PRE-DESIGN INVESTIGATION REPORT

FINAL

DEFENSE NATIONAL STOCKPILE CENTER SCOTIA DEPOT SITE
GLENVILLE, NEW YORK

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LIST OF ACRONYMS

AHA	Activity Hazard Analyses
AMC	Army Material Command
ARARs	Applicable or relevant and appropriate requirements
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
COC	contaminants of concern
CONDEC	Consolidated Diesel Electric Company
CSM	conceptual site model
CSS	Contract Compliance Screening
CVOCs	chlorinated volatile organic compounds
DCE	dichloroethene
DLA/DNSC	Defense Logistics Agency/Defense National Stockpile Center
DoD	Department of Defense
DO	dissolved oxygen
DQOs	data quality objectives
EDD	electronic data deliverable
EDMS	Environmental Data Management System
ELAP	Environmental Laboratory Accreditation Program
ESI	Expanded Site Investigation
fbgs	feet below ground surface
FOL	field operations leader
FS	Feasibility Study
FSP	Field Sampling Plan
ft	feet/foot
GSA	US General Services Agency
HSP	Health and Safety Plan
IDW	investigation-derived waste
IRM	interim remedial measure
LCS	Laboratory Control Samples
MCL	maximum contaminant level
MDL	Method Detection Limit
MS/MSD	matrix spikes/matrix spike duplicates
NAE	New England District
NAN	New York District
NAPL	non-aqueous phase liquid
NAVD	North American Vertical Datum
NCR	non-conformance report
NELAP	National Environmental Laboratory Accreditation Program
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORP	Oxidation-reduction potential
PBC	performance-based contract
PCE	tetrachloroethene
PCOCs	potential contaminants of concern

PRB	permeable reactive barrier
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
QAO	quality assurance officer
RI	Remedial Investigation
RL	reporting limit
SCDA	Schenectady County Development Agency
SEDD	staged electronic data deliverable
Site	Former Defense National Stockpile Center Scotia Depot
SOP	Standard Operating Procedure
SOW	Scope of Work
Stone	Stone Environmental, Inc.
SVI	soil vapor intrusion
TAL	Target Analyte List
TCA	trichloroethane
TCE	trichloroethene
TCL	Target Compound List
TIC	tentatively identified compound
µg/Kg	micrograms per Kilogram
USACE	United States Army Corps of Engineers
USEPA	US Environmental Protection Agency
VOC	volatile organic compound
XML	extensible markup language
ZVI	zero-valent iron

1. PROJECT OVERVIEW

This Pre-Design Investigation Report (Report) has been prepared by Stone Environmental, Inc. (Stone) to document pre-design activities at and near the former Defense National Stockpile Center Scotia Depot Site (the "Site") in Glenville, New York (Figure 1). Stone Environmental completed this work under a performance-based contract with the United States Army Corps of Engineers (USACE), New England District (NAE), completed under an Interagency Agreement with the General Services Administration (GSA) as part of the New York State Department of Environmental Conservation (NYSDEC) State Superfund Program. The ultimate goal of the USACE for this Task Order is to collect sufficient data to support the design and cost estimate for the remedy prescribed in the March 2010 Record of Decision (ROD) for the project.

2. TASK SCOPE AND OBJECTIVES

2.1. Objectives of the Pre-Design Investigation / Treatability Study Field Program

The objectives of the pre-design investigation field program are to:

1. Perform Remedial Design (RD) pre-design investigations to verify the nature and extent of contamination described in the *Expanded Site Investigation Report* (NYSDEC/GeoLogic, 2007) and the *Feasibility Study (FS) Report* (Malcolm Pirnie, 2010), including:
    a. Additional investigation to verify and further define the horizontal and vertical extent of the TCE plume; and
    b. Focused investigations to verify the location and dimensions of the selected remedy.
2. Collect the data necessary to support the design of the selected remedy in the ROD (NYSDEC, 2010). The remedy stipulated in the ROD is installation of a zero-valent iron (ZVI) permeable reactive barrier (PRB) that will mitigate off-site migration of the chlorinated ethane plume.

2.2. Pre-Design Investigation / Treatability Study Field Task Development

The tasks described in the Project Plan are designed to eliminate the identified data gaps and collect the data necessary to support the design of the selected remedy for the project. The list of field tasks has been developed in an iterative fashion, with input and approval from GSA, USACE, and Stone, through the following steps:

1. Initial SOW tasks were included in the *SOW*, dated 4 October 2010;
2. Subsequent discussions between USACE and Stone resulted in revisions to the *SOW*, dated 30 October 2012, 30 November 2012, and 7 and 13 December 2012;
3. Changes to the *SOW* under Modification 03 that requested pre-design and cost estimates for two alternative PRB configurations, dated 19 July 2013.

2.3. Pre-Design Investigation / Treatability Study Field Task Summary

Using the above process, the pre-design investigation / treatability study field tasks were developed to address the data gaps identified in the *SOW*. Table 1 summarizes the six pre-design investigation and one treatability study field tasks, objectives, additional purposes, and methods. Section 2 of the Field Sampling Plan (FSP) provides detailed descriptions of the field task methodologies. Data quality objectives (DQOs), which further detail the objectives for each field task, are described in Subsection 6.1 of the Project Plan, as well as in QAPP Worksheet #16.

Table 1: Field Tasks and Methods

Field Task	Objectives	Additional Purpose(s)	Data Collection Task and Methods
Collection and analysis of groundwater samples from the Site and vicinity	Obtain current CVOC concentrations in groundwater.	Provide additional groundwater quality data for siting vertical profiling locations.	Tasks: Monitoring well sampling and analyses. Methods: Low-flow groundwater sampling, water level measurement, sample location, sample analysis, investigation-derived waste (IDW) characterization and disposal.
Synoptic measurement of groundwater elevations	Obtain synoptic groundwater elevation data.	Provide additional understanding of groundwater flow.	Tasks: Water level measurements. Methods: Water level measurement, sample location.
Vertical groundwater profiling of the dissolved groundwater plume	Determine vertical and horizontal extent of the dissolved plume. Determine current groundwater contaminant concentrations.	Determine aquifer stratigraphy and physical and chemical properties.	Tasks: Vertical groundwater profiling. Methods: Utility clearance, vertical groundwater profiling, sample location, sample analysis, IDW characterization and disposal.
Collection and analysis of geotechnical soil samples	Provide aquifer geotechnical data.	Provide aquifer characteristics for remedy design.	Tasks: Subsurface soil sampling and analyses. Methods: Utility clearance, soil boring / soil sampling, sample location, sample analysis, IDW characterization and disposal.
Installation and development of overburden groundwater monitoring wells	Obtain current CVOC concentrations in groundwater from locations currently lacking groundwater monitoring wells.	Provide additional long-term groundwater monitoring locations. Determine aquifer stratigraphy.	Tasks: Monitoring well installation, sampling, and analyses. Methods: Utility clearance, soil boring / monitoring well installation, monitoring well development, low-flow groundwater sampling, sample location, sample analysis, IDW characterization and disposal.
Hydraulic conductivity testing of monitoring wells	Obtain aquifer hydraulic data to support remedy design.	Provide additional understanding of contaminant transport pathways. Provide plume treatability data.	Tasks: Hydraulic conductivity testing of monitoring wells. Methods: Hydraulic conductivity testing.
Treatability testing (bench-scale column tests) of soil and groundwater	Obtain remedy design parameters.	Investigate possible soil factors that might inhibit the success of the ROD-selected remedy (Zero Valent Iron Permeable Reactive Barrier.)	Tasks: Collection and bench-scale column tests of soil and groundwater samples. Methods: Utility clearance, soil boring / soil sampling, low-flow groundwater sampling, sample location, sample analysis, IDW characterization and disposal.

2.4. Background Information

The following section provides an overview of the background and setting for the project, based on Stone's review of available background documents.

2.4.1. Property Identification

The Scotia Naval Depot is adjacent to the north side of New York State (NYS) Route 5 in the Town of Glenville, Schenectady County, New York (see Figure 1). The Site and adjacent properties are zoned for commercial use. The Mohawk River is located approximately 1,500 feet west-southwest of the Scotia Naval Depot and represents the major drainage feature in Schenectady County. The Site overlies an USEPA designated Sole Source Aquifer referred to as the Schenectady or Great Flats Aquifer system. Relative to a series of four aquifer protection zones established to protect municipal water supplies relying on the aquifer system, the Site lies in Zone III, or the General Aquifer Recharge Area.

Portions of the original Scotia Naval Depot have been subdivided and sold since 1972 by the United States Government. The Site now consists of several large, privately held parcels in addition to a portion of land still administered by the GSA. The private parcels contain a variety of industrial tenants; while the GSA leases its remaining portion to the Defense Logistics Agency/Defense National Stockpile Center (DLA/DNSC) and the Navy. The disposition of land at the original Scotia Naval Depot is as follows:

- In 1972, approximately 77 acres were transferred to Schenectady Industrial Development; now known as Scotia Industrial Park, Inc. (a.k.a., Galesi Corporation);
- In June 1985, approximately 126 acres were sold to Schenectady County Development Agency (SCDA) and became Scotia Glenville Industrial Park. Also in June 1985, approximately 27 acres were sold to the Galesi Corporation and were added to Corporations Park;
- In 1988, approximately 36 acres were separated to the Navy and the Depot retained the remainder of the GSA administered land as the DLA;
- In July 1997, GSA sold approximately 11.5 acres of the Depot to SCDA; and
- Currently, the Navy occupies approximately 14.2 acres and the DLA/DNSC occupies approximately 59.7 acres. Figure 2 shows the approximate boundaries of the Defense National Stockpile Center Scotia Depot when established in 1942, and the approximate current property boundaries. The Site is currently owned by the GSA and operated by the DNSC.

The areas surrounding the Site are largely residential with commercial / industrial land use.

2.4.2. Property History

The Scotia Depot was built in 1942 and 1943 and was commissioned as a United States Navy facility on March 30, 1943. It served as a storage and supply depot for naval forces along the Atlantic coast and Europe, and as a storage and distribution point for National Stockpile materials. The parcel originally consisted of approximately 337 acres. The facility mostly stored large items such as boilers, turbines and reduction gears and was the home of the Navy's Landing Craft Maintenance and Battle Damage Program and the Navy's Automotive and Handling Equipment Spare Parts Program. Employment peaked in 1945 at 2,342 personnel. On January 1, 1960 the Navy turned the facility over to the GSA.

Between early 1966 and approximately 1973, USACE / Army Material Command (AMC) leased buildings from the Navy for the fabrication and storage of vehicles as well as other military equipment. GSA records indicate that this included the LARC V Amphibious Lighter. These operations were predominantly conducted

by the AMC contractor, Consolidated Diesel Electric Company (CONDEC). In early 1968 through 1971 inspections at the CONDEC operation indicated the continuing presence of fire and safety hazards. These included the improper storage of flammables and paints, and the "dangerous air contaminants created or released by open surface dip tank operations."

Additionally, between 1967 and 1969, the GSA and the Navy leased two buildings to the United States Army / Defense Supply Agency. The agreement indicated these buildings were used for the "preservation and rail loading of trucks; storage of trucks and ten 6 × 6 AIC vehicles."

In response to the detection of trichloroethene (TCE) at concentrations less than 1 microgram per Liter (µg/L) (the New York State Drinking Water Standard is 5 µg/L) in the Town of Rotterdam and City of Schenectady well fields, NYSDOH performed private water supply sampling in 1991. The private water supply sampling included residences located on NYS Route 5 in the Town of Glenville and hydraulically downgradient of the Site. Chlorinated volatile organic compounds (CVOCs), including TCE, 1,1,1-trichloroethane (1,1,1-TCA), and tetrachloroethene (PCE), were detected in groundwater collected in some of the residential wells. Consistent with the groundwater contamination at the Site, TCE was the primary CVOC detected in the residential well water samples (at concentrations up to 320 µg/L). Following a recommendation by the NYSDOH to connect to public water, the homes on NYS Route 5 were subsequently connected to public water provided by the Town of Glenville. Although the drinking water standard was never exceeded in the City of Schenectady and the Town of Rotterdam municipal water supply wells, increased groundwater quality monitoring was initiated following the identification of the contamination.

Subsequent to the NYSDOH residential groundwater sampling, six subsurface investigations were completed to identify the possible source of TCE in the residential wells and possibly the Town of Rotterdam and City of Schenectady municipal well fields and to delineate the extent of the TCE groundwater plume. The investigations were completed between 1995 and 2007 and focused on the assemblage of properties comprising the former 337-acre Defense National Stockpile Center Scotia Depot. During the investigations, two areas thought to represent possible TCE source areas, including a former burn pit and the Sacandaga Road Landfill, were evaluated.

Data suggested that although these areas may be contributing to minor amounts of groundwater contamination, they do not represent TCE source areas. Instead, investigation data indicated that TCE disposal occurred in the northeast corner of the property.

In addition, and unrelated to the investigations related to the TCE groundwater plume, a site assessment was completed by the Defense National Stockpile Center in advance of transferring unused portions of the property back to the GSA. Based on the site assessment, soil with metals present above background concentrations was excavated from two former metals and ore stockpile areas and two drywells were removed as part of interim remedial measures (IRMs) in 2005.

The Scotia Naval Depot is regulated under the NYSDEC Superfund program. In March 2010, a Record of Decision (ROD) for the Scotia Naval Depot was recorded. In the ROD, the NYSDEC, in consultation with NYSDOH, identified the criteria for evaluation of alternatives and selected a ZVI PRB as the remedy for the Scotia Naval Depot. The components of the remedy are as follows:

1. A remedial design program will be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program, including the exact location and dimensions of the PRB.

2. The dimensions of the PRB anticipated in the ROD were approximately 250-foot wide with ZVI injected into the subsurface using multiple soil borings from approximately 65 feet bgs to an approximate average depth of 105 feet below ground surface.
3. Imposition of an institutional control in the form of an environmental easement that will require:
    a. compliance with an approved Site Management Plan;
    b. restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and
    c. completion and submission to NYSDEC by the property owner, or designated representative, of a periodic certification of institutional and engineering controls.
4. The property owner, or designated representative, will provide a periodic certification of institutional and engineering controls, until NYSDEC notifies the property owner in writing that this certification is no longer needed.
5. The operation of the components of the remedy will continue until the remedial objectives have been achieved, or until NYSDEC determines that continued operation is technically impracticable or not feasible.
6. Since the remedy results in untreated hazardous waste remaining at the Scotia Naval Depot, a Site Management Plan is required, which will include the following institutional and engineering controls:
    a. long-term groundwater quality monitoring from wells upgradient, downgradient, and in the vicinity of the PRB to evaluate the effectiveness of the remedy and to verify the extent of the dissolved-phase VOC plume;
    b. continued implementation of a vapor intrusion monitoring program and, if necessary, installation of mitigation systems for buildings located above the TCE and CT plumes;
    c. identification of any use restrictions on the Scotia Naval Depot;
    d. provisions for the continued proper operation and maintenance of the components of the remedy; and
    e. provisions for any new structures in the area of the groundwater contamination to include sub-slab construction that allows for installation and operation of mitigation systems. The long-term monitoring program will allow the effectiveness of the groundwater VOC concentration reduction to be monitored and will be a component of the long-term management for the Scotia Naval Depot (NYSDEC, 2010).

3. INVESTIGATIVE ACTIVITIES

The following section provides an overview of the pre-design investigation activities performed between February and April 2013.

3.1. Synchronous Groundwater Level Measurement / Sampling

Stone completed a synoptic round of groundwater level measurements from thirty-five (35) groundwater monitoring wells on February 4, 2013. The wells measured are summarized in Table 2, and are depicted on Figure 3. All measurements were completed using the same 500-ft water level meter. Measurement procedures were in accordance with Stone SOP SEI-6.2.6 and Subsection 2.4.4.2 of the FSP.

Each well to be measured was located using the Site map developed from previous investigations. Each well was unlocked and the well cap removed and placed such that it did not come in contact with the ground. A calibrated photoionization detector (PID) was inserted into the headspace of well and allowed to equilibrate. The peak reading was recorded in a field notebook. The established measuring point was determined.

Prior to inserting the water level meter into a well, clean nitrile gloves were donned and the water level meter was decontaminated by rinsing with DI water. The water level meter was slowly lowered down each well until the signal was noted. The graduated wire was placed against the measuring point and raised and lowered in decreasing increments until the water surface was precisely determined. The water level of each well was then recorded in the field logbook. Measurements were determined to the nearest $1/100^{th}$ of a foot. The sequence of water level measurements was from least likely contaminated to most likely contaminated wells to reduce the risk of potential cross-contamination.

Once the water level was measured, and the measurement recorded, the well cap was then set back on the well casing, and the locking well guard re-locked. Five locks, MW-3, MW-9, MW-10, MW-16, and MW-17, were unable to be opened and were cut with bolt cutters, and were replaced with new locks.

The synchronous groundwater elevation data are summarized in Table 12 of Subsection 5.2.1. A copy of synchronous groundwater level measurement field notes are provided in Appendix A.

Table 2: Summary of Monitoring Wells for Water Level Measurement and Sampling

Well ID	Screened interval (fbgs)	Water Level Measurement	Groundwater Sampling
B-1	48 – 68	Yes	Yes
B-2	44.7 – 64.2	Yes	Yes
B-3	47.5 – 67.5	Yes	Yes
B-6	Not found in available documentation	Could not locate	Could not locate
GEP-1	59.6 – 74.6	Yes	Yes
GEP-2	60.6 – 75.6	Yes	Yes
GEP-3	59.6 – 74.6	Yes	Yes
GEP-4	60.15 – 75.15	Yes	Yes
MW-1	62 - 77	Yes	No
MW-2	66.3 – 76.3	Yes	No
MW-3	65 – 75	Yes	No

Well ID	Screened interval (fbgs)	Water Level Measurement	Groundwater Sampling
MW-4	63.8 – 73.8	Yes	No
MW-5	62.5 – 72.5	Yes	Yes
MW-6	58.5 – 68.5	Yes	Yes
MW-7	61 – 71	Yes	Yes
MW-8 (damaged)	66 – 76	No (due to bent casing)	No (due to bent casing)
MW-9	110 – 120	Yes	Yes
MW-10	65 – 80	Yes	No
MW-11 (damaged)	65 – 80	Yes	No (due to bent casing)
MW-12	65 – 80	Yes	Yes
MW-13	65 – 80	Yes	Yes
MW-14	65 – 80	Yes	Yes
MW-15	65 – 80	Yes	Yes
MW-16	55 – 70	Yes	Yes
MW-17	60 – 75	Yes	Yes
MW-18	60 – 75	Yes	Yes
MW-19	62 – 77	Yes	Yes
MW-20	63 – 78	Yes	Yes
MW-21	57 – 72	Yes	Yes
MW-22	63 – 78	Yes	Yes
MW-23	63 – 78	Yes	Yes
PMW-1	63 – 83	Yes	No
PMW-2	64 – 84	Yes	No
PMW-3	60.5 – 80.5	Yes	Yes
PMW-6 (Destroyed)	13.6 - 33.6	No	No
PMW-7 (Offsite)	14.8 – 34.8	Yes	No
S-1D (Offsite)	Not found in available documentation	Yes	No
S-2D	Not found available in available documentation	Could not locate	Could not locate
Well 5	Not found in available documentation	Could not locate	Could not locate
Well 6	Not found in available documentation	Yes	No

fbgs: feet below ground surface
B indicates a soil boring completed as a monitoring well.
GEP designates a monitoring well installed during an investigation of the Glenville Energy Park.
MW designates a monitoring well.

3.2. Groundwater Sampling

Groundwater samples representative of local groundwater were collected from twenty-four (24) groundwater monitoring wells between February 5 and 7, 2013 in accordance with USEPA's *Low-Stress (Low-Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells* (EQASOP-GW-001), dated January 19, 2010 (USEPA, 2010) and Stone SOP SEI-6.34.0 *Procedure for Sampling Groundwater Monitoring Wells Using Low Stress (Low Flow) Technique* as described in Subsection 2.5 of the FSP. The groundwater monitoring wells sampled are indicated on Table 2. MW-8 was not sampled as this well had been damaged, apparently by a vehicle running over the protective casing. MW-11 was not sampled as the well was bent and the bladder pump would not fit past the bend.

Groundwater samples were collected according to the following procedure:

Water quality instruments were calibrated in accordance with Stone SOPs SEI-5.26.0, SEI-5.28.0, and SEI-5.30.0 prior to use and at the end of use each day to document calibration shifts during use. Calibration records are attached in Appendix B. Security damage and evidence of tampering was recorded at each well and recorded in a field notebook. These observations are summarized in Table 2. Immediately after removing the well cap VOCs were measured at the rim of the well with a PID. These measurements were recorded on each groundwater sampling form. PID readings were not collected at monitoring wells MW-6, -9, -13, -14, -15, -16, -18, -19, -20, -22, GEP-3, and PMW-3 during completion of the sampling task. However, these data were collected during completion of the synoptic round of water level measurements prior to groundwater sampling.

A bladder pump (1.66-inch outer diameter) and tubing were slowly lowered (to minimize disturbance) into the well to the midpoint of the zone to be sampled. In most cases the well screen straddled the water table and the pump was positioned approximately 2 feet above the bottom of the well. For locations where the well screen was completely submerged the bladder pump was positioned such that the intake was approximately at the mid-point of the well screen. Prior to starting the pump the water level was measured and recorded. The height of the water column and volume in gallons were calculated and recorded on each well sampling form. Water level measurements could not be collected after inserting the bladder pump at monitoring wells MW-5, MW-6, MW-7, MW-22, and B-1 due to the depth of the water being below the top of the bladder pump. Water level data were not collected during sample collection at groundwater monitoring well MW-17 due to a water level meter malfunction during sampling that could not be repaired in the field.

The bladder pump was started at a low setting and slowly increased until discharge occurred. Water level was checked at 5-minute intervals until there was little or no water drawdown (less than 0.3 feet). Purging continued until indicator field parameters stabilized. Purge water was discharged into 5-gallon buckets and transferred into 55-gallon drums, pending IDW disposal determination. Water level and pumping rate were recorded approximately every 5 minutes during purging. Purge rate was measured by directing the discharge flow into a 1-liter plastic graduated cylinder. Field indicator physical-chemical parameters (pH, temperature, specific conductance, oxidation-reduction potential (ORP), and dissolved oxygen (DO)) were monitored during purging using a multi-parameter water quality meter (YSI Model 600XL) equipped with a flow-through cell system. Turbidity was also monitored by using an aliquot of groundwater in a separate turbidity meter. This aliquot was collected by opening a T-ball valve that was plumbed in-line prior to the water quality meter flow cell. Stabilization was considered achieved when three consecutive readings were within the following limits:

- Turbidity ± 5 NTU for readings greater than 1 nephelometric turbidity units (NTU) or until readings stabilized less than 1 NTU

- DO (± 10% for values greater than 2 milligrams per liter (mg/L); 0.5 mg/L for values less than 2 mg/L)
- Specific Conductance ± 3%
- Temperature ± 3%
- pH (± 0.1)
- ORP (± 10 milliVolts (mV))
- Drawdown (no more than 0.3 feet)

Water samples were collected upon indicator parameter stabilization by disconnecting tubing from the water quality meter flow cell and directing the flow directly into sample containers. Each VOA vial was filled gently down the inside of the container with minimal turbulence. Pre-preserved 40-mL glass VOA vials with Teflon septa were used to collect samples for VOC analysis. Stone personnel ensured no headspace remained in each VOA vial collected for VOC analysis.

Following sample collection the pump and tubing was removed from each well and the well was secured.

Well purging times and volumes, water level measurements, well volume calculations, weather conditions, indicator parameters, and sample name and collection time were recorded for each sampled well on field forms provided with Stone SOP SEI-6-34.0. Completed field forms are included in Appendix C, except the field form used to record this information for MW-21, which is missing.

Representative VOC samples were obtained from each monitoring well sampled to support trend analysis and evaluation of potential impact to nearby receptors. These samples were analyzed by TestAmerica-Savannah's Department of Defense (DoD)-, National Environmental Laboratory Accreditation Program (NELAP)-, and New York State Department of Health (NYSDOH)-certified fixed laboratory for Target Compound List (TCL) VOCs via USEPA Method 8260B. Duplicate samples were collected for VOC analysis from GEP-4 and MW-21. Additional water volume was collected from GEP-2 and MW-14 to serve as matrix spike and matrix spike duplicate (MS/MSD) samples. Equipment blank samples were collected after groundwater samples were collected at B-3, MW-15, and MW-21 by removing the bladder pump from each well, decontaminating the pumps according to Subsection 2.12.4.5 of the FSP, reassembling the pump and placing it in clean, deionized water, and pumping the deionized water into pre-preserved 40-mL VOA vials. One trip blank accompanied the cooler, which contained all groundwater samples for VOC analysis, to TestAmerica-Savannah. The results of the groundwater sampling program are summarized in Subsection 5.2.2, and the wells are depicted on Figure 3.

3.3. Vertical Groundwater Profiling

Stone performed a total of 16 vertical groundwater profiles (profiles) at the Site. The profile locations were partly revised from those proposed in the FSP, in response to the results of the initial profiles, and after consultation with CENAE. The actual profile locations are depicted in Figure 2, and are described as follows:

- Profiles WP-01 through WP-08, and WP-12 and WP-13 were performed along the long transect, closest to the ROD-proposed PRB location;
- Profiles WP-09, WP-10, and WP-11 were performed along a shorter, downgradient transect;
- Profiles WP-14, WP-15, and WP-16 were performed at non-transect locations southwest (WP-14 and WP-15) and east (WP-16) of the transects.

Stone pre-cleared all profile locations by calling DIGSAFE (888-DIG-SAFE) for subsurface utility clearance at least 72 hours prior to drilling activities. In addition, utility location contractor New York Leak Detection cleared the soil boring locations according to the procedures listed in Subsection 2.11 of the FSP. Copies of the clearance reports are included in Appendix D.

Profile samples were collected according to Stone SOP SEI-6.43.3, as follows. Due to the depth to groundwater being in excess of the suction limit, Stone utilized a stainless steel, gas drive pump to purge groundwater and collect samples. Two drill rigs were utilized to advance the vertical profiling tool. The first rig was a truck-mounted ODEX rig (which utilized a simultaneous driven casing / air hammering technique) that doubled as a slim-bore mud-rotary rig. The second rig was a Geoprobe® 7800-series track-mounted direct push rig.

The ODEX rig set up on each vertical groundwater profiling location and advanced a 5-inch casing, using ODEX drilling techniques, to approximate top of water table at 63 feet below ground surface (ft bgs).

Two Stone data acquisition trucks were used to perform vertical groundwater profiling as proposed in the Project Plan. Details on equipment setup, tip and pump assembly, and calibration can be found in SEI SOP-6.43.3, in Subsections 4.3, 4.4.2, and 4.5, respectively.

The 1¾-inch diameter profiling rods were assembled in 20-foot sections at each vertical groundwater profiling location and placed on metal saw-horses in the vicinity of the borehole such that the wire-line of the mud-rotary or ODEX rig could easily access the rods. Enough 20-foot sections of profiling rods were assembled to reach the bottom of the borehole when lowered through the ODEX or mud-rotary casing. Three pieces of 20-foot long, ⅛-inch stainless steel tubing were strung through each 20-foot section of profiling rod and the ends were capped to ensure the tubing did not clog.

Once the ODEX rig advanced 5-inch casing to 63 ft bgs, the 20-foot sections of profiling rod, containing three pieces of ⅛-inch diameter stainless steel tubing, were raised into a vertical position over the casing. The lead section of profiling rod included the profiling tip and gas drive pump assembly securely tightened to the profiling rod. Successive sections of tubing and direct push rod were connected, tightened and lowered until the bottom of the open borehole annulus was reached. Once the casing was advanced to depth, the ODEX rig relocated to the next vertical groundwater profiling location and repeated the process.

The profiling rod was lowered into the 5-inch ODEX casing until approximately 1 foot was sticking above the top of the mud-rotary casing. The profiling rod was secured to the top of the ODEX casing using a hydraulic clamp or chain vise. Additional 20-foot sections of profiling rod and tubing were attached to the rod and tubing in the casing using the same process, until the profiling rods reached the bottom of the borehole.

The Geoprobe® rig then advanced the vertical groundwater profiling tool to the first sample interval according to Subsection 4.6 of SEI SOP-6.43.3. When being advanced by the Geoprobe® rig, profiling rods were added in five-foot sections.

When refusal was encountered at a depth less than the planned total profile depth, the profiling rods and tubing were withdrawn from the ODEX casing, and the mud-rotary rig advanced casing to the interval where the refusal occurred. The profiling rods were then re-inserted into the mud-rotary casing. A section of butyl bicycle tube was secured around the sampling ports to prevent drilling fluids from entering the sample train. The profiling tool was driven at least 1 foot past the bottom of the mud-rotary casing prior to collecting a groundwater sample to prevent influences of the drilling fluids. Sample intervals were determined by changes in the index of hydraulic conductivity (I_K) and were approximately 5 feet apart, unless low hydraulic conductivity strata were encountered that were thicker than 5 feet. Where changes in I_K occurred frequently

(e.g., every 0.5 feet), Stone field staff exercised professional judgment to decide where it was appropriate to collect a groundwater sample within each 5-foot interval.

Upon reaching a sample collection depth at either location, groundwater samples were collected utilizing a gas drive pump according to Subsections 4.7.3 and 4.7.4 of SEI SOP-6.43.3. During groundwater purging, indicator field parameters (turbidity, pH, temperature, specific conductance, ORP, and DO) were monitored using a multi-parameter water quality meter equipped with a flow-through cell system. The parameters were monitored for stabilization prior to collection of the sample. Stabilization is achieved when three consecutive readings, taken after each nitrogen-drive pump purge cycle, are within 10% of the previous value for each parameter. Field physical-chemical parameters were recorded on both paper and electronic forms and are included in Appendix D.

Following successful sample collection the vertical groundwater profiling tool was advanced an additional 5 ft using the Geoprobe® rig, groundwater samples were collected every 5 feet, and profiling rod was added as necessary, according to Subsections 4.7.3 and 4.7.4 of SEI SOP-6.43.3.

Vertical groundwater profiling continued until two consecutive samples were free of analytes. The glacial till layer was not encountered in any of the profile locations. Upon completion of a vertical groundwater profiling location the steps outlined above were repeated for a new vertical groundwater profiling location until all locations were completed. Appendix D contains field notes regarding the profiling process.

