		0.35	1.0
cis-1,2-Dichloroethene	23		0.81	1.0
cis-1,3-Dichloropropene	ND		0.36	1.0
Cyclohexane	ND		0.18	1.0
Dichlorodifluoromethane	ND		0.68	1.0
Ethylbenzene	ND		0.74	1.0
Isopropylbenzene	ND		0.79	1.0
Methyl acetate	ND		0.50	1.0
Methyl tert-butyl ether	ND		0.16	1.0
Methylcyclohexane	ND		0.16	1.0
Methylene Chloride	ND		0.44	1.0
Styrene	ND		0.73	1.0
Tetrachloroethene	12		0.36	1.0
Toluene	ND		0.51	1.0
trans-1,2-Dichloroethene	1.0		0.90	1.0
trans-1,3-Dichloropropene	ND		0.37	1.0
Trichloroethene	11		0.46	1.0
Trichlorofluoromethane	ND		0.88	1.0

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **DUP-071112**

Lab Sample ID: 480-22467-11
Client Matrix: Water

Date Sampled: 07/11/2012 0000
Date Received: 07/12/2012 1000

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-72427	Instrument ID:	HP5973G
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	G13060.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	07/15/2012 1701			Final Weight/Volume:	5 mL
Prep Date:	07/15/2012 1701				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Vinyl chloride	13		0.90	1.0
Xylenes, Total	ND		0.66	2.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114		66 - 137
Toluene-d8 (Surr)	110		71 - 126
4-Bromofluorobenzene (Surr)	108		73 - 120

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **PZ-13R**

Lab Sample ID: 480-22467-2
Client Matrix: Water

Date Sampled: 07/10/2012 1652
Date Received: 07/12/2012 1000

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-72224	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	10			Final Weight/Volume:	1.0 mL
Analysis Date:	07/13/2012 1528			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	150		13	39

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-1**

Lab Sample ID: 480-22467-6
Client Matrix: Water

Date Sampled: 07/11/2012 1220
Date Received: 07/12/2012 1000

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-72224	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	10			Final Weight/Volume:	1.0 mL
Analysis Date:	07/13/2012 1545			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	270		13	39

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **MW-3**

Lab Sample ID: 480-22467-7
Client Matrix: Water

Date Sampled: 07/11/2012 1245
Date Received: 07/12/2012 1000

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-72224	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	10			Final Weight/Volume:	1.0 mL
Analysis Date:	07/13/2012 1602			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	140		13	39

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **A2-PZ-1**

Lab Sample ID: 480-22467-9
Client Matrix: Water

Date Sampled: 07/11/2012 1520
Date Received: 07/12/2012 1000

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-72402	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	100			Final Weight/Volume:	1.0 mL
Analysis Date:	07/14/2012 1118			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	1700		130	390

Client: ARCADIS U.S., Inc.

Job Number: 480-22467-1

Client Sample ID: **DUP-071112**

Lab Sample ID: 480-22467-11
Client Matrix: Water

Date Sampled: 07/11/2012 0000
Date Received: 07/12/2012 1000

RSK-175 Dissolved Gases (GC)

Analysis Method:	RSK-175	Analysis Batch:	480-72224	Instrument ID:	HP5890-21
	N/A		N/A	Initial Weight/Volume:	1 mL
Dilution:	10			Final Weight/Volume:	1.0 mL
Analysis Date:	07/13/2012 1653			Injection Volume:	1 uL
Prep Date:	N/A			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	RL
Methane	170		13	39

General Chemistry

Client Sample ID: **PZ-13R**

Lab Sample ID: 480-22467-2
Client Matrix: Water

Date Sampled: 07/10/2012 1652
Date Received: 07/12/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Sulfate	119		mg/L	7.5	25.0	5.0	D516-90, 02
Analysis Batch: 480-72379	Analysis Date: 07/13/2012 1728						
Alkalinity, Total	486		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72656	Analysis Date: 07/17/2012 0411						
Alkalinity, Bicarbonate	486		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72656	Analysis Date: 07/17/2012 0411						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72656	Analysis Date: 07/17/2012 0411						
Total Organic Carbon	4.4		mg/L	0.43	1.0	1.0	SM 5310D
Analysis Batch: 480-72906	Analysis Date: 07/18/2012 1128						

General Chemistry

Client Sample ID: **PZ-13R**

Lab Sample ID: 480-22467-3
Client Matrix: Water

Date Sampled: 07/11/2012 1110
Date Received: 07/12/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	0.36		mg/L	0.011	0.050	1.0	353.2

Analysis Batch: 480-72205 Analysis Date: 07/12/2012 1746

General Chemistry

Client Sample ID: **MW-1**

Lab Sample ID: 480-22467-6
Client Matrix: Water

Date Sampled: 07/11/2012 1220
Date Received: 07/12/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	0.16		mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-72205	Analysis Date: 07/12/2012 2109						
Sulfate	131		mg/L	7.5	25.0	5.0	D516-90, 02
Analysis Batch: 480-72379	Analysis Date: 07/13/2012 1728						
Alkalinity, Total	355		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0253						
Alkalinity, Bicarbonate	355		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0253						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0253						
Total Organic Carbon	0.47	J	mg/L	0.43	1.0	1.0	SM 5310D
Analysis Batch: 480-72740	Analysis Date: 07/16/2012 2315						

General Chemistry

Client Sample ID: **MW-3**

Lab Sample ID: 480-22467-7
Client Matrix: Water

Date Sampled: 07/11/2012 1245
Date Received: 07/12/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	ND		mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-72205	Analysis Date: 07/12/2012 1748						
Sulfate	117		mg/L	15.0	50.0	10	D516-90, 02
Analysis Batch: 480-72640	Analysis Date: 07/17/2012 0026						
Alkalinity, Total	242		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0234						
Alkalinity, Bicarbonate	242		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0234						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0234						
Total Organic Carbon	0.89	J	mg/L	0.43	1.0	1.0	SM 5310D
Analysis Batch: 480-72532	Analysis Date: 07/14/2012 2017						

General Chemistry

Client Sample ID: **A2-PZ-1**

Lab Sample ID: 480-22467-9
Client Matrix: Water

Date Sampled: 07/11/2012 1520
Date Received: 07/12/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	ND		mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-72205	Analysis Date: 07/12/2012 1751						
Sulfate	25.1		mg/L	1.5	5.0	1.0	D516-90, 02
Analysis Batch: 480-72640	Analysis Date: 07/17/2012 0249						
Alkalinity, Total	476		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0228						
Alkalinity, Bicarbonate	476		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0228						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0228						
Total Organic Carbon	3.3		mg/L	0.43	1.0	1.0	SM 5310D
Analysis Batch: 480-72532	Analysis Date: 07/14/2012 1957						

General Chemistry

Client Sample ID: **DUP-071112**

Lab Sample ID: 480-22467-11
Client Matrix: Water

Date Sampled: 07/11/2012 0000
Date Received: 07/12/2012 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate as N	ND		mg/L	0.011	0.050	1.0	353.2
Analysis Batch: 480-72205	Analysis Date: 07/12/2012 1752						
Sulfate	125		mg/L	7.5	25.0	5.0	D516-90, 02
Analysis Batch: 480-72640	Analysis Date: 07/17/2012 0256						
Alkalinity, Total	243		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0221						
Alkalinity, Bicarbonate	243		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0221						
Alkalinity, Carbonate	ND		mg/L	0.79	5.0	1.0	SM 2320B
Analysis Batch: 480-72452	Analysis Date: 07/16/2012 0221						
Total Organic Carbon	0.80	J	mg/L	0.43	1.0	1.0	SM 5310D
Analysis Batch: 480-72532	Analysis Date: 07/14/2012 2037						

Chain of Custody Record

TestAmerica

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-25883-5178.1
Client Contact: Mr Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 1 of 1
Company: ARCADIS U S , Inc				Job #

Address	Due Date Requested:
6723 Towpath PO BOX 66	
City: Syracuse	TAT Requested (days): Zuck
State, Zip: NY, 13214-0066	
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO # 40.1.102 NJ001016.0001
Email: dan.zuck@arcadis-us.com	WO #
Project Name: Lockheed Martin Corporation	Project # 48002828
Site: New York	SSOW#

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516, Nitrate_Calc	TOC	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	A	N	N	A	X	
PZ-11R	7/11/12	1055	G	Water			3						
PZ-13R	7/10/12	1652	G	Water			3	2	1	*2	2		* collected 7/11/12 @ 1110
MW-18	7/10/12	1320	G	Water			3						
MW-21	7/10/12	1435	G	Water			3						
MW-1	7/11/12	1220	G	Water			3	2	1	2	2		
MW-3	7/11/12	1245	G	Water			3	2	1	2	2		
A2-PZ-2	7/11/12	1435	G	Water			3						
A2-PZ-1	7/11/12	1520	G	Water			3	2	1	2	2		
TB-071012	7/10/12	—	—	Water			3						
DUP-071112	7/11/12	—	G	Water			3	2	1	2	2		
				Water									

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Please Report Results to J. Bousted

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	7/11/12 1700	Arcadis		7-12-12 0900	TAL
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				1000	UPS
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.7 4/3

Lockheed Martin Corporation

Data Usability Summary Report

UTICA, NEW YORK

Volatiles

SDG 480-26196

Analyses Performed By:
TestAmerica, Inc

Report: #17884R
Review Level: Tier III
Project: NJ001037.0001.00005

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) # 480-26196 for samples collected in association with the Lockheed Martin Site, Utica, New York. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
TB-100412	480-26196-1	Water	10/04/12		X				
Dup-100412	480-26196-2	Water	10/04/12	MW-10	X				
A1-PZ-2	480-26196-3	Water	10/04/12		X				
A2-PZ-1	480-26196-4	Water	10/04/12		X				
A2-PZ-2	480-26196-5	Water	10/03/12		X				
MW-1	480-26196-6	Water	10/04/12		X				
MW-2	480-26196-7	Water	10/03/12		X				
MW-3	480-26196-8	Water	10/04/12		X				
MW-4	480-26196-9	Water	10/03/12		X				
MW-5	480-26196-10	Water	10/02/12		X				
MW-10	480-26196-11	Water	10/04/12		X				
MW-18	480-26196-12	Water	10/03/12		X				
MW-20	480-26196-13	Water	10/02/12		X				
MW-21	480-26196-14	Water	10/02/12		X				
PZ-5	480-26196-15	Water	10/02/12		X				
PZ-6	480-26196-16	Water	10/02/12		X				
PZ-7	480-26196-17	Water	10/02/12		X				
PZ-8	480-26196-18	Water	10/03/12		X				
PZ-11R	480-26196-19	Water	10/02/12		X				
PZ-13R	480-26196-20	Water	10/02/12		X				
PZ-18	480-26196-21	Water	10/03/12		X				
PZ-26	480-26196-22	Water	10/03/12		X				
MW-14BR	480-26289-1	Water	10/05/12		X				
TB100512	480-26289-2	Water	10/05/12		X				

Notes: Only VOC (8260B) section of this SDG was validated per project request.
The matrix spike/matrix spike duplicate for VOCs was performed on sample A2-PZ-1.

ANALYTICAL DATA PACKAGE DOCUMENTATION

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 methods 8260. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOPs and NYSDEC ASP 2005.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cool to 4°C±2°C; preserved to a pH of less than 2.
	Soil	14 days from collection to analysis	Cool to 4°C±2°C.

s.u. Standard units

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-18 MW-20 MW-14BR TB100512	CCV %D	Dichlorodifluoromethane	-43.3
		Carbon Disulfide	-21.5
		Bromoform	-39.6
		1,2-Dibromo-3-Chloropropane	-20.1
PZ-18 PZ-26	CCV %D	Carbon Tetrachloride	22.9
TB-100412 A1-PZ-2 A2-PZ-1 MW-1 MW-2 MW-3 MW-4 MW-5 MW-10 MW-21 PZ-5 PZ-6 PZ-7 PZ-8 PZ-11R PZ-13R DUP-100412 A2-PZ-2	CCV %D	Dichlorodifluoromethane	-33.3
		Bromomethane	53.6
		Chloroethane	22.8
		Trichlorofluoromethane	32.5
		Carbon disulfide	-27.4

Sample Locations	Initial/Continuing	Compound	Criteria
		trans-1,3-Dichloropropene	-20.3
		1,2-Dibromo-3-Chloropropane	-22.8

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibited recoveries within control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-10/DUP-100412	1,1-Dichloroethane	3.5	2.5	AC
	Cis-1,2-Dichloroethene	45	58	25%
	Trans-1,2-Dichloroethene	3.2	3.8	AC
	Trichloroethene	1.7	2.0	AC
	Vinyl Chloride	38	47	21%

AC Acceptable
NC Not compliant
ND Not detected

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

11. System Performance and Overall Assessment

Samples A2-PZ-1, A2-PZ-2, MW-18, PZ-5, and PZ-8 were analyzed at a dilution due to the presence target compounds.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)		X		X	
Matrix Spike Duplicate(MSD)		X		X	
MS/MSD Precision (RPD)		X		X	
Field Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	

VOCs: SW-846 8260	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

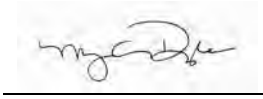
SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
480-26196-1	10/04/12	SW-846	TB-100412	Water	No	--	--	--	--	VOC- CCV%D
480-26196-2	10/04/12	SW-846	Dup-100412	Water	No	--	--	--	--	VOC- CCV%D
480-26196-3	10/04/12	SW-846	A1-PZ-2	Water	No	--	--	--	--	VOC- CCV%D
480-26196-4	10/04/12	SW-846	A2-PZ-1	Water	No	--	--	--	--	VOC- CCV%D, Dilutions
480-26196-5	10/03/12	SW-846	A2-PZ-2	Water	No	--	--	--	--	VOC- CCV%D, Dilutions
480-26196-6	10/04/12	SW-846	MW-1	Water	No	--	--	--	--	VOC- CCV%D
480-26196-7	10/03/12	SW-846	MW-2	Water	No	--	--	--	--	VOC- CCV%D
480-26196-8	10/04/12	SW-846	MW-3	Water	No	--	--	--	--	VOC- CCV%D
480-26196-9	10/03/12	SW-846	MW-4	Water	No	--	--	--	--	VOC- CCV%D
480-26196-10	10/02/12	SW-846	MW-5	Water	No	--	--	--	--	VOC- CCV%D
480-26196-11	10/04/12	SW-846	MW-10	Water	No	--	--	--	--	VOC- CCV%D
480-26196-12	10/03/12	SW-846	MW-18	Water	No	--	--	--	--	VOC- CCV%D, Dilutions
480-26196-13	10/02/12	SW-846	MW-20	Water	No	--	--	--	--	VOC- CCV%D
480-26196-14	10/02/12	SW-846	MW-21	Water	No	--	--	--	--	VOC- CCV%D
480-26196-15	10/02/12	SW-846	PZ-5	Water	No	--	--	--	--	VOC- CCV%D, Dilutions
480-26196-16	10/02/12	SW-846	PZ-6	Water	No	--	--	--	--	VOC- CCV%D
480-26196-17	10/02/12	SW-846	PZ-7	Water	No	--	--	--	--	VOC- CCV%D
480-26196-18	10/03/12	SW-846	PZ-8	Water	No	--	--	--	--	VOC- CCV%D, Dilutions
480-26196-19	10/02/12	SW-846	PZ-11R	Water	No	--	--	--	--	VOC- CCV%D
480-26196-20	10/02/12	SW-846	PZ-13R	Water	No	--	--	--	--	VOC- CCV%D
480-26196-21	10/03/12	SW-846	PZ-18	Water	No	--	--	--	--	VOC- CCV%D

Sample	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
480-26196-22	10/03/12	SW-846	PZ-26	Water	No	--	--	--	--	VOC- CCV%D
480-26289-1	10/05/12	SW-846	MW-14BR	Water	No	--	--	--	--	VOC- CCV%D
480-26289-2	10/05/12	SW-846	TB-110512	Water	No	--	--	--	--	VOC- CCV%D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

ALIDATION PERFORMED BY: Mary Ann Doyle

SIGNATURE: 

DATE: December 6, 2012

PEER REVIEW BY: Joseph C. Houser

DATE: December 6, 2012

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

17884R

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: TB-100412
Date Collected: 10/04/12 00:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/12 21:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/12 21:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/12 21:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/12 21:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/10/12 21:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/12 21:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/12 21:56	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/10/12 21:56	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/12 21:56	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/12 21:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/12 21:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/12 21:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/12 21:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/12 21:56	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/12 21:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/12 21:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/12 21:56	1
Acetone	ND		10	3.0	ug/L			10/10/12 21:56	1
Benzene	ND		1.0	0.41	ug/L			10/10/12 21:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/12 21:56	1
Bromoform	ND		1.0	0.26	ug/L			10/10/12 21:56	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/12 21:56	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/10/12 21:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/12 21:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/12 21:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/12 21:56	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/12 21:56	1
Chloroform	ND		1.0	0.34	ug/L			10/10/12 21:56	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/12 21:56	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/10/12 21:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/12 21:56	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/12 21:56	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/10/12 21:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/12 21:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/12 21:56	1
Methyl acetate	ND		1.0	0.50	ug/L			10/10/12 21:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/12 21:56	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/12 21:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/12 21:56	1
Styrene	ND		1.0	0.73	ug/L			10/10/12 21:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/12 21:56	1
Toluene	ND		1.0	0.51	ug/L			10/10/12 21:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/12 21:56	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/10/12 21:56	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/12 21:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/12 21:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/10/12 21:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/12 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*10/10/12 21:56*	*1*

Client Sample ID: TB-100412
Date Collected: 10/04/12 00:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		71 - 126		10/10/12 21:56	1
4-Bromofluorobenzene (Surr)	93		73 - 120		10/10/12 21:56	1

Client Sample ID: DUP-100412
Date Collected: 10/04/12 00:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 15:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 15:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 15:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 15:06	1
1,1-Dichloroethane	**2.5**		1.0	0.38	ug/L			10/11/12 15:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 15:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 15:06	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 15:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 15:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 15:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 15:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 15:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 15:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 15:06	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 15:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 15:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 15:06	1
Acetone	ND		10	3.0	ug/L			10/11/12 15:06	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 15:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 15:06	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 15:06	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 15:06	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 15:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 15:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 15:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 15:06	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 15:06	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 15:06	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 15:06	1
cis-1,2-Dichloroethene	**58**		1.0	0.81	ug/L			10/11/12 15:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 15:06	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 15:06	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 15:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 15:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 15:06	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 15:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 15:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 15:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 15:06	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 15:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 15:06	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 15:06	1