The groundwater samples were screened in Stone's DoD- and NELAP-certified onsite laboratory in near-real time for a reduced list of CVOCs via EPA Method 8260C (modified) that included all the contaminants of concern for the Site. Thirteen of the groundwater samples were split and analyzed separately in TestAmerica's DoD-, NELAP-, and NYSDOH-certified laboratory for TCL VOCs via EPA Method 8260B, that includes all the contaminants of concern for the Site. Samples to be split for fixed laboratory confirmation analysis represented the range of concentrations detected in the screening samples and the various depths sampled within the aquifer. The majority of the split samples were collected and analyzed early in the vertical groundwater profiling program, in order to provide early assessment of data quality.

A total of 179 groundwater samples were collected and screened, and a total of 13 split samples were submitted for fixed laboratory analysis. Table 3 summarizes the details of the profiles, and the profile locations are depicted on Figure 2.

Table 3: Summary of Vertical Groundwater Profile Details

Location ID	Profile Beginning and End Dates	Profile Interval (fbgs)	Number of Samples	Number of Refusals
WP-01	2/5/13 to 2/7/13	63 to 141.6	16	1
WP-02	2/5/13 to 2/13/13	63 to 153.0	19	2
WP-03	2/8/13 to 2/19/13	63 to 164.8	18	3
WP-04	2/8/13 to 2/11/13	63 to 120.5	11	1
WP-05	2/9/13 to 2/11/13	63 to 142.0	16	1
WP-06	2/22/13	63 to 97.0	6	0
WP-07	2/19/13 to 2/21/13	63 to 115.2	10	0
WP-08	2/20/13 to 2/21/13	63 to 113.0	11	1
WP-09	2/25/13 to 2/26/13	63 to 116.0	10	1
WP-10	2/26/13 to 3/4/13	63 to 136.0	15	2
WP-11	2/27/13	63 to 94.2	5	1
WP-12	2/27/13 to 3/1/13	63 to 123.0	11	1
WP-13	2/28/13 to 3/1/13	63 to 87.9	6	1
WP-14	3/5/13 to 3/6/13	63 to 114.8	11	1
WP-15	3/6/13	63 to 95.7	6	1
WP-16	3/7/13	63 to 101.6	8	1

fbgs: feet below ground surface

The results of the profiling program are summarized in Subsection 5.2.3. A summary of the analytical results is provided in Appendix E.

3.4. Monitoring Well Installation

Between February 4 and March 8, 2013, Stone installed four (4) monitoring wells (MW-24 through MW-27) at the site, according to SOP SEI-6.4.5, and as detailed in Subsection 2.3 of the FSP.

Stone pre-cleared all drilling locations by calling DIGSAFE (888-DIG-SAFE) for subsurface utility clearance at least 72 hours prior to drilling activities. In addition, utility location contractor New York Leak Detection cleared the soil boring locations according to the procedures listed in Subsection 2.11 of the FSP. Copies of the clearance reports are included in Appendix D.

At each location, drilling equipment (4-inch casing) was advanced to the desired depth, according to Stone SOP 6.1.6, described in Subsection 2.5 of the FSP. Drilling mud was replaced with potable water following the drilling. Using soil grain size data obtained from each soil boring, the appropriateness of a 0-sand filter pack and 0.010-inch well screen size was confirmed, in accordance with ASTM 5092D. Drill rods and plugs were removed, and the 2-inch diameter, Schedule 40, threaded polyvinyl chloride screen/riser was placed in the casing. Groundwater monitoring wells were constructed with 10-ft screens, at the request of CENAE. Filter sand was poured into the annulus between the borehole wall and well screen/riser, to a depth 1 ft above the top of the well screen. Sand was added approximately 1 ft at a time, and casing was withdrawn to match, to

prevent binding the well screen/riser in the casing. The movement of sand into the sand pack was monitored using a weighted tape measure; as the casing is withdrawn. Bentonite chips were poured to the top of the filter pack, to a depth 3 ft above the top of the well screen (2-ft thick layer). For monitoring well MW-25, where the top of the screen was not located below the water table, the chips were hydrated using potable water. Cement/bentonite grout was tremied into the annulus between the borehole wall and well riser below the water table, to a depth of 2 ft below ground surface. The grout mix was 6 gallons of water per 94-lb bag of Type I Portland cement, with no more than 3 to 8% by dry weight bentonite powder.

Monitoring wells MW-24, MW-25, and MW-27 were completed with steel protective casing with 2- to 3-ft stick up above ground surface; due to its location near a trailer parking area, monitoring well MW-26 was installed with a flush-mount waterproof road box/well cover. Each well was completed with a 1-foot by 1- foot by 8-inch thick concrete pad level with the ground surface. Each concrete pad was beveled at a minimum slope of 1 inch from the casing to the pad perimeter. Upon completion, each well was secured with a lockable well cap. A measurement point was marked clearly with a permanent mark or notch on the top of the well for surveying and water level measurement. The well number was painted on the outside of the guard in block characters. The locking well cap was labeled (inside and outside) with the well number and depth using a permanent marker such as a paint pen. Table 4 summarizes the well construction details, and the wells are depicted on Figure 2.

Table 4: Summary of Well Construction Details

Well ID	Well Construction Dates	Screened Interval (fbgs)	Well Completion Type	Well Development Date
MW-24	2/18/13 to 2/20/13	100.0 to 110.0	Stick-up	3/1/2013
MW-25	3/11/13 to 3/12/13	65.0 to 75.0	Stick-up	3/18/2013
MW-26	3/13/13 to 3/15/13	100.0 to 110.0	Flush-mount	3/18/2013
MW-27	3/18/13 to 3/20/13	100.0 to 110.0	Stick-up	5/5/2013

fbgs: feet below ground surface

Well construction details are included on the Soil Boring Logs in Appendix F.

3.4.1. Well Development

At least 24 hours following well installation, well development was performed for each well, according to the specifications included in Subsection 2.3.4.2.2 of the FSP. Each new well was developed by over pumping and mechanical surging, for a minimum of three well volumes, using development pumping rates sufficient to stress the well and to reduce potential damage to the near-bore aquifer resulting from drilling. The development dates are included in Table 4.The purge water was stored in 55-gallon drums and analyzed for VOCs to determine disposal options (see Subsection 3.10 for further information).

After development water appeared clear to the naked eye, the well development water was monitored at 5-minute intervals using a water quality meter with a flow through cell until pH, specific conductance and turbidity were stable for three successive measurements. Stability of parameters was defined as follows:

- +/- 0.2 pH units;
- <10% change in specific conductance; and,
- <+/- 10% difference in turbidity between two consecutive readings or <5 NTU.

The well development procedures and results (e.g., pumping rates, water level drawdown and recovery rates, air monitoring readings, and color of discharged water) were recorded on the Well Development Logs, included in Appendix F.

3.5. Geotechnical Sampling

Stone collected subsurface soil geotechnical samples from five locations in the vicinity of the proposed PRB under Subtask 5B. The geotechnical analytical results of subsurface soil samples will be used to provide design criteria that will be used to determine the specifications and the cost estimate for the implementation of the ZVI PRB.

Under Subtask 5B, a total of five (5) subsurface soil samples were collected from five (5) ft intervals from depths within the anticipated vertical and horizontal extents of the ZVI PRB, based on the extent and distribution of the groundwater TCE plume determined using vertical groundwater profiling. Table 5 summarizes the samples collected, which are depicted on Figure 2.

Table 5: Summary of Geotechnical Samples

Location ID	Sample Date	Sample Depth Interval (fbgs)	Note
MW-24	2/20/2013	96.0 to 98.0	Monitoring Well
WP-05	2/22/2013	75,0 to 77.0	Vertical Profile
WP-05	2/22/2013	85.0 to 87.0	Vertical Profile
MW-26	3/14/2013	67.5 to 69.5	Monitoring Well
MW-26	3/14/2013	107.5 to 109.0	Monitoring Well

fbgs: feet below ground surface

Soil Boring Logs documenting these samples are included in Appendix F.

The samples were submitted for geotechnical analyses, including:

- Laboratory sieve analysis by ASTM Method D422;
- Bulk density analysis by ASTM Method D2937; and,
- Effective porosity analysis by ASTM Method D7263.

The results of the geotechnical soil sampling are discussed in Subsection 5.1, and the sample locations are depicted on Figure 2.

3.6. Hydraulic Conductivity Testing

On April 22, 2013, Stone performed hydraulic conductivity testing on four (4) monitoring wells, existing well MW-9, and new wells MW-24, MW-26, MW-27. The objective of the hydraulic conductivity testing is to determine formation hydraulic conductivity, to facilitate estimation of groundwater flow velocity across the proposed location of the PRB. Hydraulic conductivity testing was performed using a Geoprobe® pneumatic slug test kit (GW1600), according to SOPs SEI-6.11.9 and 5.22.2, and Geoprobe® SOP 0312-1.

The initial water level in the well was measured following standard operating procedures for water level measurement (see Subsection 3.1). This was considered the equilibrium water level. The time of the measurement was also recorded.

The equilibrated water level in each of the wells tested was determined to be above the top of the well screen. Three rising head tests were performed on each well. If the well was equipped with a dedicated pump and/or associated tubing that would interfere with the transducer or cable, the pump/tubing was removed prior to testing. The pressure transducer and approximately 5 feet of cable were decontaminated by rinsing with potable water. The transducer was placed into the well, gently lowered to a point approximately 5 ft below the equilibrium water level, within the transducer response range, and secured so that it would not move over the course of the test. The transducer cable was then connected to the data-logger.

To conduct the rising head test, the pneumatic testing equipment was installed at the well head and secured, and the data logger was set up according to the manufacturer's instructions. The pneumatic slug was activated, and then released, and the transducer recorded the recovery of the well until it returned to equilibrium. The water level and time at which the water level reached equilibrium was recorded in the field logbook, included in Appendix A, Logbook 1, pages 70 and 71. The results of the hydraulic conductivity testing are discussed in Subsection 5.2.5, and the wells are depicted on Figure 2.

3.7. Groundwater Sampling – Treatability Testing

3.7.1. Treatability Parameter Testing

Under Subtask 6A, Stone collected geochemical groundwater samples from five intervals / locations to support the evaluation of the treatability of the dissolved groundwater plume. The monitoring wells sampled under Subtask 6A were determined following the vertical groundwater profiling program, based on the extent and distribution of the groundwater TCE plume determined using vertical groundwater profiling under Subtasks 5A and 5C. in accordance with USEPA's *Low-Stress (low-flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells* (EQASOP-GW-001) (USEPA, 2010) and Stone SOP SEI-6.34.0 *Procedure for Sampling Groundwater Monitoring Wells Using Low Stress (Low Flow) Technique*. Completed field forms are included in Appendix C, and Table 6 summarizes the groundwater sample locations selected for treatability parameter testing, and the wells are depicted on Figure 2.

Table 6: Summary of Treatability Parameter Samples

Sample Location	Sample Date	Sample Depth (fbgs)	Location Type
WP04-76.0-GW	2/26/2013	76	Screenpoint Sampler™
WP05-95.0-GW	2/28/2013	95	Screenpoint Sampler™
WP03-95.0-GW	3/5/2013	95	Screenpoint Sampler™
WP02-105.0-GW	3/7/13	105	Screenpoint Sampler™
MW-26	4/24/2013	105	Monitoring Well

fbgs: feet below ground surface

The treatability parameter samples were analyzed for the following parameters, per the Work Plan:

- Total organic carbon / total dissolved carbon by EPA Method 9060;
- Total dissolved solids / total suspended solids by methods SM 2540C and 2540D, respectively;
- Oil & grease by EPA Method 1664A;
- pH by EPA Method 9040B;

- Hardness by method SM 2340C;
- Ferrous and ferric iron by ASTM Method D3872-05 (2011)and manganous and manganic manganese (EPA Method 1638, Modified);
- Nitrate / nitrite and Sulfate / sulfite by EPA Method 300.0;
- Total metals, including chromium, iron, magnesium, manganese, silicon, and titanium by EPA Methods 6010B;
- Hexavalent and trivalent chromium by EPA Method 7196A; and,
- Carbonate by EPA Method 2320B.

3.8. Bench-Scale Treatability Testing

Under Subtask 6B, Stone collected groundwater samples from two locations to support the evaluation of the treatability of the dissolved groundwater plume. The initial monitoring well sampled, GEP-1, was selected in advance of the vertical profiling program, based on previous data regarding the location of the plume. This sample was submitted to the laboratory and underwent preliminary testing for anions and cations. Using data from the groundwater profiling program, monitoring well MW-24 was installed at a location and depth intended to intercept the core of the plume. Stone and CENAE determined that monitoring well MW-24 would be a better location for the treatability testing sample, and CENAE authorized Stone to collect a second treatability sample from well MW-24. The treatability testing sample was analyzed for anions and cations, and then submitted for laboratory column iron reactivity tests, to quantify the degradation rates of volatile organic compounds and metals in the presence of iron, as well as identify any potential for precipitation or clogging of the iron as a treatment medium, in order to provide design data for the final design of a ZVI PRB. Table 7 summarizes the groundwater sample locations selected for treatability parameter testing, and the wells are depicted on Figure 2.

Table 7: Summary of Treatability Testing Samples

Sample Location	Sample Date	Sample Depth (fbgs)	Location Type
GEP-1	2/7/2013	73	Monitoring Well
MW-24	3/14/2013	105	Monitoring Well

fbgs: feet below ground surface

The results of the bench-scale treatability testing are discussed in Subsection 5.2.4. A copy of the SiREM Treatability Study Report is included in Appendix K.

3.9. Investigation-Derived Waste Management

Stone was responsible for the proper characterization and management of all IDW; however, the CENAE was considered the "generator" of any IDW considered hazardous waste and therefore signed the required manifests. IDW was disposed of within 30 days of receipt of laboratory analytical results. A total of 50 drums of a mixture of solid and liquid waste were removed from the Site on April 24, 2013 by Veolia Environmental Services, in accordance with state and federal regulations. Copies of the manifests are included in Appendix G.

3.9.1. Solid Waste

Solid IDW for this program included sampling equipment (e.g., disposable valves, fittings and sample tubing used to collect samples), personal protective equipment (PPE), and soil/cuttings from soil borings. The plastic, glass, paper, and PPE IDW were double-bagged in plastic trash bags and placed into Stone's commercial dumpster for eventual disposal at a lined landfill.

Under the provisions of NYSDEC's guidance, Section 3.3 (e) 1. i., drill cuttings and other soil generated onsite during the installation of soil borings were temporarily stored in drums at the Site on a concrete pad. Laboratory analysis performed during vertical groundwater profiling was used to characterize the soil IDW to determine if onsite or offsite disposal is appropriate. Where no groundwater VOC concentrations exceeded NYSDEC GA Groundwater Standards, the soils were considered eligible for onsite disposal. A minimum of one characterization sample was collected. Where characterization data indicated NYSDEC residential direct exposure standards were not exceeded, the soil IDW was used to backfill the borehole to the extent possible. Soil IDW could not be used to backfill soil borings completed as monitoring wells, and soil cuttings from these locations were containerized, characterized, and disposed of offsite, as appropriate. The determination was based on results of analysis once a representative amount of soils had accumulated. A temporary USEPA ID number was obtained for the Site to be used for the transport and disposal of solid wastes containing contaminants in excess of acceptable levels for onsite disposal.

3.9.2. Liquid Waste

All potential IDW was containerized and labeled in accordance with Resource Conservation and Recovery Act and NYSDEC hazardous waste regulations. All non-hazardous waste IDW storage containers were labeled with the following information: class of IDW; source area; date of generation; and generator name, address and phone number. Liquid IDW for this program included purge water from sampling activities, equipment and field rinse water, and decontamination water. Monitoring well drilling, development, and sampling created hundreds of gallons of liquid IDW. Purge and well development water IDW was contained in 55-gallon steel drums and temporarily stored at the Site. Laboratory analysis for VOCs was performed to characterize the liquid IDW to determine if onsite or offsite disposal was appropriate. Drums were stored on a concrete pad to create secondary containment. Drums were filled to allow for 10% ullage, to prevent splitting if the drums froze; none of the drums failed during the storage period.

Laboratory analysis for VOCs of 14 liquid IDW samples was performed to characterize the liquid IDW to determine if onsite or offsite disposal was appropriate. Table 8 summarizes the IDW samples collected and the IDW they characterized. As permitted under NYSDEC guidance, Section 3.3 (e) 5 ii (2) (A), onsite disposal was performed only where VOC analytical results meet NYSDEC GA Groundwater Standards. A minimum of one characterization sample was collected. Liquid IDW, which did not exceed NYSDEC GA Groundwater Standards, was dispersed onto the ground surface without treatment near the location of the source of the liquid IDW and in such a manner as to prevent erosion and to prevent the water from entering surface water or storm drains, with the approval of NYSDEC. The results of the IDW characterization samples are discussed in Subsection 5.4.

Table 8: Summary of Investigation Derived Waste Samples

Sample ID	Sample Date	Source of Investigation Derived Waste
Drums 1-6-IDW	3/19/2013	Soil cuttings / drilling mud from vertical profiling locations, >63 ft bgs
Drums 7-12-IDW	3/19/2013	Soil cuttings/ drilling mud from vertical profiling locations, >63 ft bgs
Drums 13-18-IDW	3/19/2013	Soil cuttings / drilling mud from vertical profiling locations, >63 ft bgs
Drums 19-24-IDW	3/19/2013	Soil cuttings / drilling mud from vertical profiling locations, >63 ft bgs
Drums 28-30-IDW	3/19/2013	Soil cuttings / drilling mud from vertical profiling locations, >63 ft bgs
Collective Purge-IDW	3/19/2013	Purge water from all vertical profiling locations
MW-24-IDW	3/19/2013	Soil cuttings / drilling mud from soil boring for well MW-24, > 60 ft
MW-25-50.0-IDW	3/19/2013	Soil cuttings / drilling mud from soil boring for well MW-25, 50 to 75 fbgs
MW-25-75.0-IDW	3/19/2013	Soil cuttings / drilling mud from soil boring for well MW-25, >75 fbgs
MW-26-50.0-IDW	3/19/2013	Soil cuttings / drilling mud from soil boring for well MW-26, 50 to 75 fbgs
MW-26-75.0-IDW	3/19/2013	Soil cuttings / drilling mud from soil boring for well MW-26, >75 fbgs
MW-27-50.0-IDW	3/19/2013	Soil cuttings / drilling mud from soil boring for well MW-27, 50 to 75 fbgs
MW-27-75.0-IDW	3/19/2013	Soil cuttings / drilling mud from soil boring for well MW-27, >75 fbgs
TB-01-IDW	3/19/2013	Trip Blank sample

fbgs: feet below ground surface

3.10. Sample Designation and Handling

Each sample was assigned a unique sample identifier shown on the COC and container labels. The first set of characters is the alphanumeric location identification (ID) which identifies the sample location. Samples from existing wells used the most recent name for that well. All other locations were assigned an individual consecutive two-digit number, preceded by a two-letter code for the type of sample:

"OB" for an overburden soil sample location.
"MW" for a monitoring well location.
"AR" for an air sample location.
"WP" for a Waterloo$^{APS\ TM}$ profiler location.
"SV" for a soil vapor sample location.

The location ID code is followed by a dash (e.g., "OB01-").

The second set of characters identifies the depth interval from which the sample was collected. The actual depth was rounded to the nearest 0.1 foot. The depth interval was the depth of the sample in fbgs. The interval code is also followed by a dash.

The last character(s) is a letter(s) identifying the sample matrix, as follows:

"GW" Groundwater sample
"A" Air sample
"EB" Equipment Blank
"MS" Matrix spike sample
"IDW" Investigation Derived Waste sample
"S" Soil sample
"D" Field duplicate
"TB" Trip Blank
"MSD" Matrix spike duplicate sample

3.11. Equipment Use, Calibration, and Maintenance

3.11.1. Waterloo^{APS} System Calibration

The Waterloo$^{APS\ TM}$ system was calibrated at the beginning of every week, in accordance with SEI SOP-6.43.3. This weekly calibration includes calibration of the flow sensor, pressure transducer, and string potentiometer. Components were calibrated in addition to the weekly calibration if any abnormal readings were obtained.

To start the data acquisition software at the beginning of each day or to start a new location, the Waterloo$^{APS\ TM}$ system was zeroed to 1 foot of hydraulic head, in accordance with SEI SOP-6.43.3.

3.11.2. Water Quality Sonde and Turbidimeter Calibration

Stone used several different instruments to monitor water parameters during the monitoring well sampling and Waterloo$^{APS\ TM}$ portions of work. These instruments were calibrated at the start and their calibration was checked at the end of each day. The YSI 600XL instrument was calibrated in accordance with SEI SOP-5.30.2. The HydroLab MS5 instrument was calibrated in accordance with SEI SOP-5.27.1. The Scientific MicroTPW turbidimeters were rented equipment and were calibrated at 0.0 NTU, 10 NTU, and 1,000 NTU at the beginning and end of each day in accordance with SEI SOP-5.3.4 and manufacturer's instructions. Calibration records are included in Appendix B.

3.12. Site Surveying

Stone's surveying subcontractor C.T. Male Associates of Latham, NY determined the field elevations and horizontal positions for the 16 profile locations and four monitoring wells installed during this investigation. The map coordinates for this project are referenced to the horizontal datum: New York State Plane Coordinate System (East Zone) Northing and Easting (coordinates in feet) and the North American Datum of 1983 (NAD83); and the North American Vertical Datum of 1988 (NAVD88).

The northing and easting of each sample location (borings, wells, etc.) was determined to an accuracy of ± 0.1 foot. The ground surface elevation was measured to the nearest 0.01 foot and reported to the nearest 0.1 foot referenced to the NAVD88 datum (in feet). Top-of-casing elevations were measured to the nearest 0.01 foot at the measuring point marked on the top of the inner casing. All surveying measurements were performed by a New York-licensed surveyor and met the USACE positional data quality requirements (EM 1110-1-1005, 2007 version (USACE, 2007)).

3.13. Site Restoration

During the course of Waterloo$^{APS\ TM}$ work and monitoring well installation, the environmental conditions at the site went from well below freezing with significant snow cover, to rather warm and snow-free. As a result, the ground became very wet and soft; movement of trucks and drill rigs around the Site resulted in some deep ruts. In April, 2013, several Stone staff visited the site and manually broke up and smoothed out the ruts. Subsequently, CENAE contacted the property owner, who confirmed that site restoration met their expectations.

4. QUALITY ASSURANCE SUMMARY

4.1. Objectives of the Pre-Design Investigation / Treatability Study Field Program

In accordance with the January 2013 *Final Pre-Design Investigation Project Plan* and *Field Sampling Plan*, quality control measures were conducted to ensure proper data interpretation and provide a sound technical basis from which remedial options can later be evaluated for the project. These measures included quality assurance reviews of field methods, field calibration and data, and laboratory analytical results.

4.2. Field Method Deviations

Minor deviations to field methods were recorded through the course of the field program, mainly due to unforeseen changes in field conditions. A list of the field deviations is provided below.

4.2.1. Deviations in Synchronous Measurements and Groundwater Sampling Tasks 4A / 4B

1. No water level measurements were made from well MW-8 due to damage.
2. No groundwater samples were collected from wells MW-8 and MW-11 due to damage. This data loss reduced the area of the CT plume that could be delineated with this dataset, but the remainder of the data were consistent with previous datasets, indicating that there is no apparent change in plume extent or orientation.
3. No water level readings were recorded during low-flow sampling of well MW-17, due to failure of the water level indicator. The well was purged at the lowest practical rate, and had a final turbidity measurement of 27.6 NTU, which is relatively low among the samples collected, suggesting that stress to the well was minimized.
4. Groundwater sample GEP3-73-GW was not recorded on the COC form, but was correctly analyzed based on the information on its sample label. The omission has been corrected and annotated on the laboratory records.

4.2.2. Deviations in Vertical Groundwater Profiling Tasks 5A / 5C

1. After noticing inconsistent Dissolved Oxygen (DO) results at location WP-03 between the two profiling setups, it was realized that flow-through cell orientation in one of the profiler setups had headspace, resulting in artificially high DO readings. The flow-through cell was reoriented, and the issue was resolved.
2. Vertical groundwater profiling was not performed to depths greater than 162 fbgs due to refusal. Till was not encountered in any profile location.
3. Due to the availability of the profiling rigs during what would otherwise have been downtime, two additional profile increments were made in ODEX casing advanced in anticipation of an additional profile location, beyond the CENAE scope of work.
    a. Profile location WP-11 was advanced along the short transect while awaiting the completion of an ODEX soil boring at a CENAE-approved location; and
    b. Profile location WP-13 was advanced at the south end of the long transect while awaiting the completion of an ODEX soil boring at a CENAE-approved location.
4. Water was used during the drilling process as a lubricant. The water used for drilling was obtained from municipal fire hydrants. The injection water was stored in plastic tanks located on support trucks.

4.2.3. Deviations in Geotechnical Sampling Task 5B

1. No effective porosity data were received for geotechnical soil samples MW24-96-S, MW26-107.5-S, and WP05-85-S, due to insufficient soil sample recovery, which resulted in insufficient sample volume. Similarly, insufficient sample recovery prevented the collection of a duplicate sample for these analyses.

4.2.4. Deviations in Monitoring Well Installation Task 5E

1. No groundwater quality data were recorded during the development of monitoring wells MW-25 and MW-26, although the wells were monitored for stabilization.The wells were surged and overpumped by factors of 15 and 30 times, respectively. Well MW-25 was developed until the purge water was visually clear; well MW-26 purge water did not clear.

4.2.5. Deviations in Geochemical Sampling Task 6A

1. The total and dissolved solids aliquots of geochemical sample MW26-105.0-GW were not analyzed by the fixed laboratory due to an error on the COC form. The samples represent 20% of the geochemical data for these analyses, and were located from a downgradient location, less critical to the PRB design.
2. Samples analyzed for manganous / manganic manganese were received by the laboratory out of their 24-hour holding times, despite the use of the fastest possible overnight delivery services.

4.2.6. Deviations in Geochemical Sampling Task 6A

1. As discussed in Subsection 3.8, a second groundwater treatability sample was collected, a modification rather than a deviation, which was pre-approved by CENAE.

4.3. Data Validation

Data validation reported the following issues regarding the quality of the laboratory analytical results, which led to the qualification of certain analytical results (e.g., estimation of data, flagged with a "J"), as identified in the Data Summary Tables included in Appendices E and H:

1. o-Xylene was reported in the equipment blank associated with sample WP-02-128.0, at an estimated concentration of less than 1 ppb. O-xylene is not a COC for the Scotia Naval Depot, and the estimated concentration is well below the USEPA maximum contaminant level (MCL). Therefore the detection in the blank does not significantly adversely affect the quality of the groundwater data.
2. Trichloroethene was reported the equipment blank associated with samples WP05-102.9, -107.9, -112.3, -117.3, and WP09-116.2, at estimated concentrations of less than 1 ppb. Trichloroethene is a COC for the Scotia Naval Depot, but the estimated concentration is well below the MCL. Therefore the detection in the blank does not significantly adversely affect the quality of the groundwater data.
3. Chloroform was reported in the equipment blank associated with samples WP06-72.0, -77.0, -82.0, and -87.0, at an estimated concentration of less than 1 ppb. Chloroform is a COC for the Scotia Naval Depot, but the estimated concentration is well below the MCL. Therefore the detection in the blank does not significantly adversely affect the quality of the groundwater data.

4. 1,3,5-Trimethylbenzene was reported in the equipment blank associated with sample WP14-68.0, at an estimated concentration of less than 1 ppb. 1,3,5-trimethylbenzene is not a COC for the Scotia Naval Depot, and the estimated concentration is well below the MCL. Therefore the detection in the blank does not significantly adversely affect the quality of the groundwater data.
5. 1,2-Dichloroethane and naphthalene were reported in the equipment blank associated with samples Drums-1-8-IDW, -7-12-IDW, -13-18-IDW, -18-24-IDW, 26-27-IDW, -28-30-IDW, MW-25-60.0-IDW, -76.0-IDW, MW26-50.0-IDW, -110.0-IDW, MW27-25.0-IDW, and -50.0-IDW, at estimated concentrations of less than 1 ppb. These compounds are not COCs for the Scotia Naval Depot, and the estimated concentrations are all well below MCLs. Therefore their detection in the blanks does not significantly adversely affect the quality of the groundwater data.
6. Bromomethane did not meet quality control criteria for Continuing Calibration Verification Percent Difference Lower Estimation in a number of groundwater samples analyzed by the fixed laboratory, which led to the estimation of the reporting limit. Bromomethane is not a COC for the Scotia Naval Depot, and bromomethane was not detected in any of the samples. Therefore the issue does not significantly adversely affect the quality of the groundwater data.
7. Trichloroethene did not meet quality control criteria for Surrogate/Tracer Recovery Upper Estimation in sample WP08-95.0-GW, resulting in an estimated result. Trichloroethene is a COC for the Scotia Naval Depot, and the estimated concentration is well above the MCL. The issue does not significantly adversely affect the quality of the groundwater data.
8. pH and trivalent and/or hexavalent chromium results and/or reporting limits were estimated for samples WP04-76.0-GW, WP05-95.0-GW, WP03-95.0-GW, WP02-105.0-GW, and MW26-105.0-GW due to holding times. These analytes are not COCs for the Scotia Naval Depot, and the estimated concentrations are all well below MCLs. The issue does not significantly adversely affect the quality of the groundwater data.
9. Volatile organic compound analytical results for sample WP03-95.0-GW did not meet quality control criteria for holding time, resulting in estimated results. The estimated results include COCs, which were present either well above or below their MCLs.
10. Total iron results did not meet quality control criteria for Matrix Spike Lower Estimation in sample WP04-76.0-GW, resulting in an estimated result. Iron is not a COC for the Scotia Naval Depot, and the estimated concentration is well below the MCL. The issue does not significantly adversely affect the quality of the groundwater data.
11. Carbonate Alkalinity as $CaCO_3$ did not meet quality control criteria for Laboratory Control Spike Lower Estimation in sample MW26-105.0-GW, resulting in an estimated reporting limit. Alkalinity is not a COC for the Scotia Naval Depot, and the estimated reporting limit is well above the MCL. The issue does not significantly adversely affect the quality of the groundwater data.

    The complete data validation package for the mobile laboratory is included in Appendix E, and the complete data validation package for the fixed laboratory is included in Appendix H.

12. A subset of Waterloo profiler samples were split between the mobile laboratory and the fixed laboratory for confirmatory analyses. Table 10 compares mobile laboratory and fixed laboratory TCE results. The data were found to meet the DQOs for the project, as all but two of the 24 samples had relative percent differences of less than 30%. The analytical data from the mobile laboratory results

are summarized and provided in Appendix E, and the fixed laboratory results are summarized and provided in Appendix H.