Client Sample ID: DUP-100412

Lab Sample ID: 480-26196-2

Date Collected: 10/04/12 00:00
Date Received: 10/05/12 09:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**3.8**		1.0	0.90	ug/L			10/11/12 15:06	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 15:06	1
Trichloroethene	**2.0**		1.0	0.46	ug/L			10/11/12 15:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 15:06	1
Vinyl chloride	**47**		1.0	0.90	ug/L			10/11/12 15:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*10/11/12 15:06*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*10/11/12 15:06*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 15:06*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**130**		40	2.2	ug/L			10/08/12 09:17	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			10/05/12 21:04	1
Sulfate	**220**	B	100	30.0	mg/L			10/10/12 20:05	20
Alkalinity, Total	**233**		5.0	0.79	mg/L			10/09/12 14:08	1
Alkalinity, Bicarbonate	**233**		5.0	0.79	mg/L			10/09/12 14:08	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:08	1
Total Organic Carbon	**4.2**		1.0	0.43	mg/L			10/08/12 22:41	1

Client Sample ID: A1-PZ-2

Lab Sample ID: 480-26196-3

Date Collected: 10/04/12 11:00
Date Received: 10/05/12 09:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/12 22:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/12 22:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/12 22:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/12 22:39	1
1,1-Dichloroethane	**0.49**	J	1.0	0.38	ug/L			10/10/12 22:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/12 22:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/12 22:39	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/10/12 22:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/12 22:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/12 22:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/12 22:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/12 22:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/12 22:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/12 22:39	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/12 22:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/12 22:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/12 22:39	1
Acetone	ND		10	3.0	ug/L			10/10/12 22:39	1
Benzene	ND		1.0	0.41	ug/L			10/10/12 22:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/12 22:39	1
Bromoform	ND		1.0	0.26	ug/L			10/10/12 22:39	1

Client Sample ID: A1-PZ-2
Date Collected: 10/04/12 11:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			10/10/12 22:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/12 22:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/12 22:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/12 22:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/12 22:39	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/12 22:39	1
Chloroform	ND		1.0	0.34	ug/L			10/10/12 22:39	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/12 22:39	1
cis-1,2-Dichloroethene	**10**		1.0	0.81	ug/L			10/10/12 22:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/12 22:39	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/12 22:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/12 22:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/12 22:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/12 22:39	1
Methyl acetate	ND		1.0	0.50	ug/L			10/10/12 22:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/12 22:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/12 22:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/12 22:39	1
Styrene	ND		1.0	0.73	ug/L			10/10/12 22:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/12 22:39	1
Toluene	ND		1.0	0.51	ug/L			10/10/12 22:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/12 22:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/12 22:39	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/12 22:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/12 22:39	1
Vinyl chloride	**8.4**		1.0	0.90	ug/L			10/10/12 22:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/12 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*10/10/12 22:39*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/10/12 22:39*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/10/12 22:39*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2800**		200	11	ug/L			10/08/12 10:13	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			10/05/12 21:05	1
Sulfate	**2.4**	J B	5.0	1.5	mg/L			10/10/12 19:25	1
Alkalinity, Total	**299**		5.0	0.79	mg/L			10/09/12 14:14	1
Alkalinity, Bicarbonate	**299**		5.0	0.79	mg/L			10/09/12 14:14	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:14	1
Total Organic Carbon	**4.0**		1.0	0.43	mg/L			10/08/12 23:00	1

Client Sample ID: A2-PZ-1
Date Collected: 10/04/12 12:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250	210	ug/L			10/10/12 23:01	250
1,1,2,2-Tetrachloroethane	ND		250	53	ug/L			10/10/12 23:01	250
1,1,2-Trichloroethane	ND		250	58	ug/L			10/10/12 23:01	250
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	78	ug/L			10/10/12 23:01	250
1,1-Dichloroethane	**1300**		250	95	ug/L			10/10/12 23:01	250
1,1-Dichloroethene	ND		250	73	ug/L			10/10/12 23:01	250
1,2,4-Trichlorobenzene	ND		250	100	ug/L			10/10/12 23:01	250
1,2-Dibromo-3-Chloropropane	ND	J	250	98	ug/L			10/10/12 23:01	250
1,2-Dibromoethane	ND		250	180	ug/L			10/10/12 23:01	250
1,2-Dichlorobenzene	ND		250	200	ug/L			10/10/12 23:01	250
1,2-Dichloroethane	ND		250	53	ug/L			10/10/12 23:01	250
1,2-Dichloropropane	ND		250	180	ug/L			10/10/12 23:01	250
1,3-Dichlorobenzene	ND		250	200	ug/L			10/10/12 23:01	250
1,4-Dichlorobenzene	ND		250	210	ug/L			10/10/12 23:01	250
2-Hexanone	ND		1300	310	ug/L			10/10/12 23:01	250
2-Butanone (MEK)	ND		2500	330	ug/L			10/10/12 23:01	250
4-Methyl-2-pentanone (MIBK)	ND		1300	530	ug/L			10/10/12 23:01	250
Acetone	ND		2500	750	ug/L			10/10/12 23:01	250
Benzene	ND		250	100	ug/L			10/10/12 23:01	250
Bromodichloromethane	ND		250	98	ug/L			10/10/12 23:01	250
Bromoform	ND		250	65	ug/L			10/10/12 23:01	250
Bromomethane	ND		250	170	ug/L			10/10/12 23:01	250
Carbon disulfide	ND	J	250	48	ug/L			10/10/12 23:01	250
Carbon tetrachloride	ND		250	68	ug/L			10/10/12 23:01	250
Chlorobenzene	ND		250	190	ug/L			10/10/12 23:01	250
Dibromochloromethane	ND		250	80	ug/L			10/10/12 23:01	250
Chloroethane	ND		250	80	ug/L			10/10/12 23:01	250
Chloroform	ND		250	85	ug/L			10/10/12 23:01	250
Chloromethane	ND		250	88	ug/L			10/10/12 23:01	250
cis-1,2-Dichloroethene	**23000**		250	200	ug/L			10/10/12 23:01	250
cis-1,3-Dichloropropene	ND		250	90	ug/L			10/10/12 23:01	250
Cyclohexane	ND		250	45	ug/L			10/10/12 23:01	250
Dichlorodifluoromethane	ND	J	250	170	ug/L			10/10/12 23:01	250
Ethylbenzene	ND		250	190	ug/L			10/10/12 23:01	250
Isopropylbenzene	ND		250	200	ug/L			10/10/12 23:01	250
Methyl acetate	ND		250	130	ug/L			10/10/12 23:01	250
Methyl tert-butyl ether	ND		250	40	ug/L			10/10/12 23:01	250
Methylcyclohexane	ND		250	40	ug/L			10/10/12 23:01	250
Methylene Chloride	ND		250	110	ug/L			10/10/12 23:01	250
Styrene	ND		250	180	ug/L			10/10/12 23:01	250
Tetrachloroethene	ND		250	90	ug/L			10/10/12 23:01	250
Toluene	ND		250	130	ug/L			10/10/12 23:01	250
trans-1,2-Dichloroethene	ND		250	230	ug/L			10/10/12 23:01	250
trans-1,3-Dichloropropene	ND	J	250	93	ug/L			10/10/12 23:01	250
Trichloroethene	**1500**		250	120	ug/L			10/10/12 23:01	250
Trichlorofluoromethane	ND		250	220	ug/L			10/10/12 23:01	250
Vinyl chloride	**1300**		250	230	ug/L			10/10/12 23:01	250
Xylenes, Total	ND		500	170	ug/L			10/10/12 23:01	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*10/10/12 23:01*	*250*

Client Sample ID: A2-PZ-1

Lab Sample ID: 480-26196-4
Matrix: Water

Date Collected: 10/04/12 12:00
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*106*		*71 - 126*		*10/10/12 23:01*	*250*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*10/10/12 23:01*	*250*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**800**		200	11	ug/L			10/08/12 10:30	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			10/05/12 21:06	1
Sulfate	**75.9**	B	25.0	7.5	mg/L			10/12/12 15:09	5
Alkalinity, Total	**474**		5.0	0.79	mg/L			10/09/12 14:22	1
Alkalinity, Bicarbonate	**474**		5.0	0.79	mg/L			10/09/12 14:22	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:22	1
Total Organic Carbon	**6.9**		1.0	0.43	mg/L			10/08/12 23:20	1

Client Sample ID: A2-PZ-2

Lab Sample ID: 480-26196-5
Matrix: Water

Date Collected: 10/03/12 17:41
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			10/11/12 15:27	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			10/11/12 15:27	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			10/11/12 15:27	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			10/11/12 15:27	10
1,1-Dichloroethane	ND		10	3.8	ug/L			10/11/12 15:27	10
1,1-Dichloroethene	ND		10	2.9	ug/L			10/11/12 15:27	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			10/11/12 15:27	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			10/11/12 15:27	10
1,2-Dibromoethane	ND		10	7.3	ug/L			10/11/12 15:27	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			10/11/12 15:27	10
1,2-Dichloroethane	ND		10	2.1	ug/L			10/11/12 15:27	10
1,2-Dichloropropane	ND		10	7.2	ug/L			10/11/12 15:27	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			10/11/12 15:27	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			10/11/12 15:27	10
2-Hexanone	ND		50	12	ug/L			10/11/12 15:27	10
2-Butanone (MEK)	ND		100	13	ug/L			10/11/12 15:27	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			10/11/12 15:27	10
Acetone	ND		100	30	ug/L			10/11/12 15:27	10
Benzene	ND		10	4.1	ug/L			10/11/12 15:27	10
Bromodichloromethane	ND		10	3.9	ug/L			10/11/12 15:27	10
Bromoform	ND		10	2.6	ug/L			10/11/12 15:27	10
Bromomethane	ND		10	6.9	ug/L			10/11/12 15:27	10
Carbon disulfide	ND		10	1.9	ug/L			10/11/12 15:27	10
Carbon tetrachloride	ND		10	2.7	ug/L			10/11/12 15:27	10
Chlorobenzene	ND		10	7.5	ug/L			10/11/12 15:27	10
Dibromochloromethane	ND		10	3.2	ug/L			10/11/12 15:27	10
Chloroethane	ND		10	3.2	ug/L			10/11/12 15:27	10
Chloroform	ND		10	3.4	ug/L			10/11/12 15:27	10
Chloromethane	ND		10	3.5	ug/L			10/11/12 15:27	10

Client Sample ID: A2-PZ-2

Lab Sample ID: 480-26196-5

Date Collected: 10/03/12 17:41
Date Received: 10/05/12 09:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**120**		10	8.1	ug/L			10/11/12 15:27	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			10/11/12 15:27	10
Cyclohexane	ND		10	1.8	ug/L			10/11/12 15:27	10
Dichlorodifluoromethane	ND	J	10	6.8	ug/L			10/11/12 15:27	10
Ethylbenzene	ND		10	7.4	ug/L			10/11/12 15:27	10
Isopropylbenzene	ND		10	7.9	ug/L			10/11/12 15:27	10
Methyl acetate	ND		10	5.0	ug/L			10/11/12 15:27	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			10/11/12 15:27	10
Methylcyclohexane	ND		10	1.6	ug/L			10/11/12 15:27	10
Methylene Chloride	ND		10	4.4	ug/L			10/11/12 15:27	10
Styrene	ND		10	7.3	ug/L			10/11/12 15:27	10
Tetrachloroethene	**730**		10	3.6	ug/L			10/11/12 15:27	10
Toluene	ND		10	5.1	ug/L			10/11/12 15:27	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			10/11/12 15:27	10
trans-1,3-Dichloropropene	ND	J	10	3.7	ug/L			10/11/12 15:27	10
Trichloroethene	**330**		10	4.6	ug/L			10/11/12 15:27	10
Trichlorofluoromethane	ND		10	8.8	ug/L			10/11/12 15:27	10
Vinyl chloride	ND		10	9.0	ug/L			10/11/12 15:27	10
Xylenes, Total	ND		20	6.6	ug/L			10/11/12 15:27	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*10/11/12 15:27*	*10*
Toluene-d8 (Surr)	*102*		*71 - 126*		*10/11/12 15:27*	*10*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/11/12 15:27*	*10*

Client Sample ID: MW-1

Lab Sample ID: 480-26196-6

Date Collected: 10/04/12 16:15
Date Received: 10/05/12 09:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/12 23:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/12 23:44	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/12 23:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/12 23:44	1
1,1-Dichloroethane	**5.7**		1.0	0.38	ug/L			10/10/12 23:44	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/12 23:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/12 23:44	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/10/12 23:44	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/12 23:44	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/12 23:44	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/12 23:44	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/12 23:44	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/12 23:44	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/12 23:44	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/12 23:44	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/12 23:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/12 23:44	1
Acetone	ND		10	3.0	ug/L			10/10/12 23:44	1
Benzene	ND		1.0	0.41	ug/L			10/10/12 23:44	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/12 23:44	1

Client Sample ID: MW-1
Date Collected: 10/04/12 16:15
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.26	ug/L			10/10/12 23:44	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/12 23:44	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/10/12 23:44	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/12 23:44	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/12 23:44	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/12 23:44	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/12 23:44	1
Chloroform	ND		1.0	0.34	ug/L			10/10/12 23:44	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/12 23:44	1
cis-1,2-Dichloroethene	**44**		1.0	0.81	ug/L			10/10/12 23:44	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/12 23:44	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/12 23:44	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/10/12 23:44	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/12 23:44	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/12 23:44	1
Methyl acetate	ND		1.0	0.50	ug/L			10/10/12 23:44	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/12 23:44	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/12 23:44	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/12 23:44	1
Styrene	ND		1.0	0.73	ug/L			10/10/12 23:44	1
Tetrachloroethene	**99**		1.0	0.36	ug/L			10/10/12 23:44	1
Toluene	ND		1.0	0.51	ug/L			10/10/12 23:44	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/12 23:44	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/10/12 23:44	1
Trichloroethene	**25**		1.0	0.46	ug/L			10/10/12 23:44	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/12 23:44	1
Vinyl chloride	**3.9**		1.0	0.90	ug/L			10/10/12 23:44	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/12 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/10/12 23:44*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/10/12 23:44*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/10/12 23:44*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**57**		40	2.2	ug/L			10/08/12 10:58	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**2.0**		0.050	0.011	mg/L			10/05/12 21:44	1
Sulfate	**176**	B	50.0	15.0	mg/L			10/12/12 17:52	10
Alkalinity, Total	**376**		5.0	0.79	mg/L			10/09/12 14:28	1
Alkalinity, Bicarbonate	**376**		5.0	0.79	mg/L			10/09/12 14:28	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:28	1
Total Organic Carbon	**2.3**		1.0	0.43	mg/L			10/08/12 23:40	1

Client Sample ID: MW-2
Date Collected: 10/03/12 15:05
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 00:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 00:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 00:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 00:06	1
1,1-Dichloroethane	**4.9**		1.0	0.38	ug/L			10/11/12 00:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 00:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 00:06	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 00:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 00:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 00:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 00:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 00:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 00:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 00:06	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 00:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 00:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 00:06	1
Acetone	ND		10	3.0	ug/L			10/11/12 00:06	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 00:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 00:06	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 00:06	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 00:06	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 00:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 00:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 00:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 00:06	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 00:06	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 00:06	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 00:06	1
cis-1,2-Dichloroethene	**14**		1.0	0.81	ug/L			10/11/12 00:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 00:06	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 00:06	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 00:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 00:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 00:06	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 00:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 00:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 00:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 00:06	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 00:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 00:06	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 00:06	1
trans-1,2-Dichloroethene	**1.7**		1.0	0.90	ug/L			10/11/12 00:06	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 00:06	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 00:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 00:06	1
Vinyl chloride	**38**		1.0	0.90	ug/L			10/11/12 00:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*10/11/12 00:06*	*1*

Client Sample ID: MW-2
Date Collected: 10/03/12 15:05
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 00:06*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/11/12 00:06*	*1*

Client Sample ID: MW-3
Date Collected: 10/04/12 15:05
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 00:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 00:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 00:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 00:27	1
1,1-Dichloroethane	**5.4**		1.0	0.38	ug/L			10/11/12 00:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 00:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 00:27	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 00:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 00:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 00:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 00:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 00:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 00:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 00:27	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 00:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 00:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 00:27	1
Acetone	ND		10	3.0	ug/L			10/11/12 00:27	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 00:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 00:27	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 00:27	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 00:27	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 00:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 00:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 00:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 00:27	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 00:27	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 00:27	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 00:27	1
cis-1,2-Dichloroethene	**46**		1.0	0.81	ug/L			10/11/12 00:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 00:27	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 00:27	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 00:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 00:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 00:27	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 00:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 00:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 00:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 00:27	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 00:27	1
Tetrachloroethene	**8.4**		1.0	0.36	ug/L			10/11/12 00:27	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 00:27	1

Client Sample ID: MW-3

Lab Sample ID: 480-26196-8
Matrix: Water

Date Collected: 10/04/12 15:05
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**0.91**	J	1.0	0.90	ug/L			10/11/12 00:27	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 00:27	1
Trichloroethene	**12**		1.0	0.46	ug/L			10/11/12 00:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 00:27	1
Vinyl chloride	**9.1**		1.0	0.90	ug/L			10/11/12 00:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/11/12 00:27*	*1*
Toluene-d8 (Surr)	*102*		*71 - 126*		*10/11/12 00:27*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 00:27*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**18**		4.0	0.22	ug/L			10/08/12 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.26**		0.050	0.011	mg/L			10/05/12 21:45	1
Sulfate	**151**	B	50.0	15.0	mg/L			10/10/12 19:29	10
Alkalinity, Total	**395**		5.0	0.79	mg/L			10/09/12 14:36	1
Alkalinity, Bicarbonate	**395**		5.0	0.79	mg/L			10/09/12 14:36	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:36	1
Total Organic Carbon	**2.7**		1.0	0.43	mg/L			10/08/12 23:59	1

Client Sample ID: MW-4

Lab Sample ID: 480-26196-9
Matrix: Water

Date Collected: 10/03/12 13:55
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 00:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 00:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 00:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 00:49	1
1,1-Dichloroethane	**1.0**		1.0	0.38	ug/L			10/11/12 00:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 00:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 00:49	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 00:49	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 00:49	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 00:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 00:49	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 00:49	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 00:49	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 00:49	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 00:49	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 00:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 00:49	1
Acetone	ND		10	3.0	ug/L			10/11/12 00:49	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 00:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 00:49	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 00:49	1