Table 10 Comparison of Vertical Groundwater Profile Mobile Versus Fixed Laboratory Trichloroethene Results

Sample Location ID	Sample Collection Date	Mobile Laboratory Result (µg/L)	Fixed Laboratory Result (µg/L)	Relative Percent Difference
WP01-70.0-GW	2/5/2013	27	23	17
WP01-91.5-GW	2/6/2013	17	20	-15
WP01-100.0-GW	2/6/2013	3.1	3.7	-16
WP01-110.0-GW	2/6/2013	2.0 U	0.25 U	NA
WP02-75.0-GW	2/6/2013	66	77	-14
WP02-87.15-GW	2/6/2013	41	37	11
WP02-96.4-GW	2/6/2013	93	120	-23
WP02-110.2-GW	2/7/2013	0.76 J	1.5	-49
WP03-87.5-GW	2/8/2013	130	210	-38
WP04-72.7-GW	2/8/2013	100	140	-29
WP06-72.0-GW	2/22/2013	12	11	9
WP07-82.4-GW	2/20/2013	140	200	-30
WP08-95.0-GW	2/20/2013	140	170	-18
WP08-113.4-GW	2/21/2013	2.0 U	0.2 J	NA
WP11-76.9-GW	2/27/2013	79	110	-28
WP11-81.9-GW	2/27/2013	140	170	-18
WP11-87.0-GW	2/27/2013	130	120	8
WP12-78.0-GW	2/28/2013	37	39	-5
WP12-93.0-GW	2/28/2013	33	34	-3
WP14-98.0-GW	3/6/2013	56	61	-8
WP14-103.0-GW	3/6/2013	67	59	14
WP15-75.4-GW	3/6/2013	79	93	-15
WP16-68.0-GW	3/7/2013	53	61	-13
WP16-73.0-GW	3/7/2013	34	43	-21

µg/L: micrograms per liter

NA: Not applicable

5. FINDINGS OF THE PRE-DESIGN INVESTIGATION

This section provides the results of the 2013 pre-remedial investigation. The results are primarily provided in tabular form and on maps and cross-sections. These data have been used to update the conceptual site model (CSM), which comprises Section 6 of this report.

5.1. Geotechnical Results

During the installation of monitoring wells MW-24 and MW-26, samples were collected from split spoons and submitted for geotechnical analyses. Samples were also collected from split spoons during the advancement of casing from two intervals at vertical groundwater profiling location WP05 and submitted for geotechnical analyses, including:

- Laboratory sieve analysis by ASTM Method D422;
- Bulk density analysis by ASTM Method D2937; and,
- Effective porosity analysis by ASTM Method D7263.

The results of the geotechnical data are summarized in Table 11. The complete geotechnical analytical results are summarized and provided in Appendix H.

Table 11: Summary of Geotechnical Results

Sample ID	Sample Date	Dominant Grain Size, (%)	Bulk Density (g/cm^3)	Effective Porosity (%)
MW24-96-S	2/20/13	Fine Sand, 84.4%	1.61	NR
MW26-76.5-S	3/14/13	Fine Sand, 41.5%	1.74	35.4
MW26-107.5-S	3/14/13	Fine Sand, 81.4%	1.55	42.6
WP05-75-S	2/22/13	Medium Sand, 33.9%	1.74	NR
WP05-85-S	2/22/13	Fine Sand, 84.2%	1.57	NR

% = Percent
g/cm^3 = grams per cubic centimeter
NR = Not reported; insufficient sample volume for this analysis.

5.2. Groundwater Results

5.2.1. Synchronous Groundwater Level Results

Water levels of existing wells were measured on February 4, 2013 in accordance with SEI-SOP 6.2.6. Table 12 summarizes these water level measurement data. A copy of the field logs containing these measurements is found in Appendix A.

Table 12: Summary of Water Level Measurements, February 4, 2013

Well ID	Screened Interval (fbgs)	Water Level Measurement (fbToC)	PID (ppm)	Comments
B-1	48 – 68	60.97	0.2	
B-2	44.7 – 64.2	60.84	0.0	
B-3	47.5 – 67.5	59.83	0.0	
B-6	Not found in available documentation	--	--	Could not locate
GEP-1	59.6 – 74.6	70.17	0.0	
GEP-2	60.6 – 75.6	70.17	15.5	Protective lock/cap broken
GEP-3	59.6 – 74.6	67.40	0.0	
GEP-4	60.15 – 75.15	69.98	22.6	
MW-1	62 - 77	73.12	0.0	Wasp nest
MW-2	66.3 – 76.3	73.08	0.0	
MW-3	65 – 75	70.10	0.0	Cut Lock (replaced)
MW-4	63.8 – 73.8	73.70	0.0	
MW-5	62.5 – 72.5	71.86	0.2	Broken Cap
MW-6	58.5 – 68.5	70.08	0.1	
MW-7	61 – 71	68.66	0.1	
MW-8 (damaged)	66 – 76	--	--	Protective casing bent over
MW-9	110 – 120	69.84	0.0	Cut Lock (replaced)
MW-10	65 – 80	67.40	0.0	Cut Lock (replaced)
MW-11 (damaged)	65 – 80	70.26	0.0	Casing bent over, measurement still possible
MW-12	65 – 80	71.12	0.0	
MW-13	65 – 80	69.78	0.0	No Cap
MW-14	65 – 80	70.02	0.0	No Cap
MW-15	65 – 80	68.04	0.0	
MW-16	55 – 70	65.72	0.0	Cut Lock (replaced)
MW-17	60 – 75	68.98	0.0	Cut Lock (replaced)
MW-18	60 – 75	69.20	4.3	
MW-19	62 – 77	70.35	0.0	
MW-20	63 – 78	73.51	15.4	
MW-21	57 – 72	70.49	4.0	
MW-22	63 – 78	71.49	0.0	No Lock

Well ID	Screened Interval (fbgs)	Water Level Measurement (fbToC)	PID (ppm)	Comments
MW-23	63 – 78	71.80	0.0	
PMW-1	63 – 83	73.88	0.0	
PMW-2	64 – 84	72.21	0.0	No Lock
PMW-3	60.5 – 80.5	71.26	0.0	
PMW-7 (Offsite)	14.8 – 34.8	17.58	0.0	No Cap
S-1D (Offsite)	Not found in available documentation	19.00	0.0	
Well 6	Not found in available documentation	22.74	0.0	No Lock, No Cap

fbgs: feet below ground surface

fbToC: feet below top of casing

ppm: isobutylene-equivalent parts per million

5.2.2. Synchronous Groundwater Analytical Results

Between February 5, 2013 and February 7, 2013, Stone sampled the wells already installed on the site (see Table 13 below). These wells were sampled using low flow (low stress) techniques in accordance with SEI-SOP 6.34.0, to the extent possible; a number of wells did not achieve stable turbidity, and were sampled based on the stability of the remaining parameters. The groundwater parameters measured upon well stabilization are summarized in Table 13; the complete VOC analytical results for these samples are summarized and provided in Appendix H. A number of the wells sampled stabilized with elevated turbidity levels. Stone suspects the elevated turbidity is the result of the wells most recently having been sampled using passive diffusion bags, which can result in the accumulation of native fines in the well screen. These wells apparently require redevelopment, and the elevated turbidity was not the result of sampling at an excessive pumping rate. Since these samples were not analyzed for metals, the elevated turbidity should not have affected the VOC results. Further, the range of groundwater temperatures reflects variation in outside temperatures and insolation of the sample tubing.

Table 13: Summary of Synchronous Groundwater Quality Parameters, February 2013

Well ID	Date	Temperature (°C)	Oxidation-Reduction Potential (mV)	pH	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	Turbidity (NTU)
B-1	2/6/2013	5.44	42.0	6.77	1.32	0.167	>4,000
B-2	2/6/2013	11.02	85.2	7.39	4.32	0.617	10.71
B-3	2/6/2013	11.0	166.6	7.38	6.57	.0651	20.2
GEP-1	2/7/2013	9.38	93.8	7.52	6.31	0.358	59.5
GEP-2	2/7/2013	8.52	54.2	7.39	6.67	0.375	30.8
GEP-3	2/7/2013	9.67	143.3	7.48	9.79	0.286	486.7
GEP-4	2/6/2013	9.20	130.4	7.51	5.38	0.399	114

Well ID	Date	Temperature (°C)	Oxidation-Reduction Potential (mV)	pH	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	Turbidity (NTU)
MW-5	2/5/2013	8.4	204	7.69	8.95	1.832	14.1
MW-6	2/7/2013	9.74	167.7	7.32	9.61	0.454	252.1
MW-7	2/5/2013	5.22	211.7	7.63	10.86	1.599	191
MW-9	2/5/2013	7.94	17.0	7.88	6.29	0.231	20.39
MW-12	2/5/2013	10.57	191.5	8.10	4.82	0.359	1,044
MW-13	2/7/2013	9.18	152.3	7.40	9.64	0.345	524.8
MW-14	2/7/2013	9.35	134.6	7.25	9.70	0.420	321.3
MW-15	2/6/2013	10.43	172.7	7.35	7.51	0.496	1,002
MW-16	2/5/2013	10.15	984	7.26	8.50	0.376	150.9
MW-17	2/6/2013	9.25	114.5	7.43	7.12	0.452	27.6
MW-18	2/6/2013	10.09	180.5	7.3	8.00	0.476	53.02
MW-19	2/6/2013	9.03	196.5	7.12	10.3	0.510	313.4
MW-20	2/6/2013	8.21	187.2	7.34	10.18	0.524	146.4
MW-21	2/7/2013	NR	NR	NR	NR	NR	NR
MW-22	2/6/2013	9.73	169.9	7.24	10.59	0.485	>4,000
MW-23	2/6/2013	9.38	90.0	7.48	6.67	0.472	254
PMW-3	2/5/2013	8.79	108.1	7.48	5.56	0.327	133.2

°C: degrees Centigrade
mV: milliVolts
pH: log of hydrogen ion concentration
mg/L: milligrams per liter
µS/cm: microSiemens per centimeter
NTU: Nephelometric Turbidity Units
NR: No record (field sheet misplaced)

5.2.3. Vertical Groundwater Profile Results

Continuous I_K data were collected during Waterloo^{APS} profiling, which are presented graphically, along with other groundwater data, in Appendix I. Two types of data were obtained at each sampling depth interval:

- Groundwater quality data obtained upon stabilization of parameters (see Appendix D); and
- Groundwater VOCs mobile laboratory analytical results (see Appendix E).

The I_K results are also depicted for the profiles located along the two transects in Figure 4, which also depicts stratigraphic correlations between the profiles, which are further discussed in Subsection 6.1. The groundwater VOCs mobile laboratory analytical results are also depicted with the I_K results in Figure 5, and are further discussed in Subsection 6.3.1.

5.2.4. Groundwater Treatability Testing Results

Under Subtask 6A, Stone collected geochemical groundwater samples from five intervals / locations to support the evaluation of the treatability of the dissolved groundwater plume. The monitoring wells sampled under

Subtask 6A were determined following the vertical groundwater profiling program, based on the extent and distribution of the groundwater TCE plume determined using vertical groundwater profiling under Subtasks 5A and 5C. Two types of data were obtained at each sampling depth interval:

- Groundwater quality data obtained upon stabilization of parameters summarized in Table 14 and included in their entirety in Appendix C; and
- Groundwater geochemical analytical fixed laboratory analytical results (Appendix H).

Table 14: Summary of Geochemical Sample Groundwater Quality Parameters

Sample ID	Date	Temperature (°C)	Oxidation-Reduction Potential (mV)	pH	Dissolved Oxygen (mg/L)	Specific Conductivity (µS/cm)	Turbidity (NTU)
WP04-76.0-GW	2/26/2013	11.14	28.1	7.16	8.07	465	4557
WP05-95.0-GW	2/828/2013	9.49	-110.7	7.80	0.13	578	414
WP03-95.0-GW	3/5/2013	7.76	-143.7	6.46	0.39	540	55.09
WP02-105.0-GW	3/7/2013	8.66	72.0	7.51	4.21	389	385.1
MW26-105.0-GW	4/24/2013	13.16	-73.0	8.75	0.85	817	40.3

°C: degrees Centigrade
mV: milliVolts
pH: log of hydrogen ion concentration
mg/L: milligrams per liter
µS/cm: microSiemens per centimeter
NTU: Nephelometric Turbidity Units

5.2.5. Hydraulic Conductivity Testing Results

On April 22, 2013, Stone performed hydraulic conductivity testing on four (4) monitoring wells, existing well MW-9, and new wells MW-24, MW-26, MW-27. The data were used to calculate hydraulic conductivities using Waterloo Hydrogeologic's *Aquifer Test Pro*, Version 3.5 software. Table 15 summarizes the hydraulic conductivity results for each well tested; the tabulated hydraulic conductivity data, including a graphical plot of the data, are included in Appendix J.

Table 15: Summary of Hydraulic Conductivity Testing Results

Location ID	Test ID	Hydraulic Conductivity (cm/s)	Mean Hydraulic Conductivity (cm/s)	Standard Deviation (cm/s)
MW-9	MW-9b	2.52×10^{-3}	2.48×10^{-3}	1.13×10^{-4}
	MW-9c	2.60×10^{-3}		
	MW-9d	2.33×10^{-3}		
MW-24	MW-24b	3.11×10^{-3}	3.06×10^{-3}	3.77×10^{-5}
	MW-24c	3.03×10^{-3}		
	MW-24d	3.03×10^{-3}		
MW-26	MW-26b	3.03×10^{-3}	2.69×10^{-3}	2.74×10^{-4}
	MW-26c	2.69×10^{-3}		
	MW-26d	2.36×10^{-3}		
MW-27	MW-27b	1.05×10^{-4}	1.91×10^{-4}	1.31×10^{-4}
	MW-27c	1.64×10^{-4}		
	MW-27d	3.15×10^{-4}		
	MW-27f	1.55×10^{-5}		
	MW-27g	4.06×10^{-4}		
	MW-27h	1.42×10^{-4}		

cm/s: centimeters per second

5.3. Location Survey Results

Stone's surveying subcontractor, C.T. Male Associates of Latham, NY determined the field elevations for the 16 profile locations and four monitoring wells installed during this investigation. The map coordinates for this project are referenced to the horizontal datum: New York State Plane Coordinate System (East Zone) Northing and Easting (coordinates in feet) and the North American Datum of 1983 (NAD83); and the North American Vertical Datum of 1988 (NAVD88). Table 16 summarizes the results of the survey.

Table 16: Summary of Survey Results

Location ID	Northing (feet)	Easting (feet)	Ground Elevation (ft amsl)	Measuring Point Elevation (ft amsl)
MW-24	1460450.188	628767.041	290.24	292.45
MW-25	1460314.528	629261.264	288.16	290.26
MW-26	1460185.685	628730.102	287.23	286.45
MW-27	1460275.101	628066.805	286.08	288.32
WP-01	1460699.583	628806.275	292.70	-
WP-02	1460614.981	628805.386	291.21	-
WP-03	1460520.026	628815.860	288.79	-
WP-04	1460825.909	628783.046	294.04	-
WP-05	1460421.505	628826.021	290.13	-
WP-06	1460974.101	628782.112	293.90	-
WP-07	1460331.867	628836.466	289.76	-
WP-08	1460244.655	628845.871	288.29	-
WP-09	1460658.488	628365.254	291.09	-
WP-10	1460425.528	628299.352	287.29	-
WP-11	1460536.548	628352.455	290.31	-
WP-12	1460146.921	628813.171	287.31	-
WP-13	1460048.342	628766.894	287.69	-
WP-14	1460131.122	628225.952	286.37	-
WP-15	1460277.261	628074.979	285.86	-
WP-16	1460316.596	629255.836	287.92	-

ft amsl: Feet above mean sea level.

5.4. Investigation Derived Waste Results

Table 17 summarizes the determination of suitability for onsite disposal for IDW generated during the investigation. Due to limited capacity of soil borings to receive soil cuttings, some soil cuttings which met criteria for onsite disposal were nonetheless disposed of offsite as non-hazardous waste. The mobile laboratory analytical results for these samples are provided in Appendix E.

Table 17: Summary of Investigation Derived Waste Sample Results

Sample ID	Appropriate for Onsite Disposal?	Rationale
Drums 1-6-IDW	No	Trichloroethene exceeds 5 µg/L NYDEC groundwater standard
Drums 7-12-IDW	No	Trichloroethene exceeds 5 µg/L NYDEC groundwater standard
Drums 13-18-IDW	No	Trichloroethene exceeds 5 µg/L NYDEC groundwater standard
Drums 19-24-IDW	No	Trichloroethene exceeds 5 µg/L NYDEC groundwater standard
Drums 28-30-IDW	No	Trichloroethene exceeds 5 µg/L NYDEC groundwater standard
Collective Purge-IDW	Yes	All analytes meet NYDEC groundwater standard
MW-24-IDW	Yes	All analytes meet NYDEC groundwater standard
MW-25-50.0-IDW	No	Trichloroethene exceeds 5 µg/L NYDEC groundwater standard
MW-25-75.0-IDW	Yes	All analytes meet NYDEC groundwater standard
MW-26-50.0-IDW	No	Trichloroethene exceeds 5 µg/L NYDEC groundwater standard
MW-26-75.0-IDW	Yes	All analytes meet NYDEC groundwater standard
MW-27-50.0-IDW	Yes	All analytes meet NYDEC groundwater standard
MW-27-75.0-IDW	No	Trichloroethene exceeds 5 µg/L NYDEC groundwater standard

µg/L: micrograms per liter
NYSDEC: New York State Department of Environmental Conservation

6. CONCEPTUAL SITE MODEL

In developing the CSM, the observations regarding Site background and environmental setting each have implications for understanding the nature and extent of contamination and potential remedial strategies. The following text summarizes the CSM, as modified from the previous CSM, included in Section 3 of the *Final ESI Report* (NYSDEC / GeoLogic, 2007).

6.1. Geology

The Site overlies the Great Flats Aquifer system. The thickest portion of the aquifer is near the Site, where the sand and gravel deposits are approximately 200 feet. The unconsolidated deposits beneath the Site include ice-proximal end moraine and esker gravel units which vary in thickness from less than a foot to more than 50 feet, and overlie basal till, which appears to act as an aquitard. There are several sub-facies with lateral and vertical variation in grain size present. These ice-proximal deposits filled the bedrock ravine beneath the Site and also appear to extend close to the ground surface beneath the apparent source area at the Site (NYSDEC / GeoLogic, 2007). The subsurface investigation performed in 2013 confirms the interbedded nature of the subsurface deposits in the vicinity of the TCE plume, and that they appear to range from two to three orders of magnitude in hydraulic conductivity. Figure 4 depicts the I_K profiles across the two transects, and demonstrates that in some cases, individual sand or silt lenses can be tracked 250 to 500 ft laterally. The glacial till layer was not encountered in any of the borings in the subsurface investigation, which extended as deep as 164 fbgs.

6.2. Hydrogeology

Based on the data from the February 2013 synoptic water elevation measurements, summarized in Table 18 and depicted in Figure 3, groundwater beneath the Site occurs at depths of approximately 65 to 70 fbgs and flows from east-northeast to west-southwest beneath the majority of the Site toward the Mohawk River. The Mohawk River represents the regional groundwater discharge point.

Table 18: Summary of Water Elevations, February 4, 2013

Well ID	Screened Interval (fbgs)	Water Level Measurement (fbToC)	Measuring Point Elevation (fAMSL)	Groundwater Elevation (fAMSL)
B-1	48 – 68	60.97	287.14	226.17
B-2	44.7 – 64.2	60.84	287.87	227.03
B-3	47.5 – 67.5	59.83	287.05	227.22
GEP-1	59.6 – 74.6	70.17	294.98	224.81
GEP-2	60.6 – 75.6	70.17	296.02	225.85
GEP-3	59.6 – 74.6	67.40	292.97	225.57
GEP-4	60.15 – 75.15	69.98	295.62	225.64
MW-1	62 – 77	73.12	293.20	220.08
MW-2	66.3 – 76.3	73.08	295.26	222.18
MW-3	65 – 75	70.10	289.37	219.27
MW-4	63.8 – 73.8	73.70	291.74	218.04
MW-5	62.5 – 72.5	71.86	290.11	218.25
MW-6	58.5 – 68.5	70.08	288.56	218.48

Well ID	Screened Interval (fbgs)	Water Level Measurement (fbToC)	Measuring Point Elevation (fAMSL)	Groundwater Elevation (fAMSL)
MW-7	61 – 71	68.66	289.26	220.60
MW-9	110 – 120	69.84	288.33	218.49
MW-10	65 – 80	67.40	293.18	225.78
MW-11	65 – 80	70.26	295.10	224.84
MW-12	65 – 80	71.12	292.62	221.50
MW-13	65 – 80	69.78	293.91	224.13
MW-14	65 – 80	70.02	296.20	226.18
MW-15	65 – 80	68.04	293.67	225.63
MW-16	55 – 70	65.72	288.33	222.61
MW-17	60 – 75	68.98	295.24	226.26
MW-18	60 – 75	69.20	295.24	226.04
MW-19	62 – 77	70.35	297.67	227.32
MW-20	63 – 78	73.51	301.55	228.04
MW-21	57 – 72	70.49	296.52	226.03
MW-22	63 – 78	71.49	298.91	227.42
MW-23	63 – 78	71.80	300.54	228.74
PMW-1	63 – 83	73.88	302.20	228.32
PMW-2	64 – 84	72.21	300.77	228.56
PMW-3	60.5 – 80.5	71.26	299.20	227.94
PMW-7	14.8 – 34.8	17.58	234.48	216.90
S-1D	Not found in available documentation	19.00	231.24	212.24
Well 6	Not found in available documentation	22.74	233.77	211.03

fbgs: feet below ground surface

fbToC: feet below top of casing

fAMSL: feet above mean sea level

The horizontal component of the hydraulic gradient ranges between 0.001 and 0.006 feet/foot, and is 0.004 in the vicinity of the PRB as planned in the ROD. The vertical component of the hydraulic gradient, measured at well couplet MW-6 / MW-9 was downward 0.004 feet/foot. The horizontal and vertical components are approximately equal, and the actual hydraulic gradient is 0.006 feet/foot, oriented southwestward and downward.

Previous estimates of hydraulic conductivity of the unconsolidated deposits beneath the Site were based on measurements from wells screened at the water table, 65 to 85 fbgs, and resulted in values between 1 and 100

centimeters per second (cm/sec) (NYSDEC / GeoLogic, 2007). Such wells can be problematic for hydraulic conductivity estimation, as they are subject to errors related to backfill zone drainage, which can lead to an overestimation of hydraulic conductivity. Additional hydraulic conductivity testing performed by NYSDEC in October 2012 yielded some results in the previous range, as well as results between 10^{-1} to 10^{-2} cm/sec for water table wells, and a result of 3.7×10^{-2} cm/sec for well MW-9, screened 30 ft below the water table. In contrast, hydraulic conductivity testing performed during this investigation was conducted exclusively in wells with screens at least 30 ft below the water table, in the same depth interval where the plume core is located. Stone's results, obtained using pneumatic slugs, ranged between 10^{-3} and 10^{-4} cm/sec. As indicated in the cross-section presented in Figure 4, the hydraulic conductivity (represented by the proportional I_K value) of the portion of the aquifer containing the TCE plume (between 100 and 120 fbgs) is lower than shallower intervals . The hydraulic conductivity values obtained by Stone for monitoring wells MW-24 and MW-26 are consistent with the silty sand observed in soil cores and confirmed by the grain size analytical results. The grain size analyses show that soils at all intervals contain at least 12.6% silt and clay. The shallower intervals (around 75 fbgs) contain a greater amount of coarser material than the deeper intervals (85 to 105 fbgs), which is consistent with higher hydraulic conductivities noted at the shallower depths. But neither of these soil types is consistent with hydraulic conductivities greater than 10^{-2} cm/sec, which suggests that the higher values recorded previously were biased high.

Based on a hydraulic gradient of 0.001 to 0.006 ft/ft, effective porosity of approximately 40%, and hydraulic conductivities between 10^{-2} and 10^{-4} cm/sec, the range of Darcy's Law estimates of groundwater velocities are between 8.6×10^{-3} ft/day and 5.2 ft/day.

6.3. Contaminant Distribution

The available groundwater data indicate the Site is occupied by east-west trending groundwater plumes of carbon tetrachloride (CT), 1,1,1-TCA, PCE, and TCE. The suite of groundwater contaminants present across the width of the plumes varies systematically, as follows:

- The southern side of the plumes contains solely TCE, with no breakdown products.
- The center of the plumes contain equivalent amounts of TCE and PCE, modest concentrations of breakdown products, including 1,1-dichloroethene, cis-1,2-dichloroethene, as well as a smaller amount of 1,1,1-TCA and breakdown products (e.g., 1,1- dichloroethane (DCA)) and CT.
- The northern side of the plumes contains primarily CT.

This distribution of contaminants is an illustration of four separate, comingled plumes, with separate sources, discussed in detail in the following subsections.

6.3.1. Trichloroethene Plume

On the DLA/DNSC property, the highest groundwater TCE concentrations (up to 800 ppb) historically have been detected in monitoring well GEP-2. Offsite, TCE has been consistently detected in out-of-service residential water supply wells at concentrations ranging from 50 to 100 µg/L. Further offsite, trace levels (less than 1 µg/L) of TCE have periodically been detected in the City of Schenectady and the Town of Rotterdam municipal well fields. The CT plume is located to the north of the TCE plume and also appears to extend offsite (NYSDEC / GeoLogic, 2007).

The highest soil TCE concentrations do not directly overlie the area where the highest TCE groundwater concentrations were detected. This may be explained by the Site stratigraphy, the vadose zone being nearly 70

feet thick, and the downward migration and transport of the TCE following its initial release (NYSDEC, GeoLogic, 2007). In particular, occasional fine-grained sand and silt lenses are present in the overburden deposits beneath the Site. As the TCE migrated under gravity flow downward through nearly 70 feet of unsaturated glaciofluvial deposits, the low-permeability fine sand and silt lenses may have caused lateral migration of the TCE down the dip/slope of the low-permeability lenses until reaching the boundary or the margins of the low-permeability lens. Once beyond the low-permeability lens, the contamination flowed vertically downward until reaching the water table. Once the TCE reached the water table, it would migrate in two directions: Diagonally downward in the direction of the actual hydraulic gradient (see Subsection 6.2) as a dissolved-phase plume in the direction of groundwater flow, and vertically downward. TCE would continue to migrate downward in a stepwise fashion, ultimately reaching the top of the till layer, unless depleted prior to reaching that depth. This step-wise migration of contamination would lead to a complicated plume structure, such is observed in the vertical groundwater profile data. Based on the observed plume structure, it appears that the TCE never reached the top of till. Where TCE comes to rest adjacent to lower-permeability materials, a portion typically slowly diffuses into the finer material, while the remainder dissolves into groundwater and is flushed away. Once no TCE remains in the coarser material, TCE will diffuse back into the lower conductivity material and continue to act as a source of dissolved groundwater contamination by the process of reverse matrix diffusion. Based on this conceptual model, and based on the length of time that has passed since TCE disposal at the site was terminated, it is unlikely that a substantial amount of TCE remains in the subsurface, and that declining reverse matrix diffusion is the primary source of continuing TCE groundwater impacts.

Further insight into the structure of the TCE plume was obtained during the pre-design investigation performed between February and May 2013. During the most recent sampling round, the highest groundwater concentrations of TCE were detected in the following monitoring wells: MW-22 (370 µg/L); GEP-1 (160 µg/L); MW-13 (150 µg/L); MW-18 (110 µg/L); MW-15 (98 µg/L); and GEP-2 (78 µg/L). The data from these wells have been used to determine the centerline of the dissolved TCE plume in groundwater, depicted in Figure 6. In addition, groundwater samples from wells B-1, B-2, and B-3 confirm that groundwater flow south of the apparent TCE source is southwesterly, and that the TCE plume does not extend to the south in this area. The installation of monitoring wells MW-25 and MW-26 during the PDI will provide additional monitoring locations along the south side of the TCE plume for future groundwater sampling rounds.

The addition of vertical groundwater profile data provides greater resolution of the distribution of TCE in groundwater. Figure 5 depicts TCE concentrations plotted upon the I_K profiles for the long and short transects. The groundwater vertical profile transects determined that the TCE plume extends from the water table downward to depths between 105 to 130 fbgs (40 to 60 ft below the water table), and is at least 1,000 ft wide (the investigation did not identify the northern boundary of the TCE plume). Groundwater concentrations within most of the plume range approximately one order of magnitude, from 20 to 200 µg/L, with contaminant concentrations gradually increasing with depth. The pre-design investigation also identified a core area of the plume, where concentrations of TCE in groundwater are another half-order of magnitude greater, ranging from 270 to 730 µg/L. The core of the TCE plume is located at the bottom of the plume at around 100 to 110 fbgs, and is approximately 250 ft wide where it was measured. Figure 5 depicts the currently understood extent of the TCE plume geometry in cross-section. Below the plume core, TCE concentrations drop to below detection limits within 10 vertical feet. Based on the structure of the plume defined by the vertical groundwater profiling data, particularly the increasing concentrations with depth and the plume core at the bottom of the plume, it

appears that sufficient mass of TCE was released to allow its migration through the groundwater column, and to have accumulated at some depth above the top of till north of Building 403.

A second, smaller concentration of TCE is identified at the shallowest interval of vertical profile WP-06. This concentration is aligned with the western PCE plume, and could be due to PCE degradation within that plume, rather than a separate TCE source, as TCE comprises only 50% of the plume.

Figure 7 depicts TCE concentrations plotted along both transects in a 3-dimensional view. Comparison of the depth of the plume core at the longer transect (90 to 100 fbgs) and the plume core at the shorter, more downgradient transect (115 to 130 fbgs) indicates that the plume core gets deeper relative to the water table long its length. This is not atypical, as dissolved contaminant plumes typically are depressed along their length as water percolates from above and displaces the plume downward. Such "diving" plumes are typically associated with a downward vertical component of the groundwater gradient, which is present at the Site. Comparison of the I_K logs with TCE concentrations (see Figure 5) shows that the plume core appears to be located within a relatively low-permeability layer, which becomes deeper at the downgradient transect location. In this scenario, a broader area may have been previously impacted at a greater concentration, but as the TCE source has become depleted, the zones of highest hydraulic conductivity have been more rapidly flushed, and those of lower hydraulic conductivity retain higher contaminant concentrations due to diffusion-limited mass transfer.