Client Sample ID: MW-4

Lab Sample ID: 480-26196-9
Matrix: Water

Date Collected: 10/03/12 13:55
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 00:49	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 00:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 00:49	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 00:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 00:49	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 00:49	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 00:49	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 00:49	1
cis-1,2-Dichloroethene	**4.6**		1.0	0.81	ug/L			10/11/12 00:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 00:49	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 00:49	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 00:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 00:49	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 00:49	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 00:49	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 00:49	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 00:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 00:49	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 00:49	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 00:49	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 00:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 00:49	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 00:49	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 00:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 00:49	1
Vinyl chloride	**4.8**		1.0	0.90	ug/L			10/11/12 00:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/11/12 00:49*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/11/12 00:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/11/12 00:49*	*1*

Client Sample ID: MW-5

Lab Sample ID: 480-26196-10
Matrix: Water

Date Collected: 10/02/12 15:20
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 01:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 01:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 01:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 01:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 01:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 01:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 01:10	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 01:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 01:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 01:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 01:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 01:10	1

Client Sample ID: MW-5
Date Collected: 10/02/12 15:20
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 01:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 01:10	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 01:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 01:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 01:10	1
Acetone	ND		10	3.0	ug/L			10/11/12 01:10	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 01:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 01:10	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 01:10	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 01:10	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 01:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 01:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 01:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 01:10	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 01:10	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 01:10	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 01:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 01:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 01:10	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 01:10	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 01:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 01:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 01:10	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 01:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 01:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 01:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 01:10	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 01:10	1
Tetrachloroethene	**0.55**	**J**	1.0	0.36	ug/L			10/11/12 01:10	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 01:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 01:10	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 01:10	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 01:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 01:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 01:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 137*		*10/11/12 01:10*	*1*
Toluene-d8 (Surr)	*104*		*71 - 126*		*10/11/12 01:10*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/11/12 01:10*	*1*

Client Sample ID: MW-10
Date Collected: 10/04/12 13:30
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 01:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 01:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 01:32	1

Client Sample ID: MW-10
Date Collected: 10/04/12 13:30
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 01:32	1
1,1-Dichloroethane	**3.5**		1.0	0.38	ug/L			10/11/12 01:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 01:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 01:32	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 01:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 01:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 01:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 01:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 01:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 01:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 01:32	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 01:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 01:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 01:32	1
Acetone	ND		10	3.0	ug/L			10/11/12 01:32	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 01:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 01:32	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 01:32	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 01:32	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 01:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 01:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 01:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 01:32	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 01:32	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 01:32	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 01:32	1
cis-1,2-Dichloroethene	**45**		1.0	0.81	ug/L			10/11/12 01:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 01:32	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 01:32	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 01:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 01:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 01:32	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 01:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 01:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 01:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 01:32	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 01:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 01:32	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 01:32	1
trans-1,2-Dichloroethene	**3.2**		1.0	0.90	ug/L			10/11/12 01:32	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 01:32	1
Trichloroethene	**1.7**		1.0	0.46	ug/L			10/11/12 01:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 01:32	1
Vinyl chloride	**38**		1.0	0.90	ug/L			10/11/12 01:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 137*		*10/11/12 01:32*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/11/12 01:32*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 01:32*	*1*

Client Sample ID: MW-10

Lab Sample ID: 480-26196-11
Matrix: Water

Date Collected: 10/04/12 13:30
Date Received: 10/05/12 09:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**300**		80	4.4	ug/L			10/08/12 11:32	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.011	mg/L			10/05/12 21:09	1
Sulfate	**203**	**B**	50.0	15.0	mg/L			10/12/12 17:52	10
Alkalinity, Total	**234**		5.0	0.79	mg/L			10/09/12 14:53	1
Alkalinity, Bicarbonate	**234**		5.0	0.79	mg/L			10/09/12 14:53	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 14:53	1
Total Organic Carbon	**3.9**		1.0	0.43	mg/L			10/09/12 00:38	1

Client Sample ID: MW-18

Lab Sample ID: 480-26196-12
Matrix: Water

Date Collected: 10/03/12 16:00
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			10/12/12 00:05	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			10/12/12 00:05	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			10/12/12 00:05	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			10/12/12 00:05	5
1,1-Dichloroethane	**18**		5.0	1.9	ug/L			10/12/12 00:05	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			10/12/12 00:05	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			10/12/12 00:05	5
1,2-Dibromo-3-Chloropropane	ND	J	5.0	2.0	ug/L			10/12/12 00:05	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			10/12/12 00:05	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			10/12/12 00:05	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			10/12/12 00:05	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			10/12/12 00:05	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			10/12/12 00:05	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			10/12/12 00:05	5
2-Hexanone	ND		25	6.2	ug/L			10/12/12 00:05	5
2-Butanone (MEK)	ND		50	6.6	ug/L			10/12/12 00:05	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			10/12/12 00:05	5
Acetone	ND		50	15	ug/L			10/12/12 00:05	5
Benzene	ND		5.0	2.1	ug/L			10/12/12 00:05	5
Bromodichloromethane	ND		5.0	2.0	ug/L			10/12/12 00:05	5
Bromoform	ND	J	5.0	1.3	ug/L			10/12/12 00:05	5
Bromomethane	ND		5.0	3.5	ug/L			10/12/12 00:05	5
Carbon disulfide	ND	J	5.0	0.95	ug/L			10/12/12 00:05	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			10/12/12 00:05	5
Chlorobenzene	ND		5.0	3.8	ug/L			10/12/12 00:05	5
Dibromochloromethane	ND		5.0	1.6	ug/L			10/12/12 00:05	5
Chloroethane	ND		5.0	1.6	ug/L			10/12/12 00:05	5
Chloroform	ND		5.0	1.7	ug/L			10/12/12 00:05	5
Chloromethane	ND		5.0	1.8	ug/L			10/12/12 00:05	5
cis-1,2-Dichloroethene	**420**		5.0	4.1	ug/L			10/12/12 00:05	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			10/12/12 00:05	5
Cyclohexane	ND		5.0	0.90	ug/L			10/12/12 00:05	5
Dichlorodifluoromethane	ND	J	5.0	3.4	ug/L			10/12/12 00:05	5
Ethylbenzene	ND		5.0	3.7	ug/L			10/12/12 00:05	5

Client Sample ID: MW-18
Date Collected: 10/03/12 16:00
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		5.0	4.0	ug/L			10/12/12 00:05	5
Methyl acetate	ND		5.0	2.5	ug/L			10/12/12 00:05	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			10/12/12 00:05	5
Methylcyclohexane	ND		5.0	0.80	ug/L			10/12/12 00:05	5
Methylene Chloride	ND		5.0	2.2	ug/L			10/12/12 00:05	5
Styrene	ND		5.0	3.7	ug/L			10/12/12 00:05	5
Tetrachloroethene	**11**		5.0	1.8	ug/L			10/12/12 00:05	5
Toluene	ND		5.0	2.6	ug/L			10/12/12 00:05	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			10/12/12 00:05	5
trans-1,3-Dichloropropene	ND		5.0	1.9	ug/L			10/12/12 00:05	5
Trichloroethene	**80**		5.0	2.3	ug/L			10/12/12 00:05	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			10/12/12 00:05	5
Vinyl chloride	ND		5.0	4.5	ug/L			10/12/12 00:05	5
Xylenes, Total	ND		10	3.3	ug/L			10/12/12 00:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/12/12 00:05*	*5*
Toluene-d8 (Surr)	*107*		*71 - 126*		*10/12/12 00:05*	*5*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*10/12/12 00:05*	*5*

Client Sample ID: MW-20
Date Collected: 10/02/12 14:55
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/12/12 00:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/12/12 00:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/12/12 00:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/12/12 00:28	1
1,1-Dichloroethane	**0.41**	J	1.0	0.38	ug/L			10/12/12 00:28	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/12/12 00:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/12/12 00:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/12/12 00:28	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/12/12 00:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/12/12 00:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/12/12 00:28	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/12/12 00:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/12/12 00:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/12/12 00:28	1
2-Hexanone	ND		5.0	1.2	ug/L			10/12/12 00:28	1
2-Butanone (MEK)	**480**		10	1.3	ug/L			10/12/12 00:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/12/12 00:28	1
Acetone	**78**		10	3.0	ug/L			10/12/12 00:28	1
Benzene	ND		1.0	0.41	ug/L			10/12/12 00:28	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/12/12 00:28	1
Bromoform	ND		1.0	0.26	ug/L			10/12/12 00:28	1
Bromomethane	ND		1.0	0.69	ug/L			10/12/12 00:28	1
Carbon disulfide	**0.76**	J	1.0	0.19	ug/L			10/12/12 00:28	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/12/12 00:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/12/12 00:28	1