The lack of a distinct lens of low-concentration water above the TCE plume is also unusual. Nearly 0.25-mile downgradient of the presumed source area, one would expect precipitation which has percolated downward to the top of the plume should have accumulated as a lens on the top of the plume. However, the TCE concentrations are relatively low at the top of the plume and gradually increase with depth to the bottom of the plume, where they drop below detection limits within 10 vertical feet, which is somewhat consistent with the anticipated pattern.

6.3.2. Tetrachloroethene Plume

A bi-lobal PCE plume is indicated by the 2013 groundwater data, and is depicted in Figure 8. The distribution of PCE in groundwater suggests two separate historic releases, one coincident with the TCE source, and a second located to the north and west of the TCE source, coincident with the 1,1,1-TCA source apparent in the groundwater data. The presence of PCE in the vicinity of the TCE source may be due to trace concentrations (2 to 3%) of PCE in the TCE, or it may represent releases of both hazardous substances. PCE concentrations in the plume core at vertical groundwater profile locations WP-03 and WP-05 are less than 0.01% the TCE concentrations, possibly due to a nearly complete degradation of PCE to TCE at this location in the TCE plume.

6.3.3. 1,1,1-Trichloroethane Plume

A low concentration 1,1,1-TCA plume is indicated by the 2013 groundwater data, and is depicted in Figure 9. The distribution of 1,1,1-TCA in groundwater suggests a single source, coincident with the western TCE source. 1,1,1-TCA is not a breakdown product of PCE or TCE, and is thus suspected to be the result of a release of 1,1,1-TCA in the same area. 1,1,2-TCA and 1,1-DCA also appear at trace concentrations in this plume.

6.3.4. Carbon Tetrachloride Plume

A CT plume is indicated by the 2013 groundwater data, and is depicted in Figure 10. The distribution of CT in groundwater suggests a source located north and west of the PCE and 1,1,1-TCA source. The extent of the groundwater monitoring performed as part of the PDI does not provide data in the apparent CT source or the northwestern CT plume boundary, but previous investigations have identified a CT source located approximately 500 feet east of the eastern end of Building 201. The 2013 groundwater data are consistent with previous estimates of the CT plume extent.

6.4. Soil Vapor Migration

Based on a previous indoor air monitoring program, the presence of TCE at concentrations of approximately 50 µg/L in offsite groundwater was determined to not influence indoor air quality at the homes that directly overlie or that are near the TCE groundwater plume. Low levels of CT in the offsite groundwater plume to the northwest of the TCE groundwater plume, however, were found to influence both sub-slab and indoor air quality. Due to the presence of CT in both sub-slab and indoor air samples at two offsite residential properties, the owners of those properties were contacted regarding the installation of sub-slab mitigation systems. Although both property owners declined, follow-up indoor air monitoring was proposed to assess conditions over time, but has not been performed due to access issues (NYSDEC / GeoLogic, 2007). Groundwater vertical profile transects were not performed to further characterize the characteristics of the CT plume.

The CSM for soil vapor intrusion at the Site is that dissolved volatile hazardous constituents, based on their Henry's Law constants, partition preferentially to soil vapor above the groundwater plumes and moved vertically upward through the vadose zone via diffusion. Each individual VOC will partition into soil vapor proportional to its Henry's Law constant and its groundwater concentration. From this perspective, the groundwater plume orientations and hazardous constituent concentrations should be related to the location and constituents in soil vapor and indoor air, as the soil vapor diffuses outward from the plume. However, tenants in Buildings 201, 203, and 204 have used hazardous materials containing one or more of the COCs for the Site, which provide additional potential sources of COCs in indoor air. Further, the improper handling and disposal of such products could have resulted in a release to the soils beneath these buildings, which could be detected in soil vapor samples. The extent to which the groundwater plume orientations and hazardous constituent concentrations do not relate to the location and constituents in soil vapor and indoor air results may be a reflection of the influences of the alternate sources listed above.

The soil vapor intrusion pathway for onsite buildings was identified as a data gap in the ROD, and onsite soil vapor and indoor air sampling was also conducted as part of this scope of work. The results of this investigation were reported in the *Soil Vapor Intrusion Investigation Report* (Stone, 2013).

7. PRELIMINARY REMEDY DESIGN

7.1. Introduction

As described in Subsection 2.1, an objective of the pre-design investigation field program was to verify the location and dimensions of the selected remedy in the ROD and provide a preliminary design and cost estimate for that remedy. Further, as noted in Subsection 2.2, GSA and CENAE requested pre-design and cost estimates for two alternative PRB configurations to provide GSA a range of budgetary cost estimates for the ZVI PRB remedy. The following subsections describe the preliminary designs.

The ROD identified a ZVI PRB as the selected remedial alternative to contain dissolved VOCs at the Site. Section 6 of the ROD identifies the following summary of the remediation goals:

> *At a minimum, the remedy selected must eliminate or mitigate all significant threats to public health and/or the environment presented by the hazardous waste disposed at the Site through the proper application of scientific and engineering principles.*
>
> *The remediation goals for this Site are to eliminate or reduce to the extent practicable:*
>
> - *exposures of persons at or around the Site to VOCs in groundwater; and*
> - *the release of contaminants from groundwater beneath structures into indoor air through soil vapor intrusion.*
>
> *Further, the remediation goals for the Site include attaining to the extent practicable:*
>
> - *ambient groundwater quality standards; and*
> - *the air guidelines provided in the Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006.*

The preliminary ZVI PRB design described below will address exposures of persons at or around the Site to VOCs in groundwater, and will attain, to the extent practicable, ambient groundwater standards.

The ZVI PRB will treat the CVOCs in the TCE plume as the affected groundwater flows through the treatment zone of the PRB, which would limit migration of the plume to downgradient receptors. However, groundwater that has already migrated downgradient of the proposed PRB will continue to migrate offsite toward the Mohawk River. Groundwater monitoring both upgradient, downgradient, and within the treatment area will be required to evaluate the effectiveness of the PRB in reducing contaminant concentrations and protecting downgradient areas from further dissolved phase plume migration.

7.2. Laboratory Bench-Scale Test

SiREM Laboratory (SiREM), located in Guelph, Ontario, Canada, performed a laboratory bench-scale treatability column study, the results of which are summarized in the *Treatability Study Report* (SiREM, 2013), which is attached in Appendix K. The study was conducted to determine the effectiveness of the remedial technology (ZVI), determine the reaction rates to support the design of the PRB, determine the potential for fouling of the PRB over time, determine if there are any compounds in the groundwater that may cause premature passivation the ZVI, and compare the performance of two commercial ZVI products from separate manufacturers: ZVI product source CC-1190 from Connelly GPM (Connelly) of Chicago, Illinois, and ZVI product source 14D from Peerless Metal Powders (Peerless) of Detroit, Michigan. Both products had a particle size range from 0.15 to 1.7 millimeters (SiREM, 2013). Based on a comparison of their specification sheets (included in Appendix M), Connelly ZVI is a bit finer, slightly less dense, and has a different suite of trace metals than Peerless ZVI.

Groundwater from the Site was collected from monitoring well MW-24 on 3 March 2013 for use during the laboratory bench-scale treatability column study. Monitoring well MW-24 was installed immediately downgradient of the plume center identified in vertical groundwater profiles WP-03 and WP-06. The VOC concentrations in the groundwater sample were below the target concentrations, corresponding to the highest vertical groundwater profile sample TCE results, located at the 93.7-fbgs depth interval of profile WP-03 (730 µg/L). Groundwater was spiked by SiREM with PCE, TCE, cis-1,2-dichloroethylene (cis-1,2-DCE) and vinyl chloride (VC) to target concentrations of 50 parts per billion (ppb), 750 µg/L, 10 µg/L, and 5 µg/L respectively, to simulate Site conditions in the plume core under the worst-case scenario. The test was initiated by transferring spiked Site groundwater to the influent reservoir and pumping it into the columns. A flow velocity of approximately 1.6 feet per day was selected to allow the test to be completed within the target duration of seven weeks (SiREM, 2013).

The column test consisted of two columns (Connelly and Peerless) containing 100 percent granular ZVI materials. The ZVI was treated with a thickening agent to accurately simulate actual field conditions that will be used when injecting the ZVI. Each column was constructed of Plexiglas with a length of 1.64 feet and an internal diameter of 0.12 feet. Seven sampling ports (labeled A through G) were positioned vertically along the central axis of each column at distances of 0.08, 0.16, 0.33, 0.50, 0.66, 1.0 and 1.3 feet from the influent end. Each column was sampled for VOCs, pH, ORP, dissolved hydrocarbon gases, anions, cations, and alkalinity. Influent sampling ports were sampled on a weekly basis for VOCs starting with week zero, and sampling ports A through G and the effluent were sampled on a weekly basis starting at week one. A complete list of analyses with their respective sampling times can be found in the Treatability Study Report (SiREM, 2013).

At a nominal flow rate of 1.6 ft/day, approximately 43.1 pore volumes (PVs) and 47.5 PVs passed through the Connelly and Peerless columns respectively during the test. One PV corresponded to a residence time of approximately one day for each column. At the end of the test, the influent VOC concentrations were reduced to non-detect concentrations with a respective residence time as summarized in Table 19. As a result of complete dechlorination of PCE, TCE, cis-1,2-DCE and VC, approximately 10 µg/L of ethene and 218 µg/L of ethane were created in the Connelly column effluent and approximately 46 µg/L of ethene and 144 µg/L of ethane were created in the Peerless column effluent (SiREM, 2013).

Table 19: Column Study Residence Times to Achieve Full Dechlorination

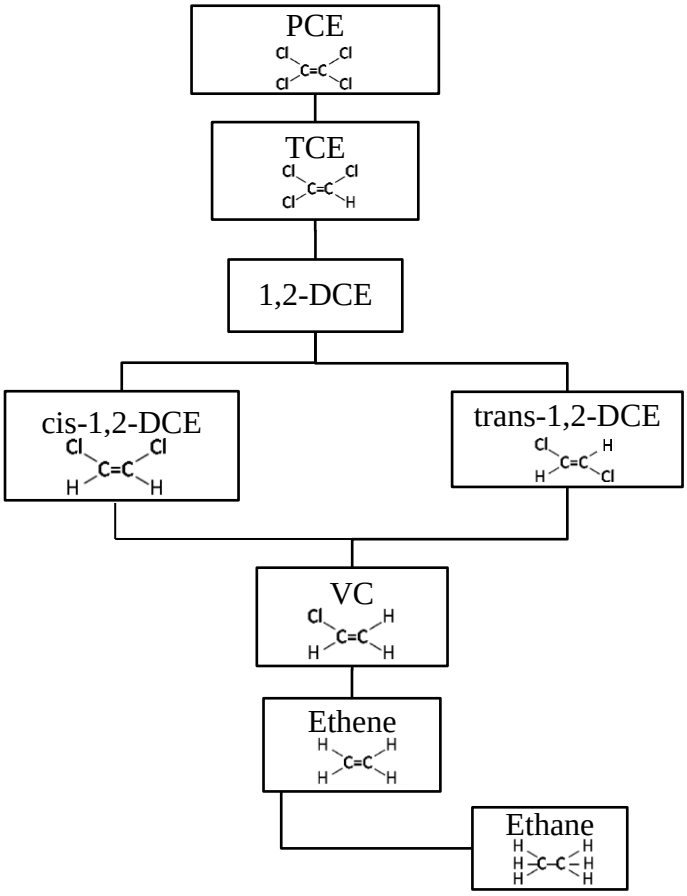
	Connelly		Peerless	
Compound	Influent Concentration (µg/L)	Residence Time (hours)	Influent Concentration (µg/L)	Residence Time (hours)
Tetrachloroethene	74	1.32	77	4.95
Trichloroethene	712	5.43	741	7.35
cis-1,2-Dichloroethene	10	2.63	10	14.69
Vinyl Chloride	6.9	1.32	6.5	7.35

µg/L – Micrograms per liter

Dechlorination of VOCs occurs through pathways, including reductive β-elimination, hydrogenolysis, hydrogenation, reductive α-elimination. Through the ZVI application, the major degradation pathways include hydrogenolysis and β-elimination. In the hydrogenolysis reaction, a chlorine atom is replaced by a hydrogen

atom, accompanied by the addition of two electrons (from the ZVI). Reductive β-elimination involves the release of two chlorine atoms and the formation of an additional carbon-carbon bond. The figure below presents the VOCs with their respective degradation pathways.

As shown above, PCE breaks down to TCE which degrades into cis-1,2-DCE and trans-1,2-DCE. Cis- and



trans-1,2-DCE break down to VC. PCE starts out as a double carbon bonded element with four chlorines; as the groundwater passes through the wall and reacts with the iron, PCE undergoes hydrogenolysis degradation. One chlorine atom will be replaced with a hydrogen atom and two electrons are attached forming TCE. TCE breaks down using the same pathway into cis-1,2-DCE and trans-1,2-DCE. Cis- and trans-DCE have the same chemical structure, except that the hydrogen atoms are attached to the carbon bond in different locations. The location of the hydrogen atoms gives the compounds different strengths; the cis-1,2-DCE structure is stronger, requiring more time to break down. From 1,2-DCE, hydrogenolysis occurs again forming VC which breaks down to ethene. The chemical structure of ethene is a double-carbon bond surrounded by four hydrogen atoms. Hydrogenolysis cannot occur anymore since all of the chlorine atoms have been used. Ethene is then broken down by reductive β-elimination to form a single-carbon bonded ethane. From the dechlorination pathways, kinetic rates to determine theoretical half-lives can be developed. Neither ethene nor ethane are considered groundwater contaminants by USEPA or NYSDOH.

Due to the complexity of the ZVI-induced dechlorination mechanisms, complex first-order rate equations were developed by SiREM to determine each analytes half-life. The half-life of a contaminant relates to the amount of time it will take to break down that product; one half-life theoretically reduces the concentration by 50 percent. The laboratory half-lives were obtained at a temperature of 12 degrees Celsius which approximates the field groundwater temperature at the Site, reducing the need to account for temperature correction when applying the half-lives for the PRB. Table 20 describes the required half-life for each of the VOCs, and shows the degradation process occurred faster in the Connelly ZVI than Peerless ZVI.

Table 20: Column Study Half-Lives

	Connelly		Peerless	
Compound	Influent Concentration (µg/L)	Half-life (hrs)	Influent Concentration (µg/L)	Half-life (hrs)
Tetrachloroethene	74	0.16	77	0.61
Trichloroethene	712	0.16	741	0.46
cis-1,2-Dichloroethene	10	0.41	10	2.8
Vinyl Chloride	6.9	0.22	6.5	1.1

µg/L – Micrograms per liter

7.3. Recommended PRB Location

The first preliminary design (Alternative 1) is a ZVI PRB that is approximately 250-ft long and 45 ft tall (approximately 65 fbgs to 110 fbgs) centered on the center of the TCE plume, a design consistent with the remedy selected in the ROD. Alternative 1 would meet the objectives of the ROD by mitigating exposures of persons at or around the Site to VOCs in groundwater, by targeting TCE concentrations greater than 250 µg/L. Based on the vertical groundwater profile data, Alternative 1 would treat approximately 49% of the total TCE mass in the plume, by treating approximately 26% of the cross-sectional area of the plume. Appendix L summarizes the effectiveness calculations. The endpoints of the ZVI PRB in Alternative 1 are as follows: North 1460608.34, East 628801.59 and North 1460355.04, East 628827.03 (New York State Plane Coordinates). Figure 11 depicts the proposed Alternative 1 ZVI PRB location.

The vertical groundwater profile data also show that the TCE plume that exceeds the 5 µg/L NYSDEC drinking water standard and USEPA MCL is nearly 1,000 feet wide (see Figure 5). Thus, as estimated across the cross-section of the TCE plume at the long transect (see Figure 12), a 250-ft ZVI PRB will leave approximately 52% of the mass and 72% of the area of the TCE plume untreated. Therefore, a second preliminary design (Alternative 2), an approximately 850-ft ZVI PRB, also centered on the center of the TCE plume, was also developed. Alternative 2 would create a zone across the plume immediately downgradient of the barrier that is at or below the TCE MCL. Over time, this zone would extend all the way to the property boundary (as the groundwater containing TCE downgradient of the barrier migrates downgradient). This alternative would nearly attain NYSDEC groundwater standards by targeting TCE concentrations greater than 50 µg/L. Based on the vertical groundwater profile data, Alternative 2 would treat approximately 95% of the total TCE mass in the plume, by treating approximately 92% of the cross-sectional area of the plume. Appendix L summarizes the effectiveness calculations. The endpoints of the ZVI PRB in Alternative 2 are as follows: North 1460949.32, East 628744.22 and North 1460100.12, East 628840.56 (New York State Plane

Coordinates). Figure 11 depicts the proposed Alternative 2 ZVI PRB location. Figure 12 shows the location and configuration of the ZVI PRB.

Both alternative PRB designs would be constructed using trenchless injection technology. Both ZVI PRBs will extend vertically from approximately 65 fbgs to an approximate average depth of 110 fbgs, as shown in Figures 11 and 12. Groundwater at the Site flows approximately in a southwesterly direction. In order to capture the maximum amount of contaminated groundwater through the PRB, it should be installed perpendicular to the direction of flow, as depicted in Figure 11.

7.4. Recommended PRB Thickness

Based on the calculated half-lives and anticipated influent groundwater concentrations, minimum residence times for each media type were calculated in order to achieve Federal drinking water MCLs and NYSDOH groundwater standards downgradient of the PRB. To achieve the objectives for all VOCs at the Site, the longest residence times, 2 hours for the Connelly column and 4 hours for the Peerless column, were used to determine the required wall thickness, as summarized in Table 21. These residence times can be compared to the laboratory bench-scale test actual residence times (Table 19) and used to calculate the required thickness of a ZVI PRB wall as well as the groundwater velocity in the vicinity of the proposed installation.

Table 21: Theoretical Minimum Field Required Residence Times

Compound	Anticipated Influent Concentrations (µg/L)	USEPA MCLs (µg/L)	NYSDOH GW Standard (µg/L)	Minimum number of Half-lives required	Connelly		Peerless	
					Half-life (hrs)	Design Residence Time (hrs)	Half-life (hrs)	Design Residence Time (hrs)
Tetrachloroethene	100	5	5	5	0.16	0.8	0.61	3.05
Trichloroethene	800	5	5	8	0.16	1.28	0.46	3.68
cis-1,2-Dichloroethene	10	70	3	0	0.41	0.41	2.8	2.8
Vinyl Chloride	10	2	2	0	0.22	0.66	1.1	3.3

USEPA Federal MCLs – U.S. Environmental Protection Agency Maximum Contaminant Levels
NYSDOH GW Standards - New York State Department of Health Groundwater Standards
µg/L – Micrograms per liter

As summarized in Tables 20 and 21 above the Connelly CC-1190 ZVI outperformed the Peerless ZVI product with respect to time to reach full dechlorination. Based on its superior performance, Connelly ZVI was used to perform further design calculations for both alternatives.

Using the greatest residence time obtained from the laboratory bench-scale test (5.43 hours; Table 19) and groundwater velocity determined through calculations based upon pneumatic slug tests performed during the PDI (8.6×10^{-3} to 5.2 ft/day or 1.0×10^{-1} to 62 inches/day, selecting1 inch per day as a conservative value best reflected in the data collected from the plume core, which was on the low side of the range of values), a calculated wall thickness of a 0.25-inch was determined to be the minimum effective thickness for a ZVI PRB; applying a safety factor of 20 percent resulted in a minimum calculated wall thickness of 0.30 inches. However, the minimum constructable thickness for a trenchless injection ZVI PRB is 3 inches. A 3-inch ZVI PRB at the Site with a groundwater velocity of 1 inch per day results in a residence time of 72 hours. A 3-inch ZVI PRB thus provides an additional 10-fold safety factor, which should be more than sufficient to treat the

VOC plume at the Site. As discussed in Subsection 6.2, the hydraulic conductivity of the formation varies vertically across the depth interval of the proposed PRB by one or two orders of magnitude. It is for this reason that additional aquifer testing using hydraulic pulse interference testing is necessary to confirm the validity of calculated hydraulic conductivity at the Site.

The VOCs at the Site have a maximum half-life of 0.41 hours. As described in Table 22, a residence time of 72 hours will allow the VOCs to undergo a minimum of 175 half-lives while passing through the ZVI PRB. This is expected to result in concentrations downgradient of the ZVI PRB below analytical detection limits, and within the performance objectives.

Table 22: Field Anticipated Half-Life Cycles

Compound	Anticipated Influent Concentration (µg/L)	Half-life (hrs)	Designed Residence Time (hours)	Number Half-lives
Tetrachloroethene	100	0.16	72	450
Trichloroethene	800	0.16		450
cis-1,2-Dichloroethene	10	0.41		175.6
Vinyl Chloride	10	0.22		327.3

µg/L – Micrograms per liter

7.5. Estimated PRB Performance

Based on previous research, inorganic composition of the treated groundwater can influence the reactivity of commercial granular ZVI PRB materials. Fouling can consist of mass accumulating in the ZVI PRB to reduce porosity causing groundwater to then flow around the wall, passivation of the zero valent iron reducing treatment effectiveness, or coating of the zero valent iron, which also reduces its ability to react. Most of these effects are related to long-term performance. Based on the results of the laboratory bench-scale test, passivation constituents or constituents that can coat the ZVI were not detected in high enough concentrations to impact the performance of the ZVI PRB. Therefore, evaluation of changes in inorganic chemistry is a crucial component in the design considerations for a ZVI PRB. Samples from the column influent and effluent were collected at week zero and week seven of the test. Inorganic chemical concentration data and inorganic chemistry results are included in SiREM's *Treatability Study Report*, found in Appendix K.

The anticipated lifespan for the ZVI PRB is approximately 30 years. During the column test, SiREM evaluated the possible mineral precipitates and their potential effect on the ZVI PRB. Iron corrosion reactions promote the reductive dechlorination reactions, but at the same time are sources of ferrous iron and alkalinity. Because no dissolved iron was detected in the column effluents, iron hydroxides are expected to form throughout a PRB. However, because these hydroxides ultimately transform to magnetite, which is electronconducting, they do not substantially reduce the reactivity of the iron and the rate of formation is not expected to cause a significant decline in permeability over time. Based on the observed levels of calcium and carbonate in Site groundwater, carbonate precipitation on ZVI grains is expected to be the main process influencing the ZVI longevity in PRB at the Site. While inorganic precipitates (mostly iron oxyhydroxides and carbonates) will form over time in a ZVI PRB at the Site, their impact will be proportional to the groundwater velocity, and it is anticipated that a ZVI PRB designed based on the cVOC degradation rates from this column test, including a reasonable safety factor, would be able to last for an extended time period without the need for rehabilitation (SiREM, 2013).

Additionally, silicon was present in the column influent and decreased significantly in the column effluent. Silica is thought to precipitate or adsorb on the surface of the ZVI grannual surfaces, which may lead the formation of a silica film or gel on the surface of the ZVI grannuals, hindering the cVOC access to the reaction sites (SiREM, 2013).

Based on the available data, total dissolved solids in groundwater are relatively low. Even with the low total dissolved solids, formation of mineral precipates are still expected. Based on that, the ZVI PRB will be designed with a factor of safety to account for the reduced effectiveness over time.

7.6. Estimated PRB Design Parameters

Two PRB designs were developed based on different cleanup objectives. Alternative 1 consists of a 3-inch thick wall approximately 250 feet in length centered on the plume, as required by the ROD, to treat groundwater with TCE concentrations up to 250 µg/L. Alternative 2 consists of a 3-inch thick wall approximately 850 feet in length to treat groundwater with TCE concentrations up to 50 µg/L.

Table 23 summarizes the conceptual design criteria for the two alternative PRBs evaluated for the Site.

Table 23: Design Alternatives

Constraint	Alternative 1	Alternative 2
Product	CC-1190 Connelly ZVI	
Product Density (pounds per cubic foot)	160	
Length (feet)	250	850
Thickness (inches)	3	
Depth (feet below ground surface)	65 to 110	
Wall Area (square feet)	11,250	38,250
Wall Volume (cubic feet)	2,813	9,563
ZVI Required (tons)	225	765
Location (see Figure11)	Between WP-01 and WP-07	Between WP-06 and WP-13
Targeted TCE Concentrations	>250 ppb	>50 ppb
Orientation (see Figure11)	Perpendicular to groundwater flow	

8. REFERENCES

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FIGURES

Figure 1: Location Map

Figure 2: Site Map

Figure 3: Groundwater Monitoring Network Map with February 2013 Groundwater Elevations

Figure 4: Index of Conductivity Profiles for Long and Short Transects with Stratigraphic Correlations

Figure 5: Index of Conductivity Profiles and Vertical Groundwater Profile Trichloroethene Results Plume Cross-Section

Figure 6: Trichloroethene Groundwater Plume Map

Figure 7: Trichloroethene Groundwater Plume: Perspective View

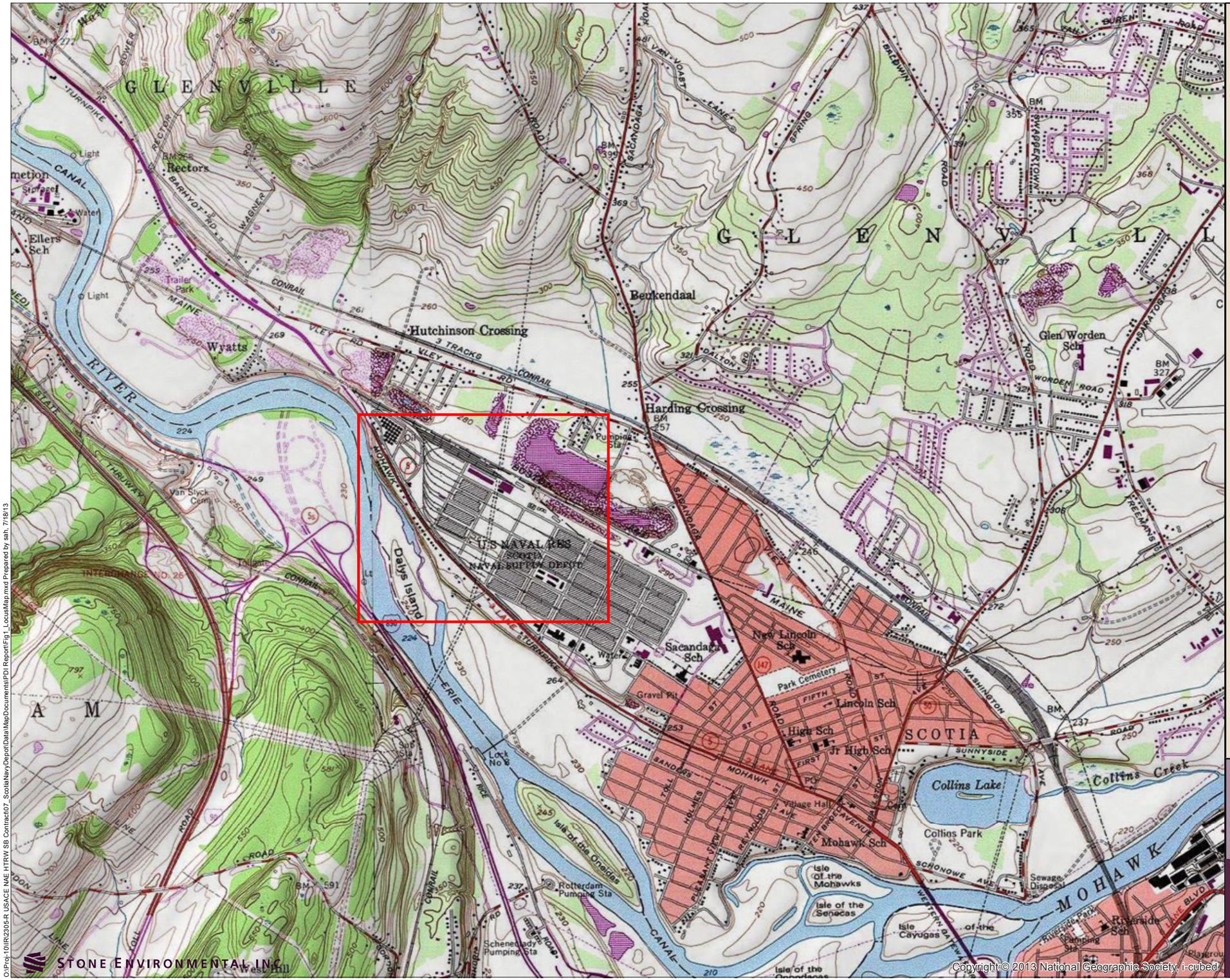
Figure 8: Tetrachloroethene Groundwater Plume Map

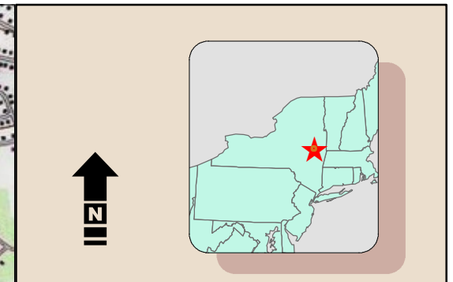
Figure 9: 1,1,1-Trichloroethane Groundwater Plume Map

Figure 10: Carbon Tetrachloride Groundwater Plume Map

Figure 11: Permeable Reactive Barrier Wall Locations: Map View

Figure 12: Permeable Reactive Barrier Wall Locations: Perspective View





Map References:

Projection: NY State Plane
Horizontal Datum: North American Datum of 1983

Locus Map

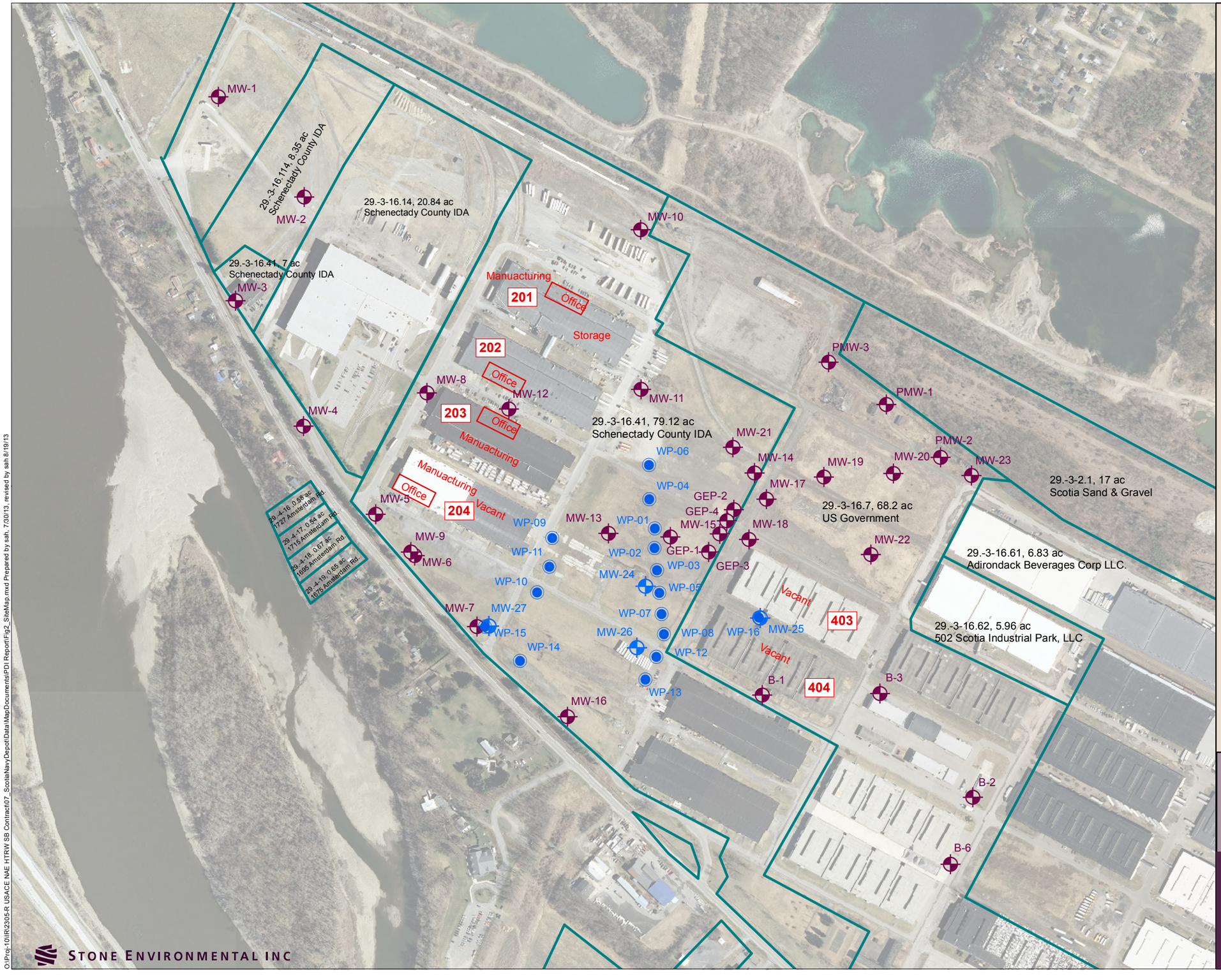
FIGURE 1

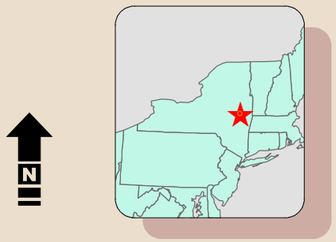
Pre-Design Investigation Report

Scotia Navy Depot
Scotia, NY

STONE ENVIRONMENTAL INC.