Client Sample ID: MW-20
Date Collected: 10/02/12 14:55
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		1.0	0.32	ug/L			10/12/12 00:28	1
Chloroethane	**4.3**		1.0	0.32	ug/L			10/12/12 00:28	1
Chloroform	ND		1.0	0.34	ug/L			10/12/12 00:28	1
Chloromethane	ND		1.0	0.35	ug/L			10/12/12 00:28	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.81	ug/L			10/12/12 00:28	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/12/12 00:28	1
Cyclohexane	ND		1.0	0.18	ug/L			10/12/12 00:28	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/12/12 00:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/12/12 00:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/12/12 00:28	1
Methyl acetate	ND		1.0	0.50	ug/L			10/12/12 00:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/12/12 00:28	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/12/12 00:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/12/12 00:28	1
Styrene	ND		1.0	0.73	ug/L			10/12/12 00:28	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/12/12 00:28	1
Toluene	ND		1.0	0.51	ug/L			10/12/12 00:28	1
trans-1,2-Dichloroethene	**7.1**		1.0	0.90	ug/L			10/12/12 00:28	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/12/12 00:28	1
Trichloroethene	ND		1.0	0.46	ug/L			10/12/12 00:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/12/12 00:28	1
Vinyl chloride	**1.9**		1.0	0.90	ug/L			10/12/12 00:28	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/12/12 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*66 - 137*		*10/12/12 00:28*	*1*
Toluene-d8 (Surr)	*108*		*71 - 126*		*10/12/12 00:28*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*10/12/12 00:28*	*1*

Client Sample ID: MW-21
Date Collected: 10/02/12 13:55
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 02:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 02:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 02:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 02:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 02:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 02:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 02:37	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 02:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 02:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 02:37	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 02:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 02:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 02:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 02:37	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 02:37	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 02:37	1

Client Sample ID: MW-21
Date Collected: 10/02/12 13:55
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 02:37	1
Acetone	ND		10	3.0	ug/L			10/11/12 02:37	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 02:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 02:37	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 02:37	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 02:37	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 02:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 02:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 02:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 02:37	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 02:37	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 02:37	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 02:37	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 02:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 02:37	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 02:37	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 02:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 02:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 02:37	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 02:37	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 02:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 02:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 02:37	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 02:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 02:37	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 02:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 02:37	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 02:37	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 02:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 02:37	1
Vinyl chloride	**13**		1.0	0.90	ug/L			10/11/12 02:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 02:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*10/11/12 02:37*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/11/12 02:37*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/11/12 02:37*	*1*

Client Sample ID: PZ-5
Date Collected: 10/02/12 17:48
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			10/11/12 02:59	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			10/11/12 02:59	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			10/11/12 02:59	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			10/11/12 02:59	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			10/11/12 02:59	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			10/11/12 02:59	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			10/11/12 02:59	4

Client Sample ID: PZ-5
Date Collected: 10/02/12 17:48
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	J	4.0	1.6	ug/L			10/11/12 02:59	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			10/11/12 02:59	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			10/11/12 02:59	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			10/11/12 02:59	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			10/11/12 02:59	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			10/11/12 02:59	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			10/11/12 02:59	4
2-Hexanone	ND		20	5.0	ug/L			10/11/12 02:59	4
2-Butanone (MEK)	ND		40	5.3	ug/L			10/11/12 02:59	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			10/11/12 02:59	4
Acetone	ND		40	12	ug/L			10/11/12 02:59	4
Benzene	ND		4.0	1.6	ug/L			10/11/12 02:59	4
Bromodichloromethane	ND		4.0	1.6	ug/L			10/11/12 02:59	4
Bromoform	ND		4.0	1.0	ug/L			10/11/12 02:59	4
Bromomethane	ND		4.0	2.8	ug/L			10/11/12 02:59	4
Carbon disulfide	ND	J	4.0	0.76	ug/L			10/11/12 02:59	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			10/11/12 02:59	4
Chlorobenzene	ND		4.0	3.0	ug/L			10/11/12 02:59	4
Dibromochloromethane	ND		4.0	1.3	ug/L			10/11/12 02:59	4
Chloroethane	ND		4.0	1.3	ug/L			10/11/12 02:59	4
Chloroform	ND		4.0	1.4	ug/L			10/11/12 02:59	4
Chloromethane	ND		4.0	1.4	ug/L			10/11/12 02:59	4
cis-1,2-Dichloroethene	**160**		4.0	3.2	ug/L			10/11/12 02:59	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			10/11/12 02:59	4
Cyclohexane	ND		4.0	0.72	ug/L			10/11/12 02:59	4
Dichlorodifluoromethane	ND	J	4.0	2.7	ug/L			10/11/12 02:59	4
Ethylbenzene	**3.8**	J	4.0	3.0	ug/L			10/11/12 02:59	4
Isopropylbenzene	ND		4.0	3.2	ug/L			10/11/12 02:59	4
Methyl acetate	ND		4.0	2.0	ug/L			10/11/12 02:59	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			10/11/12 02:59	4
Methylcyclohexane	ND		4.0	0.64	ug/L			10/11/12 02:59	4
Methylene Chloride	ND		4.0	1.8	ug/L			10/11/12 02:59	4
Styrene	ND		4.0	2.9	ug/L			10/11/12 02:59	4
Tetrachloroethene	**7.2**		4.0	1.4	ug/L			10/11/12 02:59	4
Toluene	ND		4.0	2.0	ug/L			10/11/12 02:59	4
trans-1,2-Dichloroethene	ND	J	4.0	3.6	ug/L			10/11/12 02:59	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			10/11/12 02:59	4
Trichloroethene	**3.9**	J	4.0	1.8	ug/L			10/11/12 02:59	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			10/11/12 02:59	4
Vinyl chloride	**27**		4.0	3.6	ug/L			10/11/12 02:59	4
Xylenes, Total	**14**		8.0	2.6	ug/L			10/11/12 02:59	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/11/12 02:59*	*4*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 02:59*	*4*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/11/12 02:59*	*4*

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-6
Date Collected: 10/02/12 17:30
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 03:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 03:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 03:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 03:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 03:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 03:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 03:20	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 03:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 03:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 03:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 03:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 03:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 03:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 03:20	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 03:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 03:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 03:20	1
Acetone	ND		10	3.0	ug/L			10/11/12 03:20	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 03:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 03:20	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 03:20	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 03:20	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 03:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 03:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 03:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 03:20	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 03:20	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 03:20	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 03:20	1
cis-1,2-Dichloroethene	**21**		1.0	0.81	ug/L			10/11/12 03:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 03:20	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 03:20	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 03:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 03:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 03:20	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 03:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 03:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 03:20	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 03:20	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 03:20	1
Tetrachloroethene	**7.2**		1.0	0.36	ug/L			10/11/12 03:20	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 03:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 03:20	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 03:20	1
Trichloroethene	**20**		1.0	0.46	ug/L			10/11/12 03:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 03:20	1
Vinyl chloride	**2.1**		1.0	0.90	ug/L			10/11/12 03:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 137*		*10/11/12 03:20*	*1*

Client Sample ID: PZ-6 — **Lab Sample ID: 480-26196-16**
Date Collected: 10/02/12 17:30 — **Matrix: Water**
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		71 - 126		10/11/12 03:20	1
4-Bromofluorobenzene (Surr)	93		73 - 120		10/11/12 03:20	1

Client Sample ID: PZ-7 — **Lab Sample ID: 480-26196-17**
Date Collected: 10/02/12 19:05 — **Matrix: Water**
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 03:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 03:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 03:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 03:42	1
1,1-Dichloroethane	**0.58**	**J**	1.0	0.38	ug/L			10/11/12 03:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 03:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 03:42	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 03:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 03:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 03:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 03:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 03:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 03:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 03:42	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 03:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 03:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 03:42	1
Acetone	ND		10	3.0	ug/L			10/11/12 03:42	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 03:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 03:42	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 03:42	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 03:42	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 03:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 03:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 03:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 03:42	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 03:42	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 03:42	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 03:42	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 03:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 03:42	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 03:42	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 03:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 03:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 03:42	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 03:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 03:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 03:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 03:42	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 03:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 03:42	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 03:42	1

Client Sample ID: PZ-7 — **Lab Sample ID: 480-26196-17**
Date Collected: 10/02/12 19:05 — **Matrix: Water**
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 03:42	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 03:42	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 03:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 03:42	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 03:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 137*		*10/11/12 03:42*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 03:42*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*10/11/12 03:42*	*1*

Client Sample ID: PZ-8 — **Lab Sample ID: 480-26196-18**
Date Collected: 10/03/12 12:45 — **Matrix: Water**
Date Received: 10/05/12 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	4.1	ug/L			10/11/12 04:03	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.1	ug/L			10/11/12 04:03	5
1,1,2-Trichloroethane	ND		5.0	1.2	ug/L			10/11/12 04:03	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.6	ug/L			10/11/12 04:03	5
1,1-Dichloroethane	**4.2**	J	5.0	1.9	ug/L			10/11/12 04:03	5
1,1-Dichloroethene	ND		5.0	1.5	ug/L			10/11/12 04:03	5
1,2,4-Trichlorobenzene	ND		5.0	2.1	ug/L			10/11/12 04:03	5
1,2-Dibromo-3-Chloropropane	ND	J	5.0	2.0	ug/L			10/11/12 04:03	5
1,2-Dibromoethane	ND		5.0	3.7	ug/L			10/11/12 04:03	5
1,2-Dichlorobenzene	ND		5.0	4.0	ug/L			10/11/12 04:03	5
1,2-Dichloroethane	ND		5.0	1.1	ug/L			10/11/12 04:03	5
1,2-Dichloropropane	ND		5.0	3.6	ug/L			10/11/12 04:03	5
1,3-Dichlorobenzene	ND		5.0	3.9	ug/L			10/11/12 04:03	5
1,4-Dichlorobenzene	ND		5.0	4.2	ug/L			10/11/12 04:03	5
2-Hexanone	ND		25	6.2	ug/L			10/11/12 04:03	5
2-Butanone (MEK)	ND		50	6.6	ug/L			10/11/12 04:03	5
4-Methyl-2-pentanone (MIBK)	ND		25	11	ug/L			10/11/12 04:03	5
Acetone	ND		50	15	ug/L			10/11/12 04:03	5
Benzene	ND		5.0	2.1	ug/L			10/11/12 04:03	5
Bromodichloromethane	ND		5.0	2.0	ug/L			10/11/12 04:03	5
Bromoform	ND		5.0	1.3	ug/L			10/11/12 04:03	5
Bromomethane	ND		5.0	3.5	ug/L			10/11/12 04:03	5
Carbon disulfide	ND	J	5.0	0.95	ug/L			10/11/12 04:03	5
Carbon tetrachloride	ND		5.0	1.4	ug/L			10/11/12 04:03	5
Chlorobenzene	ND		5.0	3.8	ug/L			10/11/12 04:03	5
Dibromochloromethane	ND		5.0	1.6	ug/L			10/11/12 04:03	5
Chloroethane	ND		5.0	1.6	ug/L			10/11/12 04:03	5
Chloroform	ND		5.0	1.7	ug/L			10/11/12 04:03	5
Chloromethane	ND		5.0	1.8	ug/L			10/11/12 04:03	5
cis-1,2-Dichloroethene	**56**		5.0	4.1	ug/L			10/11/12 04:03	5
cis-1,3-Dichloropropene	ND		5.0	1.8	ug/L			10/11/12 04:03	5
Cyclohexane	ND		5.0	0.90	ug/L			10/11/12 04:03	5
Dichlorodifluoromethane	ND	J	5.0	3.4	ug/L			10/11/12 04:03	5

Client Sample ID: PZ-8
Date Collected: 10/03/12 12:45
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		5.0	3.7	ug/L			10/11/12 04:03	5
Isopropylbenzene	ND		5.0	4.0	ug/L			10/11/12 04:03	5
Methyl acetate	ND		5.0	2.5	ug/L			10/11/12 04:03	5
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			10/11/12 04:03	5
Methylcyclohexane	ND		5.0	0.80	ug/L			10/11/12 04:03	5
Methylene Chloride	ND		5.0	2.2	ug/L			10/11/12 04:03	5
Styrene	ND		5.0	3.7	ug/L			10/11/12 04:03	5
Tetrachloroethene	**380**		5.0	1.8	ug/L			10/11/12 04:03	5
Toluene	ND		5.0	2.6	ug/L			10/11/12 04:03	5
trans-1,2-Dichloroethene	ND		5.0	4.5	ug/L			10/11/12 04:03	5
trans-1,3-Dichloropropene	ND	J	5.0	1.9	ug/L			10/11/12 04:03	5
Trichloroethene	**320**		5.0	2.3	ug/L			10/11/12 04:03	5
Trichlorofluoromethane	ND		5.0	4.4	ug/L			10/11/12 04:03	5
Vinyl chloride	ND		5.0	4.5	ug/L			10/11/12 04:03	5
Xylenes, Total	ND		10	3.3	ug/L			10/11/12 04:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*10/11/12 04:03*	*5*
Toluene-d8 (Surr)	*101*		*71 - 126*		*10/11/12 04:03*	*5*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 04:03*	*5*

Client Sample ID: PZ-11R
Date Collected: 10/02/12 15:40
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 04:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 04:25	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 04:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 04:25	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 04:25	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 04:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 04:25	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 04:25	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 04:25	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 04:25	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 04:25	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 04:25	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 04:25	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 04:25	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 04:25	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 04:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 04:25	1
Acetone	ND		10	3.0	ug/L			10/11/12 04:25	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 04:25	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 04:25	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 04:25	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 04:25	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 04:25	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 04:25	1

Client Sample ID: PZ-11R
Date Collected: 10/02/12 15:40
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 04:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 04:25	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 04:25	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 04:25	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 04:25	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.81	ug/L			10/11/12 04:25	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 04:25	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 04:25	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 04:25	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 04:25	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 04:25	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 04:25	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 04:25	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 04:25	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 04:25	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 04:25	1
Tetrachloroethene	**2.8**		1.0	0.36	ug/L			10/11/12 04:25	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 04:25	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 04:25	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 04:25	1
Trichloroethene	**6.0**		1.0	0.46	ug/L			10/11/12 04:25	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 04:25	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 04:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 137*		*10/11/12 04:25*	*1*
Toluene-d8 (Surr)	*103*		*71 - 126*		*10/11/12 04:25*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 04:25*	*1*

Client Sample ID: PZ-13R
Date Collected: 10/02/12 16:05
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 04:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 04:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 04:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 04:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 04:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 04:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 04:47	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/11/12 04:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 04:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 04:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 04:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 04:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 04:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 04:47	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 04:47	1

Client Sample ID: PZ-13R
Date Collected: 10/02/12 16:05
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 04:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 04:47	1
Acetone	ND		10	3.0	ug/L			10/11/12 04:47	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 04:47	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 04:47	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 04:47	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 04:47	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/11/12 04:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 04:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 04:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 04:47	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 04:47	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 04:47	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 04:47	1
cis-1,2-Dichloroethene	**1.9**		1.0	0.81	ug/L			10/11/12 04:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 04:47	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 04:47	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/11/12 04:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 04:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 04:47	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 04:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 04:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 04:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 04:47	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 04:47	1
Tetrachloroethene	**0.59**	J	1.0	0.36	ug/L			10/11/12 04:47	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 04:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 04:47	1
trans-1,3-Dichloropropene	ND	J	1.0	0.37	ug/L			10/11/12 04:47	1
Trichloroethene	**3.5**		1.0	0.46	ug/L			10/11/12 04:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 04:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 04:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 137*		*10/11/12 04:47*	*1*
Toluene-d8 (Surr)	*104*		*71 - 126*		*10/11/12 04:47*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*10/11/12 04:47*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**6.6**		4.0	0.22	ug/L			10/08/12 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND	H	0.050	0.011	mg/L			10/05/12 21:11	1
Sulfate	**67.6**	B	25.0	7.5	mg/L			10/10/12 19:32	5
Alkalinity, Total	**495**		5.0	0.79	mg/L			10/09/12 15:07	1
Alkalinity, Bicarbonate	**495**		5.0	0.79	mg/L			10/09/12 15:07	1
Alkalinity, Carbonate	ND		5.0	0.79	mg/L			10/09/12 15:07	1
Total Organic Carbon	ND		1.0	0.43	mg/L			10/09/12 17:53	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: PZ-18
Date Collected: 10/03/12 11:45
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 03:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 03:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 03:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 03:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 03:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 03:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 03:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 03:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 03:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 03:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 03:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 03:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 03:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 03:52	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 03:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 03:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 03:52	1
Acetone	ND		10	3.0	ug/L			10/11/12 03:52	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 03:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 03:52	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 03:52	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 03:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 03:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 03:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 03:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 03:52	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 03:52	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 03:52	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 03:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 03:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 03:52	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 03:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 03:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 03:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 03:52	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 03:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 03:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 03:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 03:52	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 03:52	1
Tetrachloroethene	**0.41**	**J**	1.0	0.36	ug/L			10/11/12 03:52	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 03:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 03:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 03:52	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 03:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 03:52	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 03:52	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 03:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/11/12 03:52*	*1*

Client Sample ID: PZ-18
Date Collected: 10/03/12 11:45
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*110*		*71 - 126*		*10/11/12 03:52*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*10/11/12 03:52*	*1*

Client Sample ID: PZ-26
Date Collected: 10/03/12 16:50
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/12 04:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/12 04:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/12 04:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/12 04:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/12 04:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/12 04:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/12 04:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/12 04:16	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/12 04:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/12 04:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/12 04:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/12 04:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/12 04:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/12 04:16	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/12 04:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/12 04:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/12 04:16	1
Acetone	ND		10	3.0	ug/L			10/11/12 04:16	1
Benzene	ND		1.0	0.41	ug/L			10/11/12 04:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/12 04:16	1
Bromoform	ND		1.0	0.26	ug/L			10/11/12 04:16	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/12 04:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/12 04:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/12 04:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/12 04:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/12 04:16	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/12 04:16	1
Chloroform	ND		1.0	0.34	ug/L			10/11/12 04:16	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/12 04:16	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/12 04:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/12 04:16	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/12 04:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/12 04:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/12 04:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/12 04:16	1
Methyl acetate	ND		1.0	0.50	ug/L			10/11/12 04:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/12 04:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/12 04:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/12 04:16	1
Styrene	ND		1.0	0.73	ug/L			10/11/12 04:16	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/12 04:16	1
Toluene	ND		1.0	0.51	ug/L			10/11/12 04:16	1

Client Sample ID: PZ-26
Date Collected: 10/03/12 16:50
Date Received: 10/05/12 09:00

Lab Sample ID: 480-26196-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/12 04:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/12 04:16	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/12 04:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/12 04:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/12 04:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/12 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*66 - 137*		*10/11/12 04:16*	*1*
Toluene-d8 (Surr)	*105*		*71 - 126*		*10/11/12 04:16*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*10/11/12 04:16*	*1*

Client Sample ID: MW-14BR
Date Collected: 10/05/12 16:05
Date Received: 10/06/12 10:25