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0 200 400 600 Feet

Legend

- Waterloo Profiles Advanced February & March 2013
- Monitoring Wells Installed February & March 2013
- Monitoring Wells Installed Prior to February 2013
- Property Lines

Map References:

2010 Orthoimagery of Schenectady County, NYS Digital Orthoimagery Program (NYSDOP)

Projection: NY State Plane
Horizontal Datum: North American Datum of 1983

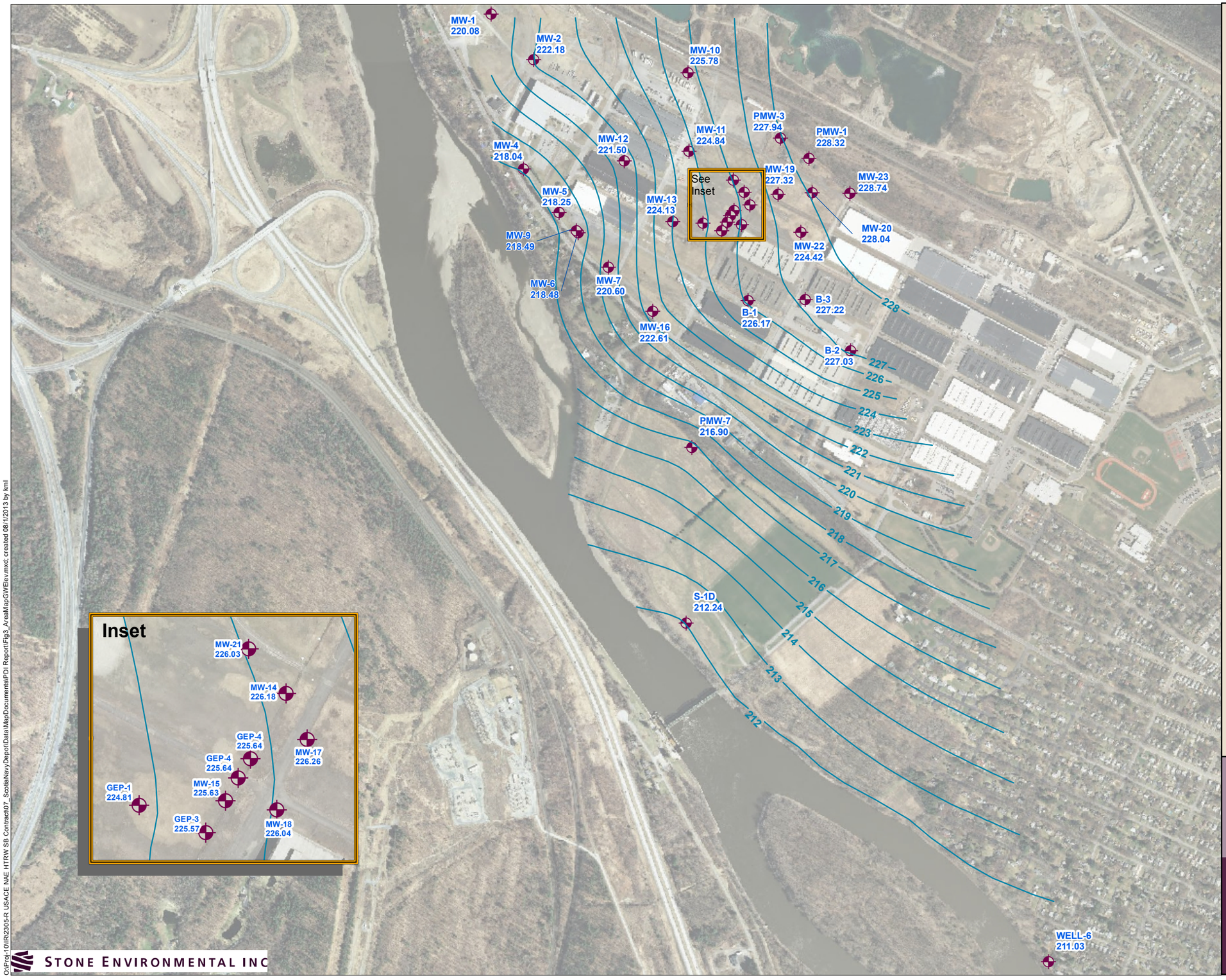
Site Map

FIGURE 2

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Scotia, NY

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N

0 500 1,000 1,500 Feet

Legend

Monitoring Well with Groundwater Elevation (Feet) Measured February 4, 2013

Groundwater Equipotential Contour *(Elevation in Feet)*

Sources: Data Results, Stone Environmental (2013)

Monitoring Well Network Map with February 4, 2013 Groundwater Elevations

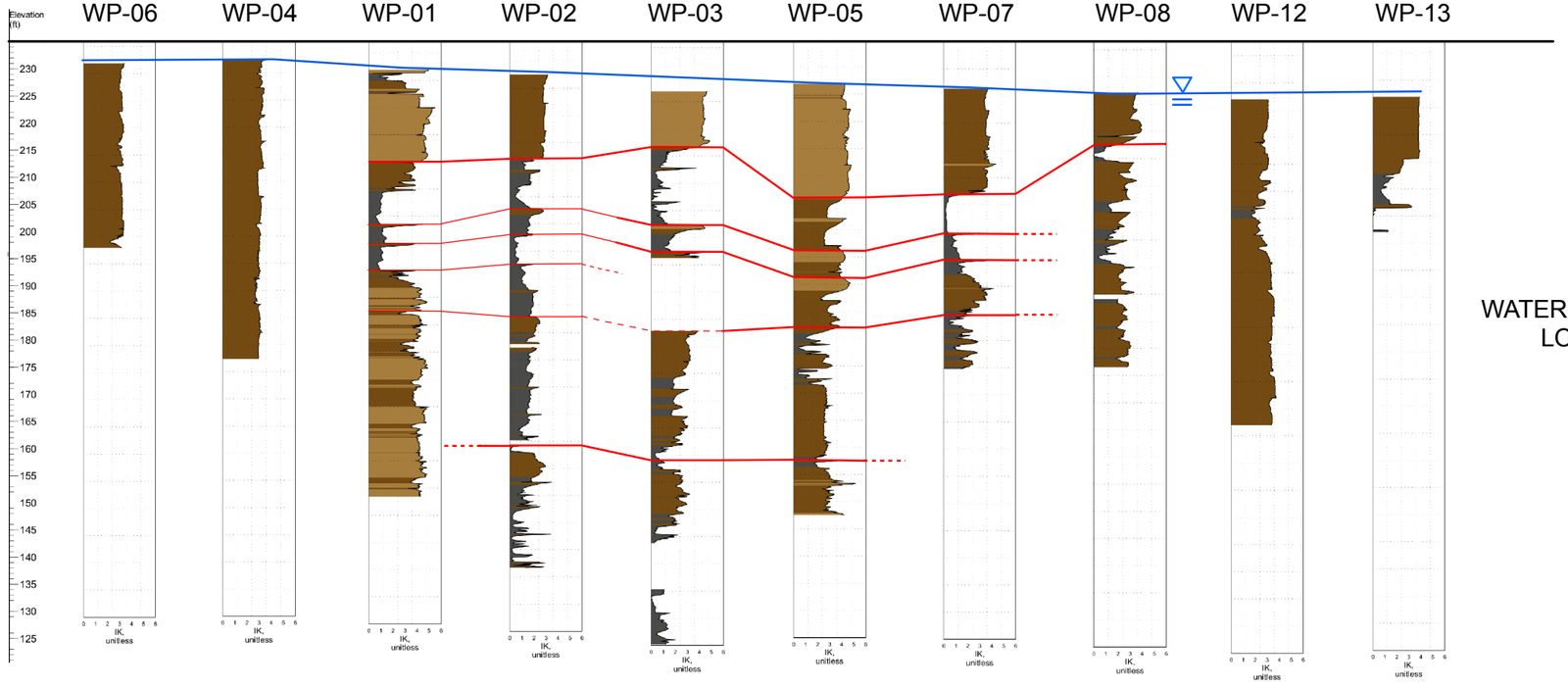
FIGURE 3

Pre-Design Investigation Report

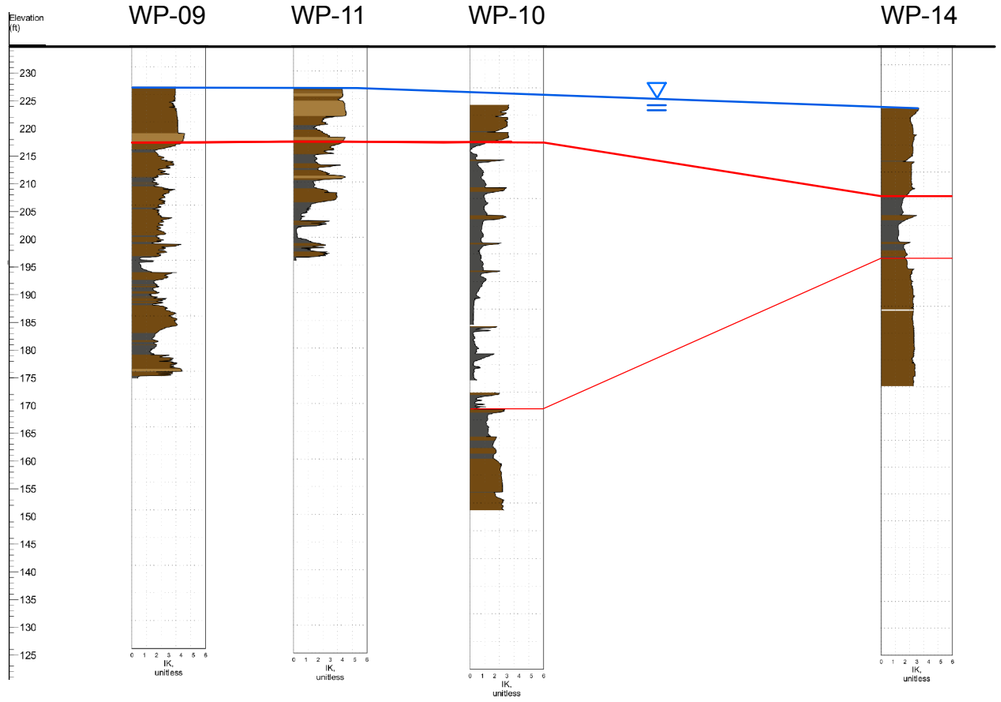
Scotia Navy Depot
Scotia, NY

STONE ENVIRONMENTAL INC

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WATERLOO$^{APS\ TM}$ PROFILES
LONG TRANSECT



WATERLOO$^{APS\ TM}$ PROFILES
SHORT TRANSECT

Legend

- Water Table (Approximate)
- I_k Scale (unitless)
  - 0 to 0.1
  - 0.1 to 2
  - 2 to 4
  - 4 to 6
  - >6
- Possible Lateral Correlation of I_k Features
- Likely Lateral Correlation of I_k Features
- Uncertain Correlation of I_k Features

Source: Waterloo$^{APS\ TM}$ Results, Stone Environmental (2013)

Elevations are in feet.
Vertical Datum: NAVD88

Index of Hydraulic Conductivity (I_k) Profiles with Stratigraphic Correlations

FIGURE 4

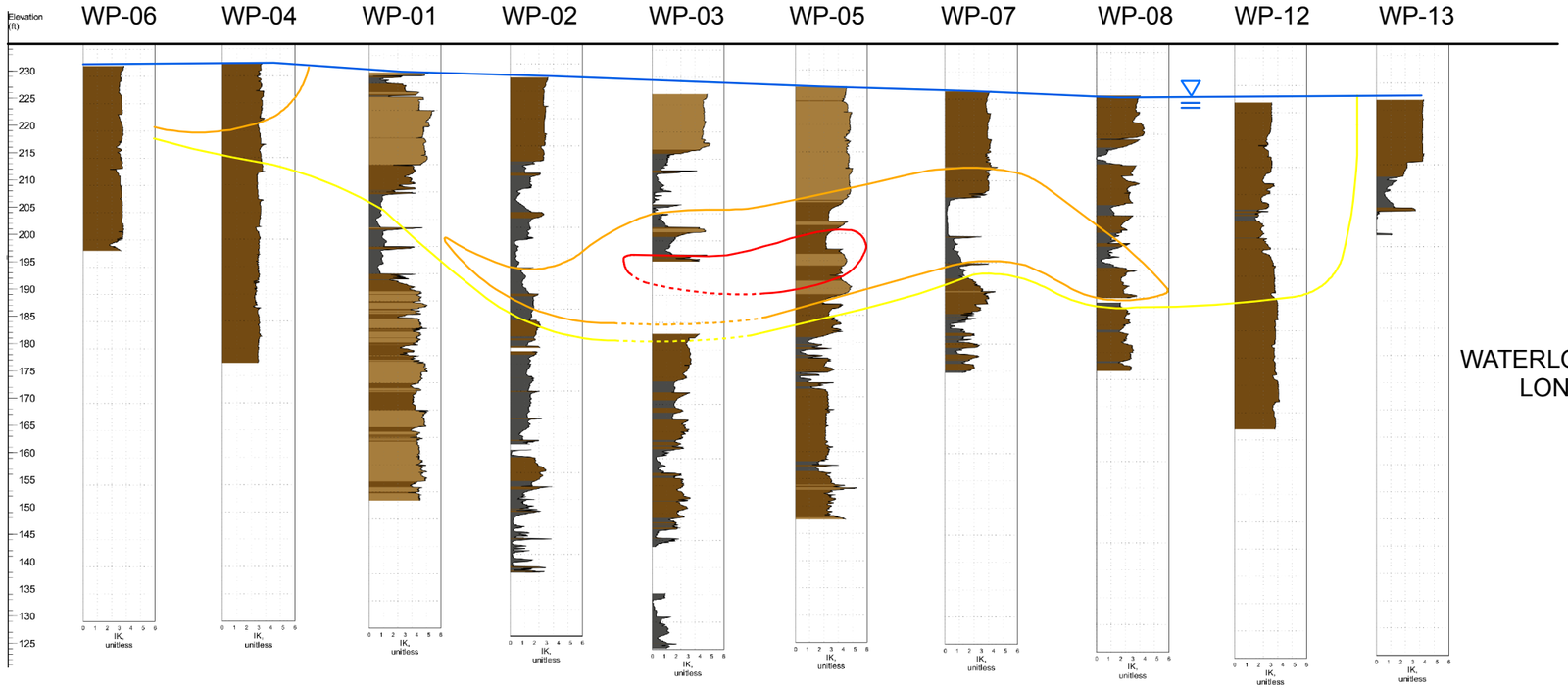
Pre-Design Investigation Report

Scotia Navy Depot
Scotia, NY

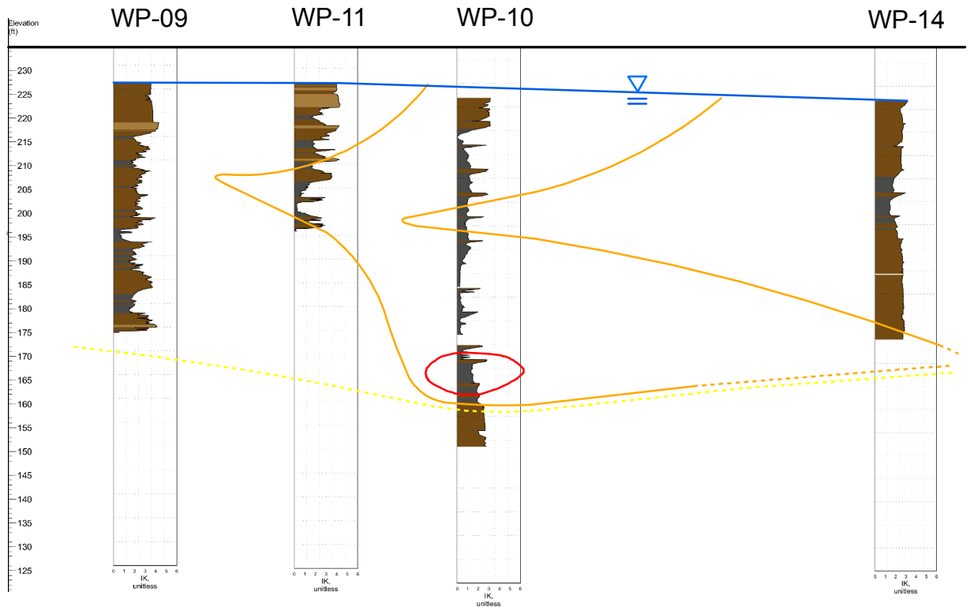
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Waterloo APS™ ADVANCED PROFILING SYSTEM

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WATERLOO$^{APS\ TM}$ PROFILES
LONG TRANSECT



WATERLOO$^{APS\ TM}$ PROFILES
SHORT TRANSECT

Legend

Water Table (Approximate)

I_k Scale (unitless)

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

TCE Concentration Isolines

- 250 µg/L
- 100 µg/L
- 5 µg/L

Source: Waterloo$^{APS\ TM}$ and MobiLab^{TM} Analytical Results, Stone Environmental (2013)

Elevations are in feet.
Vertical Datum: NAVD88

Index of Hydraulic Conductivity (I_k) Profiles with Trichloroethene (TCE) Plume Cross-Section

FIGURE 5

Pre-Design Investigation Report

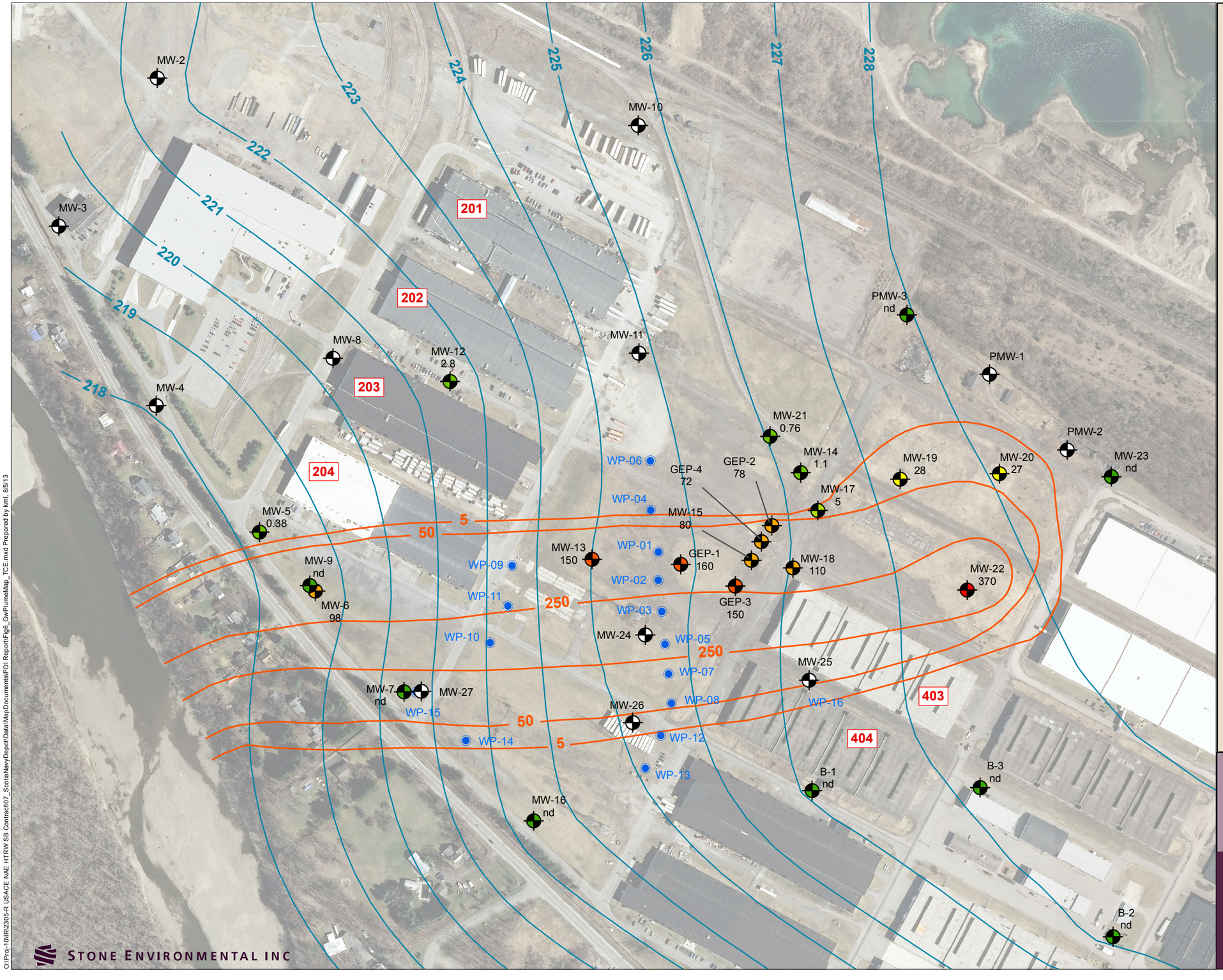
Scotia Navy Depot
Scotia, NY

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Waterloo APS™ ADVANCED PROFILING SYSTEM

MobiLab™ DEFENSIBLE REAL-TIME ANALYTICS

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Legend

Groundwater Contour with Elevation in Feet

Waterloo Profiles

Monitoring Wells

TCE Concentration (µg/L)

- Non-detect (nd)
- 0.38 to 2.80 µg/L
- 2.81 to 5.00 µg/L
- 5.01 to 28.00 µg/L
- 28.01 to 110.00 µg/L
- 110.01 to 160.00 µg/L
- 160.01 to 370.00 µg/L
- Not Sampled

February 2013 Groundwater Plume Isopleths (µg/L)

Trichloroethene (TCE)

Map References:

2010 Orthoimagery of Schenectady County, NYS Digital Orthoimagery Program (NYSDOP)

Projection: NY State Plane
Horizontal Datum: North American Datum of 1983

Groundwater Trichloroethene (TCE) Plume Map

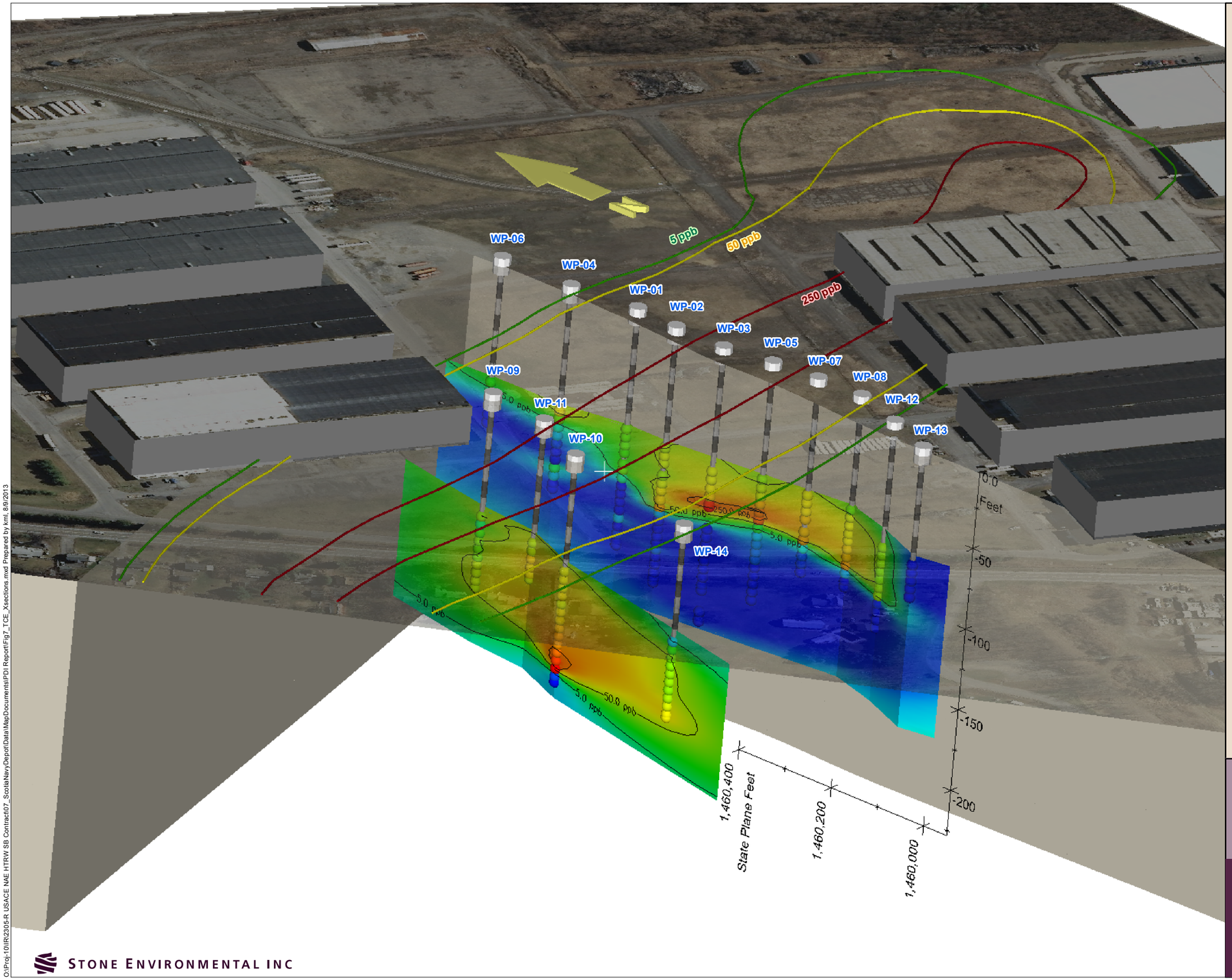
FIGURE 6

Pre-Design Investigation Report

Scotia Navy Depot
Scotia, NY

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Legend

Trichloroethene

- 730 ppb
- 300 ppb
- 100 ppb
- 30 ppb
- 10 ppb
- 3 ppb
- 1 ppb
- 0.3 ppb
- 0.1 ppb
- 0.06 ppb

Map References:

2010 Orthoimagery of Schenectady County,
NYS Digital Orthoimagery Program (NYSDOP)

Projection: NY State Plane
Horizontal Datum: North American Datum of 1983

Trichloroethene Groundwater Plume Map: Perspective View

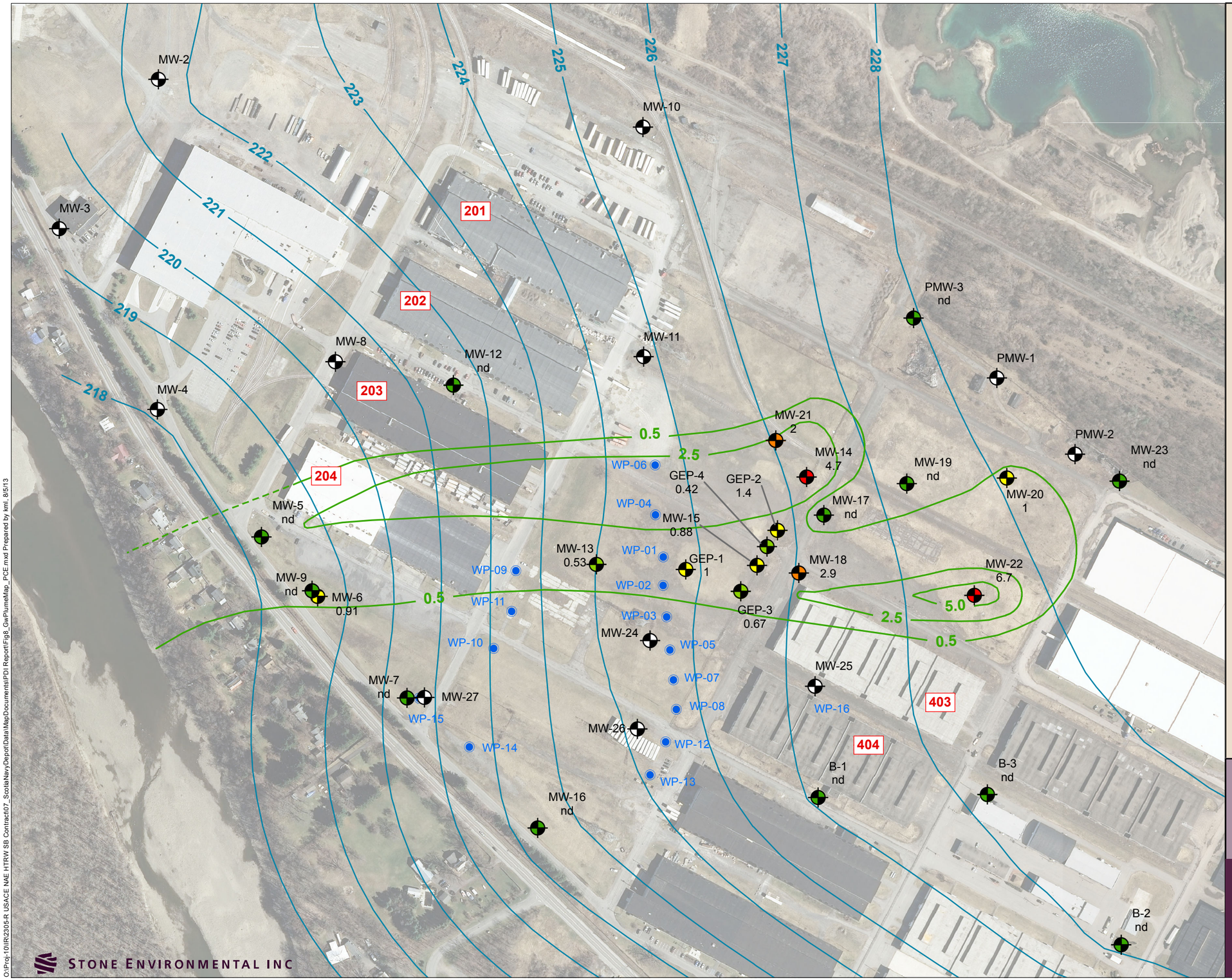
FIGURE 7

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Scotia Navy Depot
Scotia, NY

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Legend

Groundwater Contour with Elevation in Feet

Waterloo Profiles

Monitoring Wells

PCE Concentration (µg/L)

- Non-detect (nd)
- 0.01 to 0.67 µg/L
- 0.68 to 1.40 µg/L
- 1.41 to 2.90 µg/L
- 2.91 to 6.70 µg/L
- Not Sampled

February 2013 Groundwater Plume Isopleths (µg/L)

Tetrachloroethene (PCE)

Map References:

2010 Orthoimagery of Schenectady County, NYS Digital Orthoimagery Program (NYSDOP)

Projection: NY State Plane
Horizontal Datum: North American Datum of 1983

Groundwater Tetrachloroethene (PCE) Plume Map

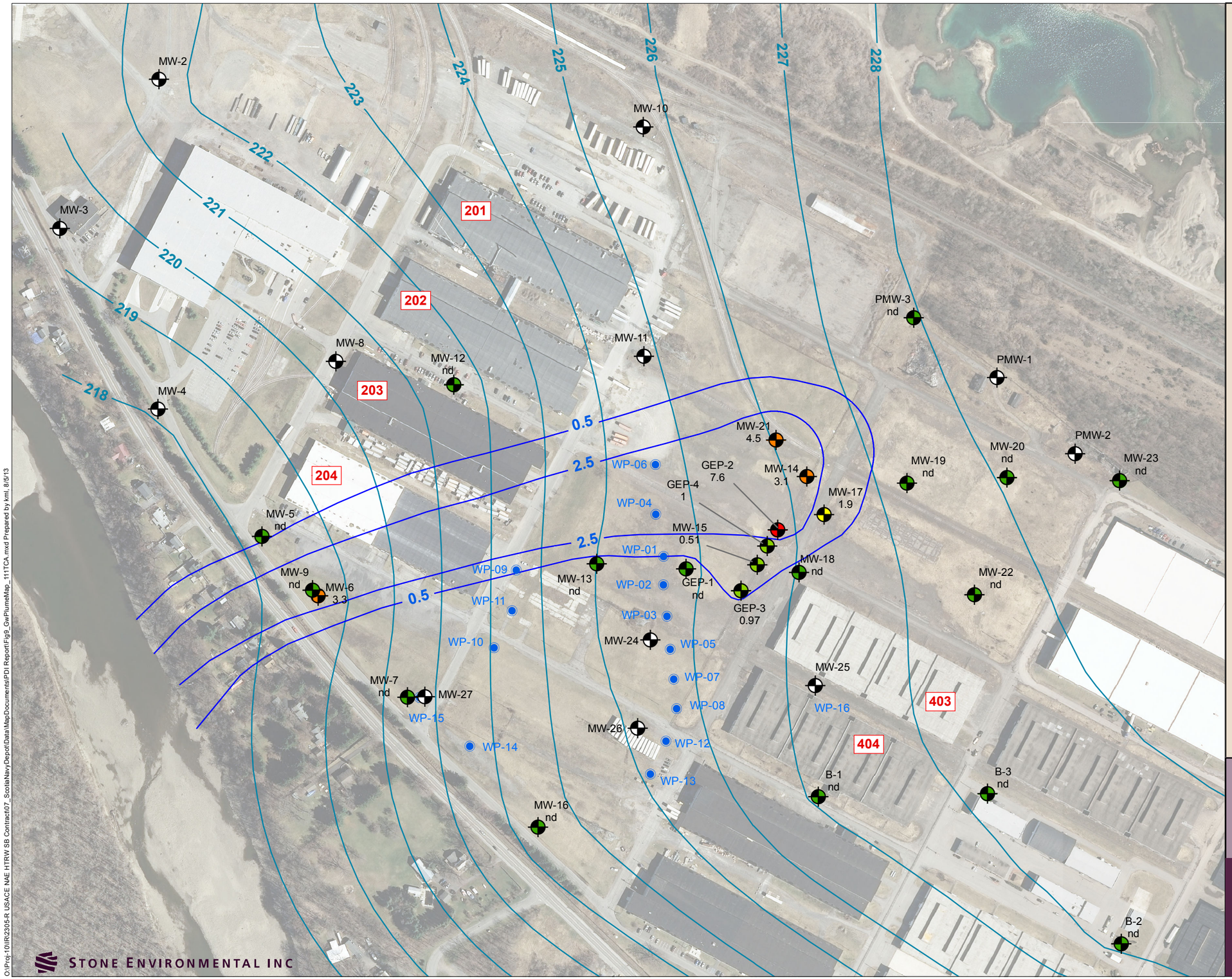
FIGURE 8

Pre-Design Investigation Report

Scotia Navy Depot
Scotia, NY

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N

0 200 400 600 Feet

Legend

Groundwater Contour with Elevation in Feet

Waterloo Profiles

Monitoring Wells

1,1,1 - TCA Concentration (µg/L)

- Non-detect (nd)
- 0.01 to 1.00 µg/L
- 1.01 to 1.90 µg/L
- 1.91 to 4.50 µg/L
- 4.51 to 7.60 µg/L
- Not Sampled

February 2013 Groundwater Plume Isopleths (µg/L)

- 1,1,1-Trichloroethane (1,1,1-TCA)

Map References:

2010 Orthoimagery of Schenectady County, NYS Digital Orthoimagery Program (NYSDOP)

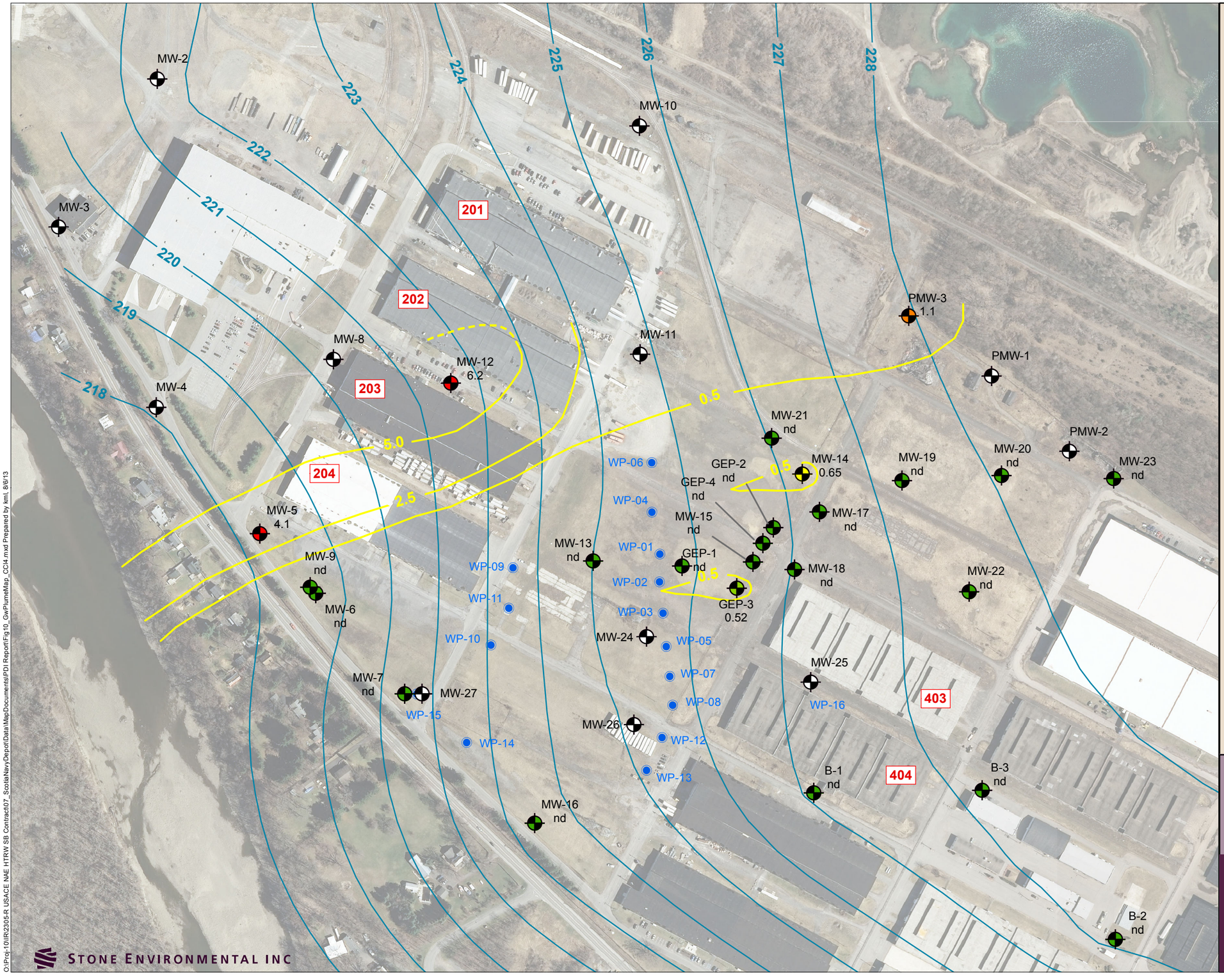
Projection: NY State Plane
Horizontal Datum: North American Datum of 1983

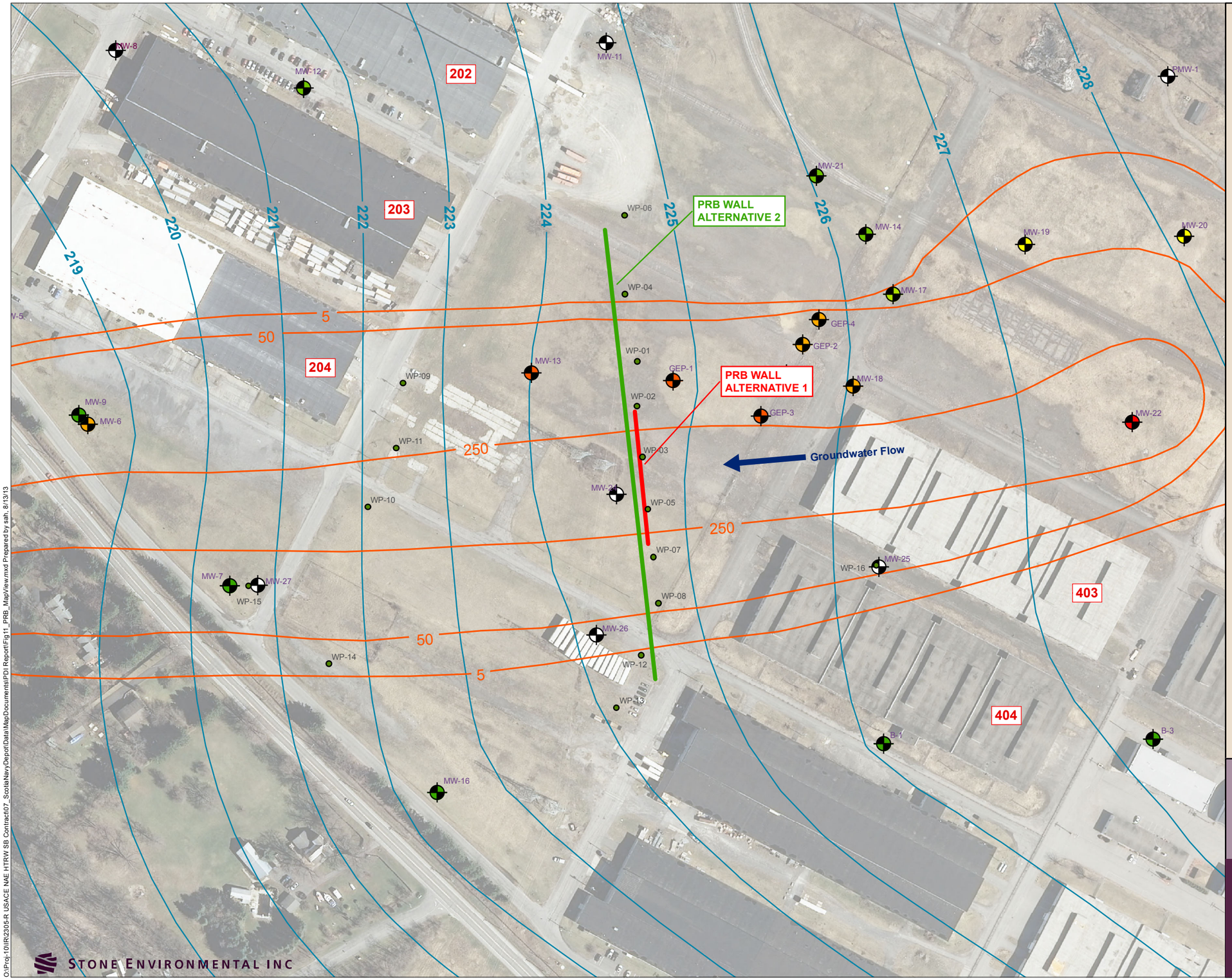
Groundwater 1,1,1-Trichloroethane (1,1,1-TCA) Plume Map

FIGURE 9

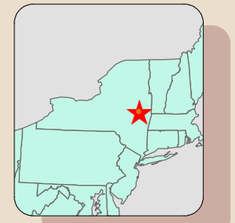
Pre-Design Investigation Report

Scotia Navy Depot
Scotia, NY


MW-2
MW-3
MW-4
MW-5
4.1
MW-6
nd
MW-7
nd
MW-8
MW-9
nd
MW-10
MW-11
MW-12
6.2
MW-13
nd
MW-14
0.65
MW-15
nd
MW-16
nd
MW-17
nd
MW-18
nd
MW-19
nd
MW-20
nd
MW-21
nd
MW-22
nd
MW-23
nd
MW-24
MW-25
MW-26
MW-27
PMW-1
PMW-2
PMW-3
1.1
GEP-1
nd
GEP-2
nd
GEP-3
0.52
GEP-4
nd
B-1
nd
B-2
nd
B-3
nd
WP-01
WP-02
WP-03
WP-04
WP-05
WP-06
WP-07
WP-08
WP-09
WP-10
WP-11
WP-12
WP-13
WP-14
WP-15
WP-16
201
202
203
204
403
404
218
219
220
221
222
223
224
225
226
227
228
0.5
2.5
5.0
0.5
0.5
N
0
200
400
600 Feet
Legend
Groundwater Contour with Elevation in Feet
Waterloo Profiles
Monitoring Wells
Carbon Tetrachloride Concentration (µg/L)
Non-detect (nd)
0.01 to 0.52 µg/L
0.53 to 0.65 µg/L
0.66 to 1.10 µg/L
1.11 to 6.20 µg/L
Not Tested
February 2013 Groundwater Plume Isopleths (µg/L)
Carbon Tetrachloride
Map References:
2010 Orthoimagery of Schenectady County, NYS Digital Orthoimagery Program (NYSDOP)
Projection: NY State Plane
Horizontal Datum: North American Datum of 1983
Groundwater Carbon Tetrachloride Plume Map
FIGURE 10
Pre-Design Investigation Report
Scotia Navy Depot
Scotia, NY
STONE ENVIRONMENTAL INC
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N

0 100 200 300 Feet

Legend

Groundwater Contour with Elevation in Feet

February 2013 Groundwater Plume Isopleths (µg/L)

Trichloroethene (TCE)

Monitoring Wells

TCE Concentration (µg/L)

- Non-detect (nd)
- 0.38 to 2.80 µg/L
- 2.81 to 5.00 µg/L
- 5.01 to 28.00 µg/L
- 28.01 to 110.00 µg/L
- 110.01 to 160.00 µg/L
- 160.01 to 370.00 µg/L
- Not Sampled

Map References:

2010 Orthoimagery of Schenectady County, NYS Digital Orthoimagery Program (NYSDOP)

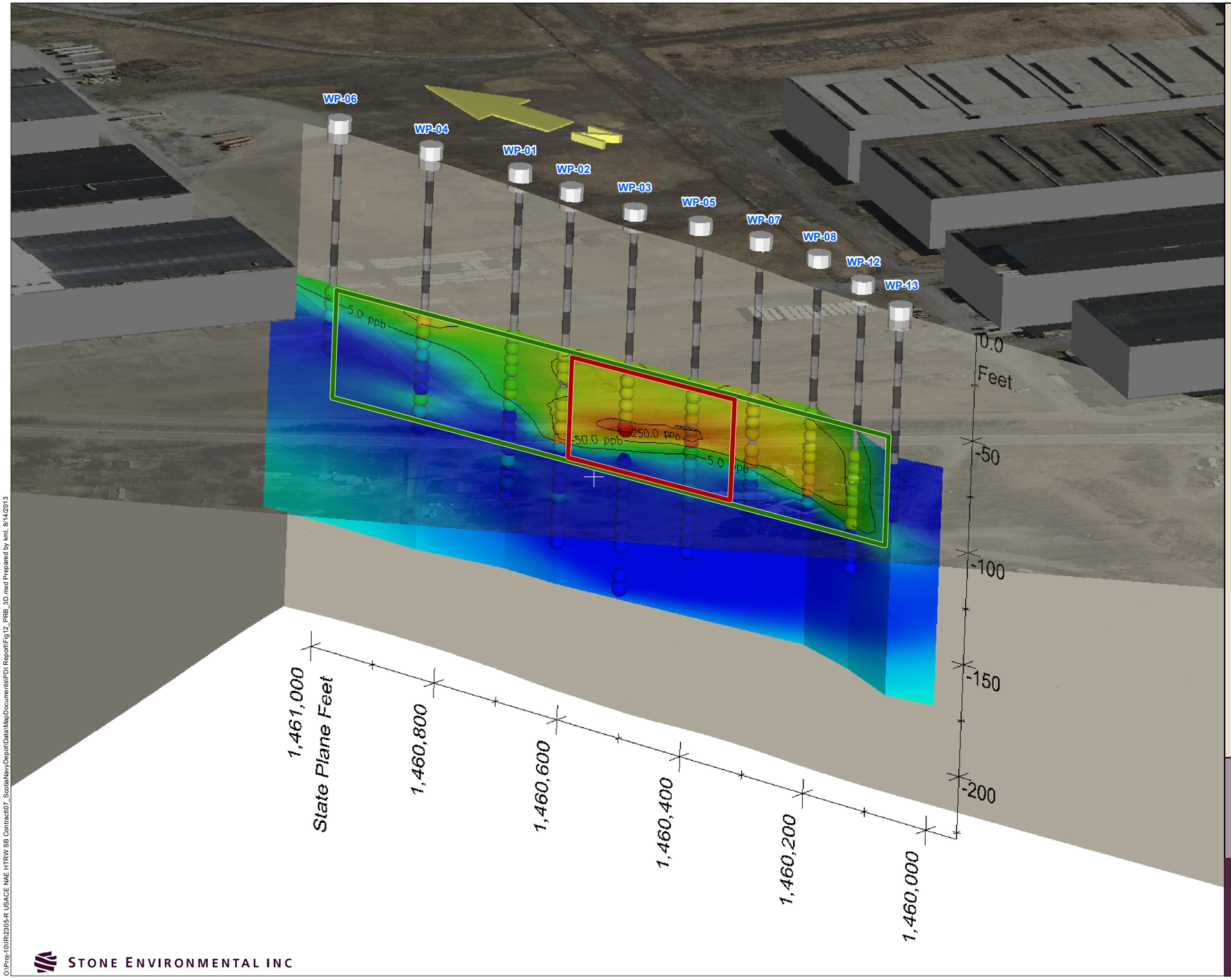
Projection: NY State Plane
Horizontal Datum: North American Datum of 1983

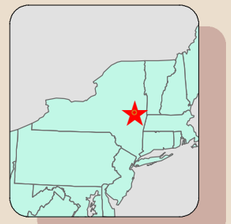
Permeable Reactive Barrier (PRB) Wall Locations: Map View

FIGURE 11

Pre-Design Investigation Report

Scotia Navy Depot
Scotia, NY





Legend

Trichloroethene

- 730 ppb
- 300 ppb
- 100 ppb
- 30 ppb
- 10 ppb
- 3 ppb
- 1 ppb
- 0.3 ppb
- 0.1 ppb
- 0.06 ppb

Proposed
ZVI Permeable Reactive Barrier Wall

- Alternative 1
- Alternative 2

Map References:

2010 Orthoimagery of Schenectady County,
NYS Digital Orthoimagery Program (NYSDOP)

Projection: NY State Plane
Horizontal Datum: North American Datum of 1983

Permeable Reactive Barrier Wall Locations: Perspective View

FIGURE 12

Pre-Design Investigation Report

Scotia Navy Depot
Scotia, NY

STONE ENVIRONMENTAL INC

O:\Proj-10\IR2305-R USACE NAE HTRW SB Contract\07_ScotiaNavyDepot\Data\MapDocuments\PDI Report\Fig12_PRB_3D.mxd Prepared by kml, 8/14/2013

APPENDICES

APPENDIX A: FIELD LOGBOOK NOTES

Location Scotia Naval Depot Date 24 JAN2013

Project / Client CENAE/CENAN

Joseph Schmidl

08:00	Arrive at DLA - Check in with Dave Hanby and Lisa Sanders. Dave reviews the locations of the three gates, and the fences which separate DLA and Business Park properties. We tour the parcels with Dave.
09:00	Mark Manzari of New York Leak Detection arrives on site to begin subsurface utility clearance. We hold a tailgate safety meeting, reviewing hazards. Primarily cold stress (temp is ~ 5°F) and slips, trips, and falls. Review the HASP.
09:30	Proceed to work at the two drilling locations on DLA property, and Mark begins utility clearance. Lee Rosberg and I begin locating wells on DLA property: MW-17 to -23; PMW-1 to 3; and B-1 to -3 and B-6. Each well is flagged w/ pink tape, and flushmounted wells (B-series) are staked. Well B-6 cannot be located, and is suspected to be beneath a snowbank.
11:00	Lee and I proceed to Galleci property

Location Scotia Naval Depot Date 24 JAN2013

Project / Client CENAE/CENAN Joseph Schmidl

Scale

and stake out boring locations. The gas transmission line is well marked, and we adjust a few locations to avoid it.

12:30 Lee and I begin locating monitoring wells on the Galleci property:
GGP-1 to -4; MW-1 to -16
MW-11 is a flushmount - we add a stake.
MW-8 has been damaged, and cannot be sampled without repairing the protective casing (out of scope)
MW-12 cannot be located with the metal detector - possibly paved over.
MW-3 cannot be located - metal detector is failing due to cold. Will check again later.

14:00 Check in w/ Mark, who provides results from his initial clearance activities - relatively minor adjustments.

14:30 Begin locating wells south of Route 5. Locate PMW-7, S-1S and -1D. Cannot locate PMW-6, S-2D, or Well-5.

16:00 Return to DLA. DLA agrees to move snowbank where we suspect well B-6 is located. Offsite at 16:45.

Location Scotia Naval Depot Date 30 Jan 2013

Project / Client CENAE/CENAN Joseph Schmidl

11:30	Dave Liwai and I arrive at DLA office - Meeting w/ Lisa Sanders and Dean Brunner (CENAE).
11:35	Discuss logistical needs for work/testing next week. DLA confirms we cannot store anything inside their garage. Lisa accepts our requests to obtain electricity to heated pre-fabricated overnight parking trailer outside their garage. We also ask if DLA can provide 50 amp power for the lab. Mechanic would also park outside. She will forward our request to her supervisor, who is out until Monday. Bathroom privileges are not a problem.
11:50	Discuss mobilization w/ Dean Brunner. He will be onsite Monday through Wednesday. He will inquire w/ Greg Goerbert regarding whether there will be an onsite mtg. next week. I would invite Evan Barnum of Watermark to such a mtg. Discuss schedule - 10-day shift from Feb 4 to 13. 5 days off. Back Feb 18th. Dean indicates CENAE/NAN plans

Location Scotia Naval Depot Date 30 JAN 2013

Project / Client CENAE/NAN Joseph Schmidl

Scale

	to execute the optional tasks by the middle of next week. We discuss reporting needs - a minimum daily email summaries, a call every couple of days to summarize progress.
12:30	Dean leaves to get well keys from Jason Kellam at NYSDEC. Dave and I depart DLA to search for missing wells.
13:00	No evidence of well S-2D found after exhaustive search - likely destroyed / became flooding as MW-6.
13:05	Dan Peters and I meet up at MW-3, which we find. Flush mount casing is full of water, and the casing is located in a depression on the edge of the road, which is a puddle today.
13:30	We locate well MW-12 (in the clay lot).
14:00	We meet with John MacElroy and David Ahl of Gale Associates. We show them the staked locations and show the marking on the utility locator, and confirm that we have obtained DigSafe clearance. Dave Ahl says that cold patch will be sufficient to repair any pavement

Location Scotia Naval Depot Date 30 JAN 2013
Project / Client CENAE/CENAN Joseph Schmidt

We also discuss accessing water through hydrants at the Gables property. Dave Ahl indicates Gables may want us to pay for the water. Dean says he'll check with the Town, and see if we can get water from DLA property.
Dave Ahl indicates we can store toys and coolers in the east end of Building 4004. No power or heat available.
John MacElroy has a copy of a map of subsurface utilities with him. He will copy the map and deliver us a copy on Monday, Feb. 4
15:00 Drive to DLA Warehouse 505, where we shovel the snow bank in an effort to find well B-6. After ½ hour search, no luck. Dean says to skip the well for now,
15:30 Clock out at DLA office, and depart site for day.

Location Scotia Naval Depot Date 2/4/13
Project / Client CENAE/CENAN Joseph Schmidt

Scale

12:05 Arrive onsite. Joseph Schmidt, David Ciuci, Lee Rooney, Bill Woolsey at Building 505 to tail gate safety Mtg. discuss site tasks.
12:20 Dean Brunet of CENAE arrives. Joe Dunham of Precision Locating is onsite clearing for Dig Safe (despite tickets issued on 1/25). I walk down the locations of the Gables and DLA Properties & they are OK.
12:45 Ciuci and Rooney are beginning Soppchoy Workload maneuvers. Dean and I proceed to DLA offices.
13:00 Meet w/ DLA staff - No power nor water. Dave Jakes says one person at the GSA Building that has power.
13:35 Back to site. Willis setting up his pot filling truck. Grosvenor Builders are late, and I cannot reach them.
14:30 Parratt-Wolff drill crew arrives w/ Gregg Rider. Mickey Marshall and Jeff Riggins. We have been there with them.

8

Location Scotia Naval Depot Date 2/4/13

Project / Client CENAE/CENAN

Joseph Schmidt

15:00 Proceed to well location B-6 to host farewell - no lock -

16:00 Geologic Rig and tender arrive. Scott Breeds and John Winkler arrest them to the site and they set up the HSP.

16:45 Steve Lowance of Geologic arrives we discuss drilling program, site details, we set up the HSP.

17:00 Hillary Eaton arrives. She is waiting to turn on the

18:00 Washington Water Annex w/ Portable trailer and Mobile Lab. Hillary commences setting up Lab

19:00 Lab set up - ot the for day

9

Location Scotia Naval Depot Date 2/5/13

Project / Client CENAE/CENAN

Joseph Schmidt

0700 Onsite Safety Talk crew except Steve Lowance who is off collecting the compressor. Tailgate H&S Meeting JSI-SSPs Cold, Slip-Trips, Falls.

0800 GeoCore has calibrated instruments, and is off to first wells. Probing trucks are setting up. Compressor arrives. Set up at first location WP01.