Lab Sample ID: 480-26289-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/12/12 03:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/12/12 03:04	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/12/12 03:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/12/12 03:04	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/12/12 03:04	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/12/12 03:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/12/12 03:04	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/12/12 03:04	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/12/12 03:04	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/12/12 03:04	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/12/12 03:04	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/12/12 03:04	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/12/12 03:04	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/12/12 03:04	1
2-Hexanone	ND		5.0	1.2	ug/L			10/12/12 03:04	1
2-Butanone (MEK)	**2.7**	J	10	1.3	ug/L			10/12/12 03:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/12/12 03:04	1
Acetone	**16**		10	3.0	ug/L			10/12/12 03:04	1
Benzene	ND		1.0	0.41	ug/L			10/12/12 03:04	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/12/12 03:04	1
Bromoform	ND	J	1.0	0.26	ug/L			10/12/12 03:04	1
Bromomethane	ND		1.0	0.69	ug/L			10/12/12 03:04	1
Carbon disulfide	**0.20**	J	1.0	0.19	ug/L			10/12/12 03:04	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/12/12 03:04	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/12/12 03:04	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/12/12 03:04	1
Chloroethane	ND		1.0	0.32	ug/L			10/12/12 03:04	1
Chloroform	ND		1.0	0.34	ug/L			10/12/12 03:04	1
Chloromethane	ND		1.0	0.35	ug/L			10/12/12 03:04	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/12/12 03:04	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/12/12 03:04	1
Cyclohexane	ND		1.0	0.18	ug/L			10/12/12 03:04	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/12/12 03:04	1

Client Sample ID: MW-14BR
Date Collected: 10/05/12 16:05
Date Received: 10/06/12 10:25

Lab Sample ID: 480-26289-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L			10/12/12 03:04	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/12/12 03:04	1
Methyl acetate	ND		1.0	0.50	ug/L			10/12/12 03:04	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/12/12 03:04	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/12/12 03:04	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/12/12 03:04	1
Styrene	ND		1.0	0.73	ug/L			10/12/12 03:04	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/12/12 03:04	1
Toluene	ND		1.0	0.51	ug/L			10/12/12 03:04	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/12/12 03:04	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/12/12 03:04	1
Trichloroethene	ND		1.0	0.46	ug/L			10/12/12 03:04	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/12/12 03:04	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/12/12 03:04	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/12/12 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*66 - 137*		*10/12/12 03:04*	*1*
Toluene-d8 (Surr)	*109*		*71 - 126*		*10/12/12 03:04*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/12/12 03:04*	*1*

Client Sample ID: TB-100512
Date Collected: 10/05/12 00:00
Date Received: 10/06/12 10:25

Lab Sample ID: 480-26289-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/12/12 03:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/12/12 03:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/12/12 03:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/12/12 03:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/12/12 03:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/12/12 03:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/12/12 03:26	1
1,2-Dibromo-3-Chloropropane	ND	J	1.0	0.39	ug/L			10/12/12 03:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/12/12 03:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/12/12 03:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/12/12 03:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/12/12 03:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/12/12 03:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/12/12 03:26	1
2-Hexanone	ND		5.0	1.2	ug/L			10/12/12 03:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/12/12 03:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/12/12 03:26	1
Acetone	ND		10	3.0	ug/L			10/12/12 03:26	1
Benzene	ND		1.0	0.41	ug/L			10/12/12 03:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/12/12 03:26	1
Bromoform	ND	J	1.0	0.26	ug/L			10/12/12 03:26	1
Bromomethane	ND		1.0	0.69	ug/L			10/12/12 03:26	1
Carbon disulfide	ND	J	1.0	0.19	ug/L			10/12/12 03:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/12/12 03:26	1

Client: ARCADIS U.S. Inc
Project/Site: Lockheed Martin Corporation

TestAmerica Job ID: 480-26196-1

Client Sample ID: TB-100512
Date Collected: 10/05/12 00:00
Date Received: 10/06/12 10:25

Lab Sample ID: 480-26289-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			10/12/12 03:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/12/12 03:26	1
Chloroethane	ND		1.0	0.32	ug/L			10/12/12 03:26	1
Chloroform	ND		1.0	0.34	ug/L			10/12/12 03:26	1
Chloromethane	ND		1.0	0.35	ug/L			10/12/12 03:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/12/12 03:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/12/12 03:26	1
Cyclohexane	ND		1.0	0.18	ug/L			10/12/12 03:26	1
Dichlorodifluoromethane	ND	J	1.0	0.68	ug/L			10/12/12 03:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/12/12 03:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/12/12 03:26	1
Methyl acetate	ND		1.0	0.50	ug/L			10/12/12 03:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/12/12 03:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/12/12 03:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/12/12 03:26	1
Styrene	ND		1.0	0.73	ug/L			10/12/12 03:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/12/12 03:26	1
Toluene	ND		1.0	0.51	ug/L			10/12/12 03:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/12/12 03:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/12/12 03:26	1
Trichloroethene	ND		1.0	0.46	ug/L			10/12/12 03:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/12/12 03:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/12/12 03:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/12/12 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*66 - 137*		*10/12/12 03:26*	*1*
Toluene-d8 (Surr)	*106*		*71 - 126*		*10/12/12 03:26*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*10/12/12 03:26*	*1*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-28048-4020.1
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 1 of 3
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): 2 wk			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: ~~NJ001010.0001~~ NJ001040.1.103			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8260B - TCL list OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, 353.2_Nitrate_Calc	SM5310D - Total Organic Carbon	D516 Sulfate	Special Instructions/Note:
TB-100412	10/4/12	NA	G	Water	2						
DUP-100412	10/4/12	NA	G	Water	3	2	1	1	2	1	
A1-PZ-2	10/4/12	1100	G	Water	3	2	1	1	2	1	
A2-PZ-1	10/4/12	1200	G	Water	3	2	1	1	2	1	
A2-PZ-2	10/3/12	1741	G	Water	3						
MW-1	10/4/12	1615	G	Water	3	2	1	1	2	1	
MW-2	10/3/12	1505	G	Water	3						
MW-3	10/4/12	1505	G	Water	3	2	1	1	2	1	
MW-4	10/3/12	1355	G	Water	3						
MW-5	10/2/12	1520	G	Water	3						
MW-10	10/4/12	1330	G	Water	3	2	1	1	2	1	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Report Results to J. Bousted.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 10/4/12 1745	Company: Arcadis	Received by: [signature]	Date/Time: 10/5/12 0900	Company: TAB Affiliate
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.4 #2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-28048-4020.2
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 2 of 3
Company: ARCADIS U.S., Inc.		Analysis Requested		Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify), Other:
City: Syracuse	TAT Requested (days): 2 week			
State, Zip: NY, 13214-0066	PO #: ~~NJ0010160.0004~~ NJ001040.1.103			
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	WO #:			
Email: dan.zuck@arcadis-us.com	Project #: 48002828			
Project Name: Lockheed Martin Corporation	SSOW#:			
Site: New York				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	82609 - TCL list OLM04.3	RSK_175 - RSK 175 Methane	22309 - Alkalinity	353.2, 353.3_Nitrite, 9056, Nitrate_Calc	SM5310D - Total Organic Carbon	Sulfide (9376)	Special Instructions/Note:
MW-18	10/3/12	1600	G	Water	3						
MW-20	10/2/12	1455	G	Water	3						
MW-21	10/2/12	1355	G	Water	3						
PZ-5	10/2/12	1748	G	Water	3						
PZ-6	10/2/12	1730	G	Water	3						
PZ-7	10/2/12	1905	G	Water	3						
PZ-8	10/2 | 10/3	1730 | 1295	G	Water	3						
PZ-11R	10/2/12	1540	G	Water	3						
PZ-13R	10/2 | 10/4	1605, 1120, 1040	G	Water	3	2	1	1	2	1	Collected Nitrate/Nitrite on 10/4/12 @ 1040
PZ-16	10/3/12	1145	G	Water	3						
PZ-26	10/3/12	1650	G	Water	3						

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For ___ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements: Email Results to J. Basked

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 10/4/12 1745	Company: Arcadis	Received by:	Date/Time: 10/5/12 0900	Company: TAL Stls		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: ▲ Yes ▲ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.4 #2

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Zuck	Lab PM: Fox, Candace	Carrier Tracking No(s):	COC No: 480-28048-4020.3
Client Contact: Mr. Dan Zuck	Phone: 516-369-2741	E-Mail: candace.fox@testamericainc.com		Page: Page 1 of 1
Company: ARCADIS U.S., Inc.				Job #:
Address: 6723 Towpath PO BOX 66	Due Date Requested:			
City: Syracuse	TAT Requested (days): Zwk			
State, Zip: NY, 13214-0066				
Phone: 518-452-7826(Tel) 518-452-4398(Fax)	PO #: ~~NJ001016.0000~~ NJ001040.1.103			
Email: dan.zuck@arcadis-us.com	WO #:			
Project Name: Lockheed Martin Corporation	Project #: 48002828			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8260B - TCL Est OLM04.2	RSK_175 - RSK 175 Methane	2320B - Alkalinity	353.2, 353.2_Nitrite, D516, Nitrate_Calc	SM5310D - Total Organic Carbon	Special Instructions/Note:
MW-14BR	10/5/12	1605	G	Water	3					
TB-100512	10/5/12	—	G	Water	2					
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ___ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Report Results to J. Bousted

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/5/12 1700	Arcadis	[signature]	10/6/12 1025	[illegible]
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.4°C #3

10/19/2012