0930 National Grid notifies us that they need a second guy to clear the gas line.

0940 Dennis Russell of the Town Water Dept. comes and swerves a fitting for water to set at the end of Van Buren and Pumphouse

0950 Chris Hunt Nick Martell Dan Thurn 518/433-3535 of National Grid clear line, they give us permission to drill.

0955 Drilling at 7ft (3ft sub, 5ft lengths) we lay down to catch cuttings. Casing advances at better than 1ft/min cuttings are sandy gravel, well rounded

0958 Drilling at 33 ft - still sandy sand

1025 Drilling has advanced to 53ft. Gravel appears finer, and more sand than above.

1040 Rods at 63 ft bgs. - Move to next location - WP-2.

Location Scotia Naval Depot Date 2/5/13

Project / Client CENAE/CENAN

Joseph Schmidt

11:50	Geoprobe setup on WP01, Rig has moved to WP02. ~~Event to work for~~ ~~back at~~ 55 Geoprobe advances push to 70ft bgs. WT is at 67-68, based on water levels from MW-13 and GEP-land-3.
12:20	Trouble with drive caps, they are hitting the threads on the new rods.
13:00	Geologic Crew begins advancing Casing at WP-2.
13:10	Sniphy begins at 70 ft at WP-1.
13:40	Contact Electrician regarding power at Bldg 303.
14:00	Meet Electrician at Bldg 503. He estimates ~ $600- to install power, and indicates he can get it done tomorrow.
14:20	Back on site - WP02 advanced to 38 ft ~~HP~~ WP01 has first sample collected, and prepping to advance to 75 ft.
14:50	Low return from 75 ft ~ we advance to 76.5 - still low return. WP02 is at 53 ft bgs. Cuttings are similar to WP01.
15:15	Still working on recovery at WP01. WP02 has advanced to 68 ft bgs, and will be

Location Scotia Naval Depot Date 2/5/13

Project / Client CENAE/CENAN

Joseph Schmidt Scale

	ready to trip out inner rods.
15:20	Lines cleared on WP01
15:00	Start collecting 75 ft sample at WP01. Begin tripping rods at WP02.
16:30	WP02 at 70 ft bgs, not encountered at 68 ft bgs. Geoprobe advanced WP01 to 80 ft.
17:20	Sample Collected from WP02 from 70 ft.
17:35	Sample collected from WP01 from 80 ft. End of the day Calibrations completed.
17:40	Lucas and Rosbey offsite.
17:50	Last samples collected.
18:00	Shovel, Knife, Water/trait pump, forks, buckets to Bldg 503 for night
18:30	Offsite for day w/ Easton.

Location Scotia Naval Depot Date 2/6/13

Project / Client CENAE/CENAN

Joseph Schmidt

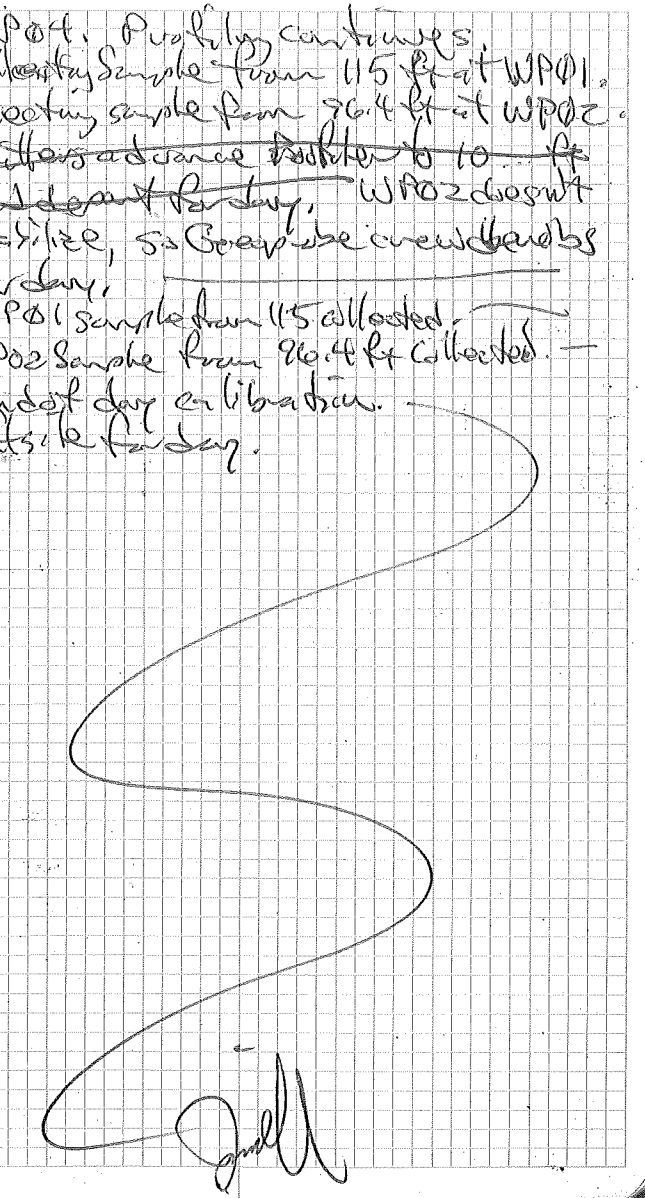
0700	Onsite for day. All executed Rev. Begin daily equipment calibrations. Tailgate safety Meeting held.
0745	GW crushers mob to their first locations
0750	Profilers mob back to their locations.
0810	During Profiler at WP01. Geologic setting up on Geoprobe WP03.
0820	During Profiler at WP02.
0830	Electrician can install connections today.
0900	Electrician arrives at Bldg. 503 to setup power. Profiling continues at WP01 and WP02.
11:30	Profiling continues at WP01 and WP02. We determine it will take us 6 hours to collect the additional sample aliquots with the profiler. Discussion Seth Pitkin and Dan Brammer to use the standby time the Geoprobe crew has to advance screen tools to our desired sample depths, and collect the samples using a pump.
11:30	Geologic crew completes WP03 to 63 ft. off site for lunch.
12:30	Everett-Wolff tender tows the Mobile Lab to Bldg. 503. Geologic crew rigs up on

Location Scotia Naval Depot Date 2/6/13

Project / Client CENAE/CENAN

Joseph Schmidt Scale

	WP01. Profiling continues.
16:30	Collecting Sample from 115 ft at WP01. Collecting sample from 96.4 ft at WP02.
17:00	~~Drillers advance tooling to to ft and depart for day.~~ WP02 does not stabilize, so Geoprobe crew leaves for day.
17:15	WP01 sample from 115 collected. WP02 Sample from 96.4 ft collected. End of day calibration.
18:20	Offsite for day.



14

Location Scotia Naval Depot Date 2/7/13

Project / Client CENAE/CENAN

Joseph Schmidt

07:00 On site for day. all present,
07:10 Tailgate Mtg. discuss fire safety.
07:15 Calibration wks.
07:45 Pushing trucks w/ rigs to location. Walter notices a broken valve, and walks to replace it with a spare.
Reviewing samples from the first two days, make the following selections for field lab's split confirmation samples - WP01-70.0, WP01-90.5, WP01-100.0, WP02-75.0, WP02-87.5, WP02-98.4, WP01-110.0
08:40 Advancing push to 120 at WP01. WP02 has already been advanced, and is sampling at 1100 ft.
09:43 WP04 has been advanced to 63 ft bgs. WP01 is being advanced to 125 ft bgs.
12:00 Rolling continues. Dean instructs us to collect the trench by sample from well GEA-1. Lee does so following the VOC sample.
15:00 Conference call w/ CENAE. I report that WP01 has refused at 144 ft bgs. It is decided to terminate the boring at the hole remains TD to depth. Hold casing until next day 8:30 call to remain to verify.

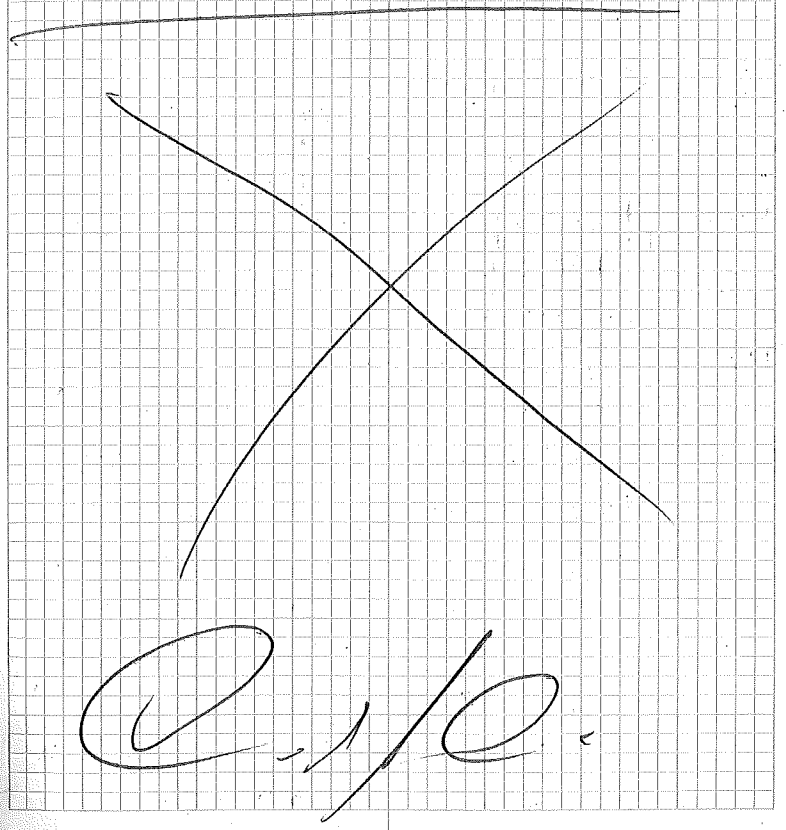
15

Location Scotia Naval Depot Date 2/7/13

Project / Client CENAE / CENAN

Scale

17:00 GeoProbe Screen Samples packed for Shipment. Schmidt decides to deliver samples to FedEx.
17:30 - WP02 pulled sample from 125' advanced to 129' possible refusal
18:00 - off site



16

Location: Scotia Naval Depot Date: 2/8/13

Project / Client: CENAE ICENAN

Dan Linard

0700	Onsite for day, All Present
0710	Tailgate H&S meeting
715	Calibrate Sonde
740	WP02 - Sampling Commences at 129'
750	Lowering into WP03
9:00	Lowering into WP03 complete
~~1015~~ 930	WP02 sample pulled at 129', +2 extra Jars
	Drove 1' to 130' to refusal, pulled ProTiler
10 20	- ProTiler out of WP02 - T8
1025	- WP03 commence profile drive ~
1050	- WP03 drove to 72', pulling sample
1055	- T7 moved onto WP04, commence lowering
1115	- Sonde Standby
1145	WP04 commence driving/Pulling Casing on WP01
1119	Collected WP03 72' sample
1148	Drove WP03 to 77.1 to collect sample
1207	Drove WP04 to 72.7' started sampling
1214	Collected WP-03 -77.1
12.44	Collected WP-04-72.7 Collected 4 for offsite split if needed.
1300	Driving WP04 to 77.5 to collect sample
1315	Driving WP-03 to 83.00 to collect sample

17

Location: Scotia Naval Depot Date: 2/8/13

Project / Client: CENAE/CENAN

Dan Linard Scale

1348	- how IC zone for WP-03/Continue Drive to 85 Possible Frozen lines? - Pulled Back up to 82.7', formation below too tight to sample.
1346	WP04 - 77.5 collected
1355	- Driving WP-04 to -82.50'
1410	- WP-01 Casing pulled moving to WP05
1411	Collected WP03 @ 1411 - 82.7'
1420	- Drove WP-03 to -87.50' to sample
1426	- Collected WP-04 - 82.5
1501	Collected WP03 - 87.5 / 4 VOA, 1 - Split
1509	Collected WP04 - 87.7
1510	WP-03 drove to -92.50
1541	Collected WP04 - 92.7 / 4 VOA, 1 Split
1544	collected WP03 - 92.5
1600	Refusal of WP-03 at 93.70
1610	Odex rig broke fitting down for afternoon
1640	Collected - 93.70 WP-03
1653	Collected WP04 - 97.7
1730	Offsite

Location Scotia Naval Depot Date 2/4/13

Project / Client CENAE / CENAN

Dave Chan

0700	ONSITE for day, All Present
0715	Tailgate H&S Meeting
0720	Calibrate Sondex
0730	Continue advancing ODEX Casing
0800	wP04 Drive to 102.70
910	Freezing issues with wP04 Location Pulling Profiler back 20' to check for frozen/split lines.
920	ODEX at wP05 down to 30' BGS. Drilling Continues. Cuttings are sandy Gravel / well rounded
945	Lower profiler back to 102.7 for sample collection.
1010	ODEX Drilling @ 45' BGS
1110	ODEX Drilling at wP05 complete
1215	Pulled out of wP04 & moved to wP05
1225	wP05 - EB
1252	wP04 - 102.7 - Continue driving
1305	lowering into wP05 with profiler

Location Scotia Naval Depot Date 2/4/13

Project / Client CENAE / CENAN

Dave Chan Scale

1340	- Begin Driving on wP05 - Begin Setting up Mobility on wP03
14:00	wP04 @ 107.5 Possible downhole pump failure. Stone Profile - Lines + trouble shooting
1523	wP05 @ 77.7 collected Continue driving
15:33	Talked to SS on wP04 said to pull pump and go back down hole to continue sampling
1545	Tripped out wP04 Profiler
1630	- wP04 EB-2 / EB collected for second pump in wP04
1615	Drive wP05 to 73.0
1635	- wP05 - 73.0
17:00	- Finish tripping wP04 to Bottom of casing until drive in the morning to previous depths to sample
17:30	- off site

Location Scotia Naval Depot Date 2/10/13

Project / Client CENAE / CENAN

-2° Clear Dave Chard

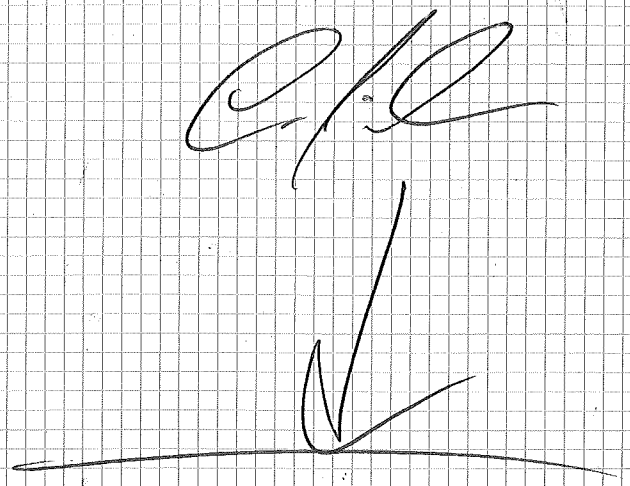
0700	Onsite All Present except Whitney
0715	H&S meeting
0720	Calibrate Sands
0730	Continue Advancing Mud Rotary @ wP03
0811	Drive wP03 to -78.00 to collect sample
845	- John - Plow Guy stopped by to check excavations 578-860 7741
9:36	- Collected wP05 -78.0 → 4402 for Split
11:06	Collected wP05 - 82.8
	Driving wP04 down to depth
1135	Mud Rotary Rig GL. down to 95' with depth, no cobbles hit. Sanding down split spoon for confirmation
	- 600 gallon water used so far
	- spoon contents ~ Fine grained dark olive brown sand w/ silt, no cobbles / sub angular
	Blows 50-36-35-40 / saturated
	- Continue to drill 7' more feet to depth
1211	Collected wP-05 - 87.8
1251	Collected wP-04 107.5
1304	collected wP-05 92.6
	Pushed to 97.7 wP05

Location Scotia Naval Depot Date 2/10/13

Project / Client CENAE/CENAN

Scale

1356	- Collected wP-05 - 97.7
1440	Collected wP05 - 102.9
1441	- Collected wP04 112.5
	wP05 Drive wP05 to 107.90
1546	- wP05 - 107.9 collected /4402A
1632	- wP05 - 112.8 collected
1622	wP04 - 117.6 collected
1645	wP04 - ~~105.0~~ Refusal 120.5 will sample in Morning
1515	Off site



Location Scotia Naval Depot Date 2/11/13

Project / Client CENAE/CENAN

360 Freeway Run/Snow

0700	On site
0715	H&S Meeting
0730	Calibrate Sonde
0800	Drove wP05 to 107.3
0853	Collected WP-05-107.3
0904	-120.55 - wP04 sample pulled, Due to high silt content ~~started~~ DC only 300 mL was purged
905	Drove wP05 - 122.2
943	Collected WP-03a-EB
950	WP-05-122.2 Collected
	Drove to 127.5 @ wP-05
1016	wP04 Pulled out of hole
	- Profiler snapped off, lost 15' of Rod + Profiler + stainless
1130	Tripped wP03 to 105' bgs
	Start to drive
	WP03a-EB collected Previously
1113	Collected WP-05-127.5
1145	WP03 Drove to 107.4 / Start MR on WP02
1201	WP-05-132.4 collected 4 VOA 2 unfilt
1300	collected WP-05-137.3 / WP-05-137.3-D

Location Scotia Naval Depot Date 2/11/13

Project / Client CENAE/CENAN

Scale

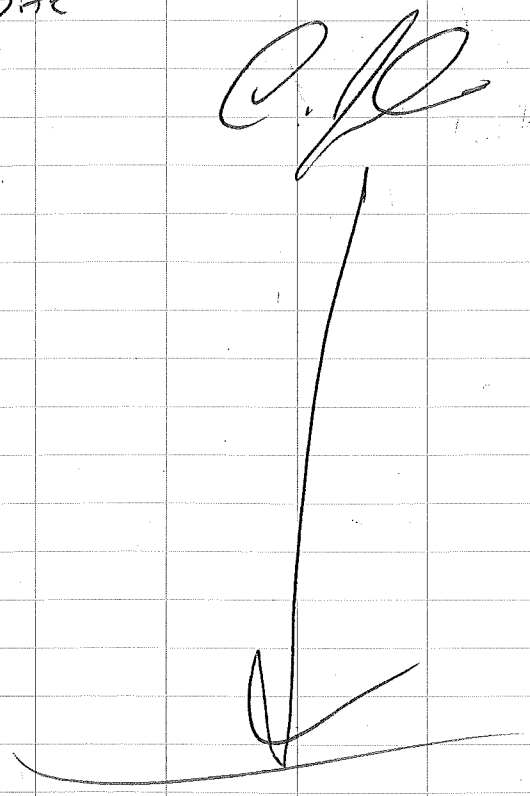
1311	Collected WP03a-107.8 / WP03a-107.8-D +2 VOA for offsite split
1345	Drove to 142.4 @ wP05 - Retrieval Pulling sample
	Drove to 112.8 @ wP-03a Pulling sample
1412	Collected WP-05-142.4 / WP-05-142.4-D
	- waiting for MW Rotary Rig to Finish on WP02 to pull V. Rig at WP05
1455	Collected WP03a-117.8 / 4 VOA for Offsite
	Drove WP-03a-117.8
1601	WP03a-117.8 / WP03a-117.8-D Collected @ 16:01 - Continuing to Driving down
1630	MW Rotary at 130' for WP02 Sent down split spoon Blow Count 34-36-42-45 / 130' → 132'

Location Scotia Naval Depot Date 2/11/13

Project / Client CENAN/CENAE

Dave Lehard

1635	Split spoon soils consist of fine rounded grained dark olive/brown sand w/ silts
1722	Collected WP03A-122.8 -Drillers off Site
1740	off Site



Location Scotia Naval Depot Date 2/12/13

Project / Client CENAN/CENAE

Dave Lehard Scale

0700	Onsite - All Present
0715	HTS Meeting
0730	Calibrate Sonde
0800	Drive WP03 to -127.3
0845	Roll out WP05 location
0915	Dropping int WP02 to 130'
935	Collect WP03a -127.3 +
945	Collected WP02A -EB
11:00	Collected WP03a -132.4 +
1120	Drove WP02 to -132.80 +
12:08	Drove to WP03a -137.5 - 4 PROA +
12:18	Drove to WP-02A -132.8 - 4 VOA +
1312	WP02A 137.5 collected +
1337	WP03A -142.6 collected +
1400	Removing ODEX from WP04

Location Scotia Naval Depot Date 2/12/13

Project / Client CENAN / CENAE

Dave Lhuer

1410	146.1' BGS Refusal @ WP03A
1457	collected WP03A - 145.6 +
1479	Collected WP-02A -147.0 +
1545	ODEX on WP04 Pulled
1600	Pulling WP03A to Mud Rotary down to 146.00
1544	WP-02A -147.1 collected +
1630	Done -152.2 at WP-02A
1645	Drilling offsite
1713	Collected WP-02A-151.0 +
1750	off site

SPT WP-02A
SPT WP03A

3a	02
127.5	~~130.0~~ 132.1
132.4	137.5
137.5	142.0
142.6	147.1
145.6	RT

Location Scotia Naval Depot Date 2/13/13

Project / Client CENAN / CENAE

Dave Lhuer Scale

0700	On site all Present
0715	HAS Meeting
0730	Calibrate Sonds
0810	WP03 cored to -70' needs Refill with Casing advance to 150'
0830	- Marked for new Drysafe Locations
0847	Collect WP03b-EB
0900	Wes out to get supplies
0924	WP-02A -153.1 collected 4 VOA Refusal at -153. tried to Pull back, broke off 5' down hole
1030	Mud rotary continues at WP03
1050	Mud not returning to surface Drillers do not want to continue - Call Sue S.
11:00	Retrieve WP-02 vert. Profile - Pull Back out ~
11:30	R Trip to Reposit. back down same Hole to see if Possible to Continue

Location Scotia Naval Depot Date 2/13/13

Project / Client CENAN/CENAE

Dave Chm

17.30	Overhead Power lines being pulled through / lines very low, right above WP06
1330	Attempted to drive Prop the at WP02 Refusal at same depth.
	Pulling Probes
1415	Parratt W.H. offsite Geologic Pulling ODEX on WP05
1530	Geologic done pulling ODEX at WP05
1546	Geologic + Stone offsite
11.5	
12	
12	

Location Scotia Naval Depot Date 2/18/13

Project / Client CENAN/CENAE

Dave Chm Scale

0940	All onsite except Parratt Wolf Air Sparging Ring
1015	Onsite H&S Safety Calibrate Sonde
1122	Called Joe Approved for well 10' Screen slotted 90-100' / 80-90' 1 sample for each screened interval 5 samples total + 1 dup
	Approved for WP03 +
1136	collected ~~WP06 FB~~ DI WP07 FB
1205	Called Joe - Push Point Sample at WP4, 2 or 3 - Check to see if Gate can be opened → GSA - Parratt Wolf brought 100' of 3" casing 60' of 6" casing
1300	Parratt Wolf did not bring the Screen Point Samplers equip
1326	P.W. starts on MW-24

Location Scotia Naval Depot Date 2/18/13

Project / Client CENAN / CENAE

Daeline

15 45	Geologist @ 130' BGS @ WP03 N2 recovery of Mud / Drilling is Slow
1715	Geologist @ 145 BGS @ WP03
15 39	Geologist offsite
	P.W. @ MW-24 @
1550	offsite

Location Scotia Naval Depot Date 2/19/13

Project / Client CENAN/CENAE

Daeline Scale

0700	ONSITE 20° windy
0710	H+S sign in Cold Soaks
0900	Geologist to 150', pulling mud lines to lower W.P.
1010	WP03 at Bottom of Hole Drove to 159 due to low IK
1046	Geologist setting up ODEX on WP07 location / very coarse-Gravel
1142	WP036 -159.0 Collected collected Dup & Split
1152	Driving WP03 down
1230	MW-24/W.P. @ 51'
1250	Paul Young onsite from Amec Corp.
1255	WP03b-163.9 drilled — P.W out to get DT22 screen Sample
1310	Reload WP03 @ 164.8.0
1415	MW-24 @ 61 P.W.

Location Seaton Naval Depot Date 2/19/13

Project / Client CENAN/CENAE

Dave Linard

1429	Collected WP035 -164.8
	WP07 Firm ground
	58' with ODEX
	MW-24 @ 71'
1500	ODEX at Depth @ WP07
	Material Change down to Fine Brown rounded Sands
1528	Collected WP08-EB
1545	Dropped U.P. into WP07 location
	Drove to 68' BGS
1600	Moved ODEX onto WP08
1625	Sent home P.W. Geo Probe operators
1630	ODEX on WP08 Begins
1706	Collected WP07-67.6
1745	offsite

Location Seaton Naval Depot Date 2/20/13

Project / Client CENAN/CENAE

Dave Linard

Scale

07:00	Onsite with All 15° windy
0715	Call Sands
0730	Hds Signs
	- G.L. Down to 15' with ODEX @ WP08 / Fine Sands with few cobbles
	- P.W. at 98' @ MW-24 Slight Spoon to 100' to Shut
0800	P.W. Drive, WP07 to 72.4 to collect Sample / Tools
	Mess, scanning well sampling Forms - Dark Young Onsite
0850	ODEX @ WP08 @ 60' BGS Fine Sands ~~trouble~~ Or few cobbles all the way down
0854	collected WP07 - 72.4
	drove to -77.40 @ WP07
1000	-Collected WP-07 -77.4 + Dup
1037	Dropped into WP08

Location Scotia Naval Depot Date 2/20/13

Project / Client CENAN / CENAE

Dave Linas

1035	Spoke with J.S. Approval for Push Point samples at the following Locations + Depths!
	WP02 → 100-105*
	WP03 → 95'
	WP04 → 72'
	WP05 → 95'
1050	Drove to 69.5 @ WP08 to collect sample
1104	Collected WP-07-82.4 + splits
1109	Collected WP-08-65.9 + splits
1117	Collected WP-08-70.4
1224	Collected WP-08-75.7
1222	Collected WP-07-90.2
1252	Collected WP-08-80.8 + split
	- GL spinning MR down to 165 to collect split spoon @ WP-03
1324	Collected WP07-95.2 @ 1324
1332	Collected WP08-84.9

Location Scotia Naval Depot Date 2/20/13

Project / Client CENAN / CENAE

Dave Linas Scale

1345	GL dropping into WP03
1401	Collected WP08-90.0
1427	Collect WP07-100.3
1445	G.L. Casing clogged @ WP03 -20' of Heave
1448	Collected WP08-95.0 + 4 Lor split
1524	Collected WP08-100.0 - G.L. Letdo set new water swivel
1532	Collected WP07-105.2 + 4 Lor split
1600	Paul Young Offsite
	JS call
	- WP6 → 110
	WP02 → 170
	WP04 → Probe No
	WP05 → Sample Rec 75-77
	Soil 85-87
	- check on 3" casing
1627	Collected WP08-105.0
1655	- GL Back with Pull Collected WP07-110.0
1712	- Pulled all inner rods Collected WP08-110.0 + 4 split
1745	Offsite

Location Scotia Naval Depot Date 2/21/13

Project / Client CRNAN / CENAE

Daeluw

0700	All Onsite / 19° 30-40 mph winds
0715	Cal Instruments
0730	H+S Sign in
740	G.L. lowers Gate down @ WP03 PW Moves Rig to WP05 for soil Sampling - Marked out New drg Safe Cogntins
807	Drove WP05 Refusal at 113.4 - Pulling Sample
824	- Spoke w/ S.S. ~~113.4'~~ - Holes 7+8 done @ 110' Pull current Sample
852	Collected WP08 - 113.4 + 4 for Split
907	Collected WP07 - 115.2 / Set all New Cals
956	- GL @ 160 @ WP03
10 30	P.W. Dropping into WP04 to 72' Ft He screen point sampler / same loc were Probler snapped off. 13' of open hole
1109	Pow'in split Spoon @ WP03 165-167' Bgs Fine grained Sand w/silt Olive Gry to Brown Sub Rounded Fine Sand, PID 0.0 ppm
1200	Finish Pushing screen point to 73' @ WP03 - Pulling U.P. Drm 7+8 Split spoon @ 165 → 31-34-38-43

Location Scotia Naval Depot Date 2/21/13

Project / Client CENAN / CENAE

Daeluw Scale

1300	Started pushing
1330	Water at surface for WP04 - tubing kinked + broke, pulled out and replaced
1450	- P.W. @ 36' w/ mud Rotary for soil sample @ WP05 - GL have M.R. tools out @ WP03 Starting to pull ODEX.
1530	tubing @ WP04 keeps Freezing - tubing keeps breaking
1630	- ODEX out @ WP03 - Talked to S.S. pulled tubing on screen Point Sampler will try again on Monday with bigger tubing
17:00	- P.W. advanced to 56' for soil boring Location - P.W. Probe + M.R. Crews offsite
1745	LG offsite
1800	offsite

Location Scotia Naval Depot Date 2/22/13

Project / Client CENAN / CENAE

20° Calm Dave Lunn

0700	Onsite
715	Cal instruments
730	Hts Sign in Air compressor wont start
815	Compressor started
1000	wP06 0-27' medium grained brown sand 27'-47' Gravel
	currently @ 47'
1015	Gravel @ 55 @ wP06 Dig Safe onsite to clear locations
1115	sowing down 1st spoon @ wP05 Begin to lower VP into wP06
1130	@ 65' in wP06 preparing to drive - collected Soil @ wP05-75-S
1150	Drive wP06 to -66.0' BGS to collect a sample Spoon @ wP05 @ 75' medium grained/coarse sands w/ subangular gravel / Assorted colors
1200	wP06 Not in the water table, driving to 72'.

Location Scotia Naval Depot Date 2/22/13

Project / Client CENAN / CENAE

Dave Lunn Scale

1319	Collected wP06-72.0 +4 split.
1340	Collected soil wP05-+85-S fine Olive Grey Fine Sand
1401	Collected wP06-77.0
	- Pulling out MR. @ wP05
1500	- Pw MR rig out of wP05
	- Both ODEX casings out of wP748 Moving all with gear over to 9+10
1510	- Collected wP06-82.0 + Dup
1559	- collected wP06-87.0
1645	off Site

Location Scotia Naval Depot Date 2/25/13

Project / Client CENAN / CENAE

Dave Lehman

1030	All onsite / PW MR 5B still onsite - starting to drive wP06 to 92 wP09 ODEX @ 25' - Cobbles present, VP1/little Fines T.S. - Spoke to Joe
1150	Mark Manzari onsite from NY Heat Relation
1151	Collect wP-06-92.0
1156	Collect wP09-EB
1200	ODEX set to 63' @ wP09
1253	Collected wP06-92.0
1300	- Sample @ wP06-92 clean, pulling out of hole as per TS
1315	Lowering into wP09 w/ V.P. Still pulling out of wP06
	▽ 71.41' @ wP09 2' of silt
1400	kPRO in wP09 clogged, pulling V.P - Waltera pump clogged.
1410	Begin Purge @ wP09-72.0

Location Scotia Naval Depot Date 2/25/13

Project / Client CENAN/CENAE

Dave Lehman Scale

1440	ODEX Dur wP10 to 15' BGS Air clogged Had to pull out, clean Restart
1623	Collected wP-10-EB
1650	Collected wP09 -72.0
1700	ODEX at 32' @ wP10
1720	offsite to Fedex to ship samples
1845	back to Hotel

Location Scotia Naval Depot Date 2/26/13

Project / Client CENAN/CENAE

Dave Law

0700	onsite / All Present
0735	H&S sign in - Drive wP09 to -77.0'
	- Driving wP04 deeper & sample due to
0845	ODEX set to 63 @ wP10
0841	wP-09-77.0 collected Driving to 82'
0915	started Pumping @ wP04 @ 76'
0954	collected wP09-87.1
1018	wP10 drove to 65'
	Talk JS need 3 more splits top 3 same Drill on
1048	collect wP09-87.2
1045	ODEX pulled on wP06 moving to wP11
1104	Collected wP10-66.0
1122	Collected wP09-92.0
1132	collected wP04-76 for extra analysis
1158	collected wP10-73.0
1211	collected ~~wP-97.1~~ wP09-97.1

Location Scotia Naval Depot Date 2/26/13

Project / Client CENAN/CENAE

Dave Law

Scale

1247	collected wP10-78.0
1300	started ODEX at wP11
1330	wP10-83.0
1305	Collected wP09-101.8
1350	ODEX @ 35' / Compressor ODEX Broke -> GL returning, should be back 4.5 hours
1402	Collected wP09-106.8 + Dup
1416	collected wP10-88.0
1444	collected wP09 112.0
1500	ReDrilled @ 116.2 @ wP09
1505	collected wP10-93.0 Drive wP10 98.0 GL Back onsite w/ new compressor
1534	Collected wP09-116.2 Pulling screenPoint sample @ wP04

Location Scotia Naval Depot Date 2/26/13

Project / Client CENAN/CENAB

Dave Durell

1604	Collected LP10 -98.0 - Pulling V.P @ wP09
1632	ODEX @ wP11 @ 63'
1700	off site

Location Scotia Naval Depot Date 2/27/13

Project / Client

4" of Snow onsite / Steady Rain Dave Durell Scale

0700	On site
0715	Mtg Sign in
0745	Collected WP-11-EB
830	Talked to SS. total of 15 holes wP11 deepest down
	- Driving down screen Point Sampler @ wP05 location
859	- collected wP10 -103.0
917	Screen point at wP05 @ 45'
945	Drove wP11 to 71.9 Drove wP10 to 108.0
1005	ODEX @ wP02 moving to wP12
1022	wP10 Reload @ 112.8 collecting Sample
1057	collected wP-11-71.9
12:00	wP10 out of Hole - Screen Point Sampler at 95' / need to advance screen
1111	collected wP11-76.9 + 4 for spit
1123	collected wP 10-112.8

Location Scotia Naval Depot Date 2/27/13

Project / Client CERNAE / CERNAN

Dave Lamie

1248	Collected wP11 - 81.9 + 4 L Split
1327	wP-12-EB collected
1350	WP-11-87.0 collected + splits
1400	12' of Hewitt screen point sampler @ wP05 need to set to set to depth
1425	wP12 ODEX to Depth, tripping out inner rod
1456	collected wP11 - 91.6
1513	wP11 Reamed @ 94.20
1535	V.P. dropped into wP12
1600	Collected WP-11-94.2 Drive to 73.0 @ wP12
1653	Collected wP-12-73.0
1715	off site

Location Scotia Naval Depot Date 2/28/13

Project / Client CERNAE / CERNAN

Dave Lamie Scale

0700	On site with all
0715	H+S sign in Calibrate Sonde
0730	Starting to pull ODEX @ 11 to drive @ wP13 - Attempting to set 12' of Hewitt at of screen point sampler at wP05
405	collected wP-12-78.0 + split
0900	met with Primeau Utility Clearance ODEX @ wP11 outfield
926	collected wP13 - EB
955	collected wP12-83.0 + split
1033	Started pulling wP05 Screen Point
1102	collected wP12-88.0 + split
1122	collected wP05-95.0-GW Screen Point
1153	collected WP-12-93.0 + split
1252	collected wP-12-98.0

Location Scotia Naval Depot Date 2/28/13

Project / Client CENAR / CENAN

Declan

1300	WP13 ODEX set, tripping out inner rod
1330	UP at bottom of WP13
1350	Drove WP13 to 68'
1415	Drove WP12 to 108.0
1456	Collected WP13 - 103.0
	- M.R. Rig setting up on WP10
1454	Collected WP13 - 68.0
1505	Collected WP-12-108.0
1543	Collected WP13 - 72.9 + Dup
1612	Collected WP12 - 113.0
1645	off site

Location Scotia Naval Depot Date 3/1/13

Project / Client CENAE / CENAN

Declan Scale

0700	Onsite
0715	Calibrate sonde / Hot Sign In
0818	WP-13 - 77.8 Collected
0832	Collected WP12 - 118.0
	M.R. Rig down to 90' bgs
0930	WP03 Screen Point Sampler fell down around inside previously installed hole. trying to retrieve it
	Had at 115' @ WP10, pulling tooling shortly.
937	Collected WP12 - 123.0 / EOH
948	Collected WP13 - 82.8 ODEX set to 115'
1047	Collected WP13 - 87.9
1040	collected WP
1122	WP13 out of ground
	WP12 pulling pushes, snapped off
1146	tripping into WP10 / Issues / Pulling ODEX @ WP12
1330	Begin drive @ WP10
1335	- starting to develop new well - Lower Piping
1410	Begin development Mar-24

Location Scotia Naval Depot Date 3/1/13

Project / Client CENAN / CEMVE

Dave Law

1454	collected wP10 - 118.0
1500	ODEX @ wP12 pulled
1510	Pulling ODEX @ wP13
1540	MW-24 Developed
1641	WP-10-123.0 collected sample
	- TB stuck by MW-24, pulled out by probe
1550	ODEX out @ wP13
1628	collected wP10 - 127.0
1700	off site

Location Scotia Naval Depot Date 3/4/13

Project / Client

25° Windy 24mph Scale

10:10	Onsite All onsite
	- H+S Sign in
1045	charged oil in generators
	- Cal soils
11:00	GL setting up on location between Buildings
1140	Driving wP10 to 133
	- Hand dug out to sample ~~top~~ MW-24
1231	collected wP10-133.0
1256	Retired @ 136 @ wP10
1341	collected wP10 →
1445	Starting to drive Screen Point sampler @ wP03
1545	collected wP15 EB
1558	collected wP14 EB
1615	collected ~~top~~ MW-24 - 12 gallons
	AV Drilled to depth @ wP03 → 95'
	Sample in morning
	GL set up on wP14 to set ODEX
1703	offsite

52

Location Scotia Naval Dept Date 3/5/13

Project / Client CENAE / CENAN

280 Sunny Dave Lilley

0700	Onsite H+S sign in Cal soils etc.
0715	ODEX @ wP 14 starting 0 - 30' sand, 30-40' Gravel, 40-63' sand
0930	started purging wP03 @ 95'
1008	collected wP03-95.0-GW
1045	DW Pulling screen Point sampler GL - Dropping UP into wP-14
1051	Collected MW-24-Purge, sample for analysis
1100	GL starting to pull casing @ WP03
1206	Collect samp @ 68.0 @ wP04
1215	Drive to - 73.00 @ wP14

Location Scotia Naval Depot Date 3/5/13

Project / Client CENAE / CENAN

Dave Lilley Scale

1302	collected wP 14-73.0
1330	GL setting up ODEX @ wP15 - starting to send down screen point sampler at wP02 location
1359	collected wP 14-78.0 + Dup
1414	Collected sample from the collective purge drum from all samples collected for IDW → Collective Purge - IDW
1439	wP02-100-GW screen point sent sending down tubing to start purging
1527	Collected wP 14-83.0 + Dup
1620	- No water in screen point sampler, need to pull and restart tomorrow - ODEX @ wP15 done, pulling rods
1622	Collected WP 14-88.0
1703	Collected wP 14-93.0
1745	off site

Location Scota Mun/ Depot Date 3/6/13

Project / Client CENAN / CENAE

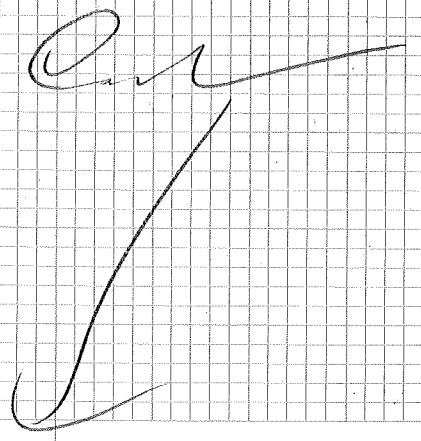
700	Onsite
715	HLS sign in Sonde Cal
730	Dropped into wP15 - Down wP14 to 98'
810	Drove wP15 to 70' GC Pulley Cash @ wP10
822	collected wP-14-98 + split
910	ODEX on wP10 pulled
921	Collected wP 14-103.0 + split
925	collected wP 15-70
1032	wP14-108.0 collected
1040	collected wP15-75.4 + split
1140	Tripped out Screen Point sampler @ wP02 dropped last 9' down hole.
1150	Collected wP14-113.0

Location Scota Mun/ Depot Date 3/6/13

Project / Client CENAE / CENAN

Duchoux! Scale

1152	Collected wP15-80.8
1247	Collected wP-14-114.8 / Refusal
1254	Collected wP15-85.6
1320	Tripped out of wP14
1342	Collected wP16-EB
1400	Tripped into wP16 with VP
1457	Collected wP15-91.6
1500	Pulley Cash @ wP14 tomorrow
1530	wP15 Refusal @ 95.7.
1616	Collected wP15-95.7
1700	offsite



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Location Scotia Naval Depot Date 3/7/13

Project / Client CENAE/CENAN

Dave Law

0700	Onsite H/S sign-in
0715	Sound Cal - Tripping screen point sample, No water @ WP02
0805	WP15 U.P. tripped out of hole
845	Attempt to purge WP02
850	Start Drive of WP16
920	Collected WP16-68.0 + split
933	Collected - WP02-105.0-GW - WP02-105.0-GW-D
952	Collected WP16-73.0 + split
1015	ODEX @ WP14 removed
1046	Collected WP16-78.0
1130	WSW offsite
1136	Collected WP-16-83.0
1227	Collected WP16-88.0

Location Scotia Naval Depot Date 3/7/13

Project / Client CENAE/CENAN

Dave Law

Scale

1339	Collected WP16-93.0
1434	Collected WP-16-97.8/~~98~~ 92.4
1450	Refusal 101.6' collecting sample - WP15 ODEX Removed
1532	WP16-101.6 Collected + D.P EOH, Tripping out UP - WP02 + split samples shipped via Fedex
1620	- Tripped UP out of WP16 - Tripping out screen point @ WP02
1700	offsite

Location Scotia Naval Depot Date 3/8/13

Project / Client CENAE/CENAN

32° 4" of snow Dave Law

0700	Onsite HS sign in
0730	Begin pulling rod @ wP02 + DEX @ wP16
	-Tod loads truck & offsite mob.
820	wP02 screen found out of ground
845	GL + PW offsite
910	Tod offsite
920	spoke with JS + DTV onsite DSL offsite

Location Scotia Naval Depot Date 3/11/13

Project / Client CENAE / CENAN

~40°, partly sunny Lee Rosberg Scale

07:50	Onsite (PW)
08:00	Parratt Wolff driller's helper on-site
08:40	Parratt Wolff driller onsite (Glenn)
08:50	showed Glenn drilling location (MW-25)
09:00	PW getting water
10:20	Drillers begin to setup on MW-25
11:30	Advanced 4.25" Augers to 10 ft bgs then tripped out Second PW driller helper (Brian) onsite
11:10	Used auto-hammer to drive 6" surface casing to 14 ft bgs. Began mixing drilling mud LSR offsite to grab lunch
12:45	LSR onsite, drillers just starting to spin roller bit
17:20	Rotary bit advanced to 34 ft bgs Pulled bit back to within surface casing. Winterized rig Offsite

Lee Rosberg

Location Scotia Naval Depot Date 3/12/13

Project / Client CENAE / CENAN Lee Rosberg

Onsite @ 07:00, Justin (PW) onsite, other drillers Filling water tank

Weather: ~50°F, Mostly cloudy, breezy
10:00 am → rain began

07:30 All PW drillers @ MW-25, conducted Health + Safety meeting

07:45 Resumed advancing roller bit @ MW-25 loc.

09:25 Roller bit @ 42' bgs, drillers lost ~50 gal, of fluid between 34 and 42'

14:00 collected split spoon from 67.5 to 69.5' interval

14:45 collected split spoon From 72.5 to 74.5 interval

15:20 PW advanced roller bit to about 76' and circulated mud to clear out hole, then began installing well

16:00 Tremmied sand around screen (75 → 63')
Screened interval: 75-65' bgs
Bentonite seal: 65-62' bgs

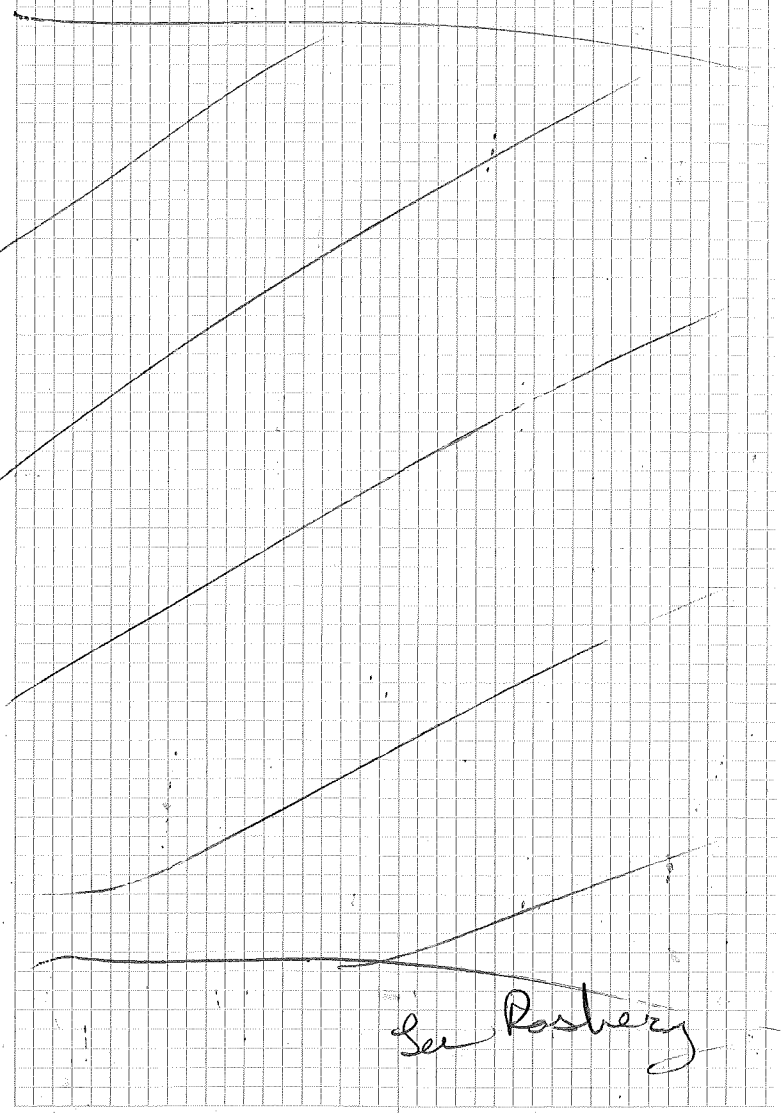
16:05 Called Joe S. to update on progress

Location Scotia Naval Depot Date 3/12/13

Project / Client CENAE / CENAN Lee Rosberg

Scale

16:30 PW / LSR OFFsite



Lee Rosberg

Location Scotia Naval Dept Date 3/13/13

Project / Client CENAE/CENAN Joseph Schmidl

~~Onsite at~~ 07:05	Onsite for day. Justin of PW arrives behind me. Drillers arrive at 07:15
07:30	Drillers begin grouting well MW-25 to surface. I go around to boring locations and make sure all are staked and labeled.
0800	Discharge Purgewater from MW-24 developed to ground per NYSDEC and CENAE consent, as well as David Ahl of Galesi Group. Water tested at 0.5 ppb TCE.
09:15	Drillers move to location for MW-26. Advance HSA to 15 ft bgs. Pull casing and advance casing. Top 4 ft very gravelly. 4 to 15 ft, clean sand 15 ft to 22 ft. gravelly sand - slow advancement.
12:30	Drillers break for lunch - casing at 22 ft bgs. Helper backfills borings.
13:00	Drillers resume work.
15:00	Casing at 33 ft bgs.
17:00	Casing at 45.5 ft.
17:20	Crew unloads the rigs for the night.
17:30	Offsite for Day

Location Scotia Naval Dept Date 3/14/13

Project / Client CENAE/CENAN Joseph Schmidl

Scale

0960	Onsite for day. Drillers also arrive. Tailgate Safety Meeting.
0710	Crew determines rig
0730	Drilling resumes at 45.5 ft. Driller reports interbedded sands and gravelly sands - drilling rate improves.
09:50	Split Spoon Recovered from 67.5 to 69.5 ft bgs. Blows 17-14-15-15. Dark Olive Brown m-C Sand, with f-m Gravel, saturated, rounded, no apparent bedding. Photo taken. Sample MW26-76.5-S collected. 18 in recovery - 4 in Sloush.
11:20	Drilling at 82 ft bgs.
12:15	Crew Breaks for lunch
12:45	Crew resumes drilling
13:30	Drilling at 92.5 ft bgs.
15:15	Sample from 107.5 ft collected. Pen Rec 2.8/1.5. Olive brown fine SAND, trace silt (Gravel on outside of core, but none within), saturated, cohesive. Sample MW26-107.5-S collected. I contacted Dean Bramer, who approved skipping the duplicate sample, due to volume issues. Photo taken.
16:00	Boring at 110 ft bgs. Crew will flushout borehole tonight - install well in morning. I depart site to skip another
17:00	Samples Shipped.

Location Scotia Naval Depot Date 3/15/13

Project / Client CENAE / CENAN Joseph Schmidt

07:00	Drillers onsite for day - clear barricade and pit voids - H&S Meeting held.
08:45	Wellscreen and riser added. Screen set at 110 to 100 ft. Sand added to 98 ft.
09:10	top of sand set at 98 ft. Bentonite chips added to 94.5 ft.
09:50	Drillers break while seal hydrates
10:10	Drillers back and resume work - begin grouting process.
11:50	Grouting complete -
12:00	Casing pothesis removed. (begin)
12:20	Casing off - Crew rerods to MW-27 location
~~13:00~~	Break for Lunch.
13:00	Arrive at MW-27 location - offset 5 feet NW west of MP05, to be sure to avoid a storm water sewer.
13:50	At 15 ft, lead auger is lost. Rig relocates to 6 FASW west of MP15.
14:00	Drilling resumes
14:30	Casing advancement begins
5:30	Casing advanced to 10 ft. not waited, as we would be commuting to/from site for days. Offsite for day.

Joe

Location Scotia Naval Depot Date 3/18/13

Project / Client CENAE / CENAN Lee Rosberg

Scale

07:45	Onsite, drill rig @ MW-27 location Weather: clear, ~20°F, light wind
08:45	Glenn and Justin onsite (PW drillers) Warmed up rig and left to fill water tank
09:35	PW mixing mud, preparing to clear surface casing. LJR moved to MW-25 to develop. Called Joe S, do not have pH, Spcond or turbidimeter to collect those parameters while developing wells. He advised to develop w/out meters.
10:03	Lowered foot pump to bottom of MW-25 on 1½" ID PVC pipe, secured pipe in Waterra and began developing
10:15	No water, turned off waterra to let well recharge
10:25	Depth to water = 66' btoc, resumed purging
10:35	Ice clear from ½" PVC, well pumping w/out drawdown, offsite to get fuel for generator
10:50	Onsite, PW advancing roller bit, currently @ 21 ft bgs. Report drilling through cobbly gravel. Returned to MW-25
11:20	Filled one 55 gal. drum @ MW-25
11:50	Filled second 55 gal. drum @ MW-25, purge water appears clear. PID on both drums = 0.0 ppm v/v Collected IDW sample MW-25-75.0-IDW from two drums.
12:20	Returned to MW-27, PW @ 32 ft bgs, Drillers said ~ every 3' they go through a cobbly layer
12:35	Moved to MW-26 to begin developing

Lee Rosberg

Location Scotia Naval Depot Date 3/18/13

Project / Client CENAE/CENAN

See Rosberg

13:55	Began developing MW-26
14:10	Filled one 55 gal. drum @ MW-26
14:30	PW @ ~50 ft bgs w/roller bit @ MW-27 cuttings are still coarse sand w/some gravel, likely chewed up cobbles
15:10	Filled second 55 gal. drum dev. MW-26
15:40	PW @ 58' bgs 53-58' gravel w/cobbles
16:00	Filled third 55 gal. drum dev. MW-26, water still has a milky turbidity, began filling Fourth drum
16:45	Filled Fourth 55 gal. drum dev. MW-26 collected composite sample from 4 drums MW-26-110.0-IDW PID = 0.0 ppm w/v
17:00	Removed foot pump From MW-26, resecured w/l PW collected split spoon from 67.5 to 69.5 Blow counts; 18, 17, 16, 19 Recovery = 20" Brown, well sorted fine to med. sand, wet
17:20	PW winterized rig, consolidated drums all OFFsite

See Rosberg

Location Scotia Naval Depot Date 3/19/13

Project / Client CENAE / CENAN

See Rosberg

Scale

07:00	Onsite, PW Filling water tank Weather; Cloudy, light snow/rain mix precip ~32°F, 2" of snow Fell overnight
07:40	PW onsite, conducted H2S tailgate
08:30	LSR to drum storage area to collect IDW characterization samples. Numbered unlabeled drums
09:00	Collected composite sample of water on top of drilling cuttings from MW-26 (6 drums) MW-26-50.0-IDW
10:00	Collected composite sample Drums 1-6-IDW From cuttings drums, liquid above cuttings collected
10:20	Collected composite sample From two MW-25 cuttings drums, liquid above cuttings collected
11:00	Collected composite sample From Drums 7-12-IDW liquid IDW,
11:30	Collected composite sample Drums 13-18-IDW From cuttings drums, liquid above cuttings Collected.
12:00	Collected composite sample Drums 19-24-IDW From cuttings drums, liquid above cuttings collected.
12:05	PW offsite For lunch break. Roller bit @ 70' bgs, ~4" of snow has Fallen since 08:00
12:35	Collected composite sample Drums 25-27-IDW From liquid above cuttings
12:40	PW returned From lunch
12:50	Collected composite sample Drums 28-30-IDW From liquid IDW drums
13:15	Returned to MW-27, PW @ ~95' bgs, cuttings are med. to coarse sand
14:55	PW tripping out roller bit From 107.5' bgs to collect split spoon

See Rosberg

Location Scotia Naval Depot Date 3/19/13

Project / Client CENAE / CENAN

See Rosberg

15:20 Collected split spoon From 107.5-109.5' bgs : interval
Blow Counts: 25, 28, 33, 37
Recovery: 1.8' PID; 0.0 ppm v/v
Texture; Brown, very well sorted fine sand
w/trace silt, wet

15:55 PW tripping out roller bit

18:00 Well constructed (MW-27)
Sand pack: 110-98'
Bentonite chips: 98-94'
Will grout in morning

18:05 PW + LSR offsite

See Rosberg

Location Scotia Naval Depot Date 3/20/13

Project / Client CENAE / CENAN

See Rosberg Scale

07:00 onsite, PW getting water to mix grout
Weather; Mostly sunny, ~25°F

07:45 Collected composite sample MW-27-50.0-IDW From water above cuttings. Composite sample collected From a total of 8 drums

08:45 Called Joe S. to update him on progress

09:30 Drum inventory

Location generated	Contents	Number/Quantity
MW-25 (dev. H2O @ well)	Water	2
MW-26	dev. water	4
MW-25	Cuttings	2
MW-26	Cuttings	6 LTR
MW-27	cuttings	8
Drums 1-6 / unknown	cuttings	6
Drums 7-12 / unknown	liquid / water	6 LTR
Drums 13-18 / unknown	cuttings	6
Drums 19-24 / unknown	cuttings	6
Drums 25-27 / unknown	water	3
Drums 28-30 / unknown	cuttings	3
Profile Purge water	water	1
MW Purge water	water	1
MW-27	Water From grouting	2
	Total	54 drums

10:10 collected MW-27-25.0-IDW From two drums containing grout water.

11:30 PW completed construction of MW-27
12:00 Collected TB-01-IDW (trip blank)
12:10 PW completed Flush mount @ MW-26
PW to clean up site, decon, etc.
12:30 LSR offsite

See Rosberg

Location Scotia Naval Depot Date 4/24/13

Project / Client CENAE/CENAN

Joseph Schmidt

06:30	Onsite Parday. IC calculate drums for pick up. 48 drums at staging area, 2 at MW-25 location.
07:15	Lee Rasbery arrives onsite. He deploys to MW-25 to collect the geochemical sample, while I finish drums
10:00	Lee completes sample collection-see fieldsheet for details.
10:15	Deploy to well MW-24 Re-hydrate & conductivity testing, using a pneumatic tester. Initial DTW: 67.62ft BTOC.
11:50	Three tests completed at MW-24 (b,c,d) Mob to MW-9
12:10	Initial DTW at MW-9 63.07ft
12:35	Tests complete (MW-9b, -9c, -9d) Mob to MW-27
12:40	Initial DTW at MW-27 : 65.25ft. Recovery is very rapid w/in seconds
13:50	LSR called Seth Pitkin for advice on rapid recovery, he advised to submerge transducer to max. possible depth (15' below static level) and maximize head differential
13:35	Performed a few slug tests @ MW-27

Location Scotia Naval Depot Date 4/24/13

Project / Client CENAE / CENAN

Scale

as described above, still w/ minimal recovery time

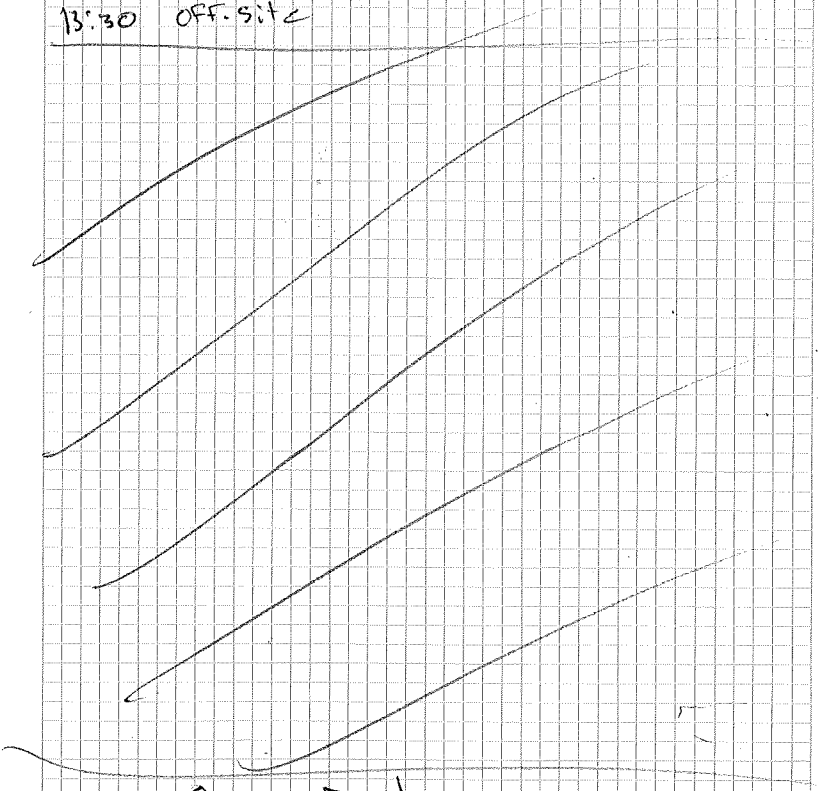
13:35 Three tests completed

13:40 Initial DTW @ MW-26 : LSR 67.65 ft btoc

14:05 Three tests completed

13:00 IDW hauled onsite for pickup during 48 drums at pad 1; 2 at GSA property.

13:30 OFF-SITE



See Rasbery

Central
Railroad
Pearl
Parke
Central
Maple
Main
Lincoln
Summit
Jackson
FILM
School

Scotia Naval Depot 2/18/13
102305-R/C WJW
Mud-Rotary / Split Spoon
-Activity Log: MW-24

1330 Set up rig on hole *
1355 set 4.25" augers,
1415 to 20'
1510 Trip Out Augers, Lower/Hammer
~~1430~~ Conductor casing (6.5" to 20') 19'
1510 Set up hoses, etc., Mix Mud
1555 Trip in Roller bit, casing,
Bore out conductor casing
1735 Conductor casing bored out.
Drain hoses, pumps, etc. F-11
w/ Wiper fluid.
1750 Offsite

WJW

* Parratt-Wolff CME, Glen & Matt

"Rite in the Rain"

Seaton Naval Depot 2/19/13
MW-24 WJW
Drilling and Well Install

0706 On site, Drillers getting water
0800 Drillers (Glen/Mull) at hole, setting up
0815 Resume drilling
1685 Roller bit down to 90'
Wash out and circulate
Pull up 15-20'
split spoon on AM
1715 Drillers off site

~900 gallons of water used for mud rotary phase of hole.

Seaton Naval Depot 2/20/13
MW-24 WJW
Drilling and well install

0700 On site, drillers getting water
0800 Trip out mud-rotary tooling
0900 2 split spoon runs done, back down w/ roller bit
0925 Roller bit tripped out, back down w/ spoons

0950 2 spoon runs, back down w/ roller bit
1055 Roller bit tripped out, back down w/ spoon (last one)
1105 Trip in roller bit, drill to 100'
1125 Trip out roller bit/casing
1150 Tripped out of hole
Install well, sand, Bentonite
1500 Began Portland/Bentonite Tremie to fill hole.
1630 Trip out conductor casing
1700 Drain hoses, fill w/ Wiper fluid. Stick-up casing set
1730 off site

"Rite in the Rain"

Seatra Naval Depot 2/21/13
WP-05 Borings WJW

0700 On Site
0800 Move off-hole
0830 Move to WP-05 location
Set Augers to -19
Set conductor casing to -19
1100 Begin mud-rotary
1695 Roller bit down to -56' at end of day.
1715 Drillers off-site

2/21/13 WJW
WP-03 split spoon 16.5-16.7'
31, 31, 38, 43

MW-24

90-92: 26, 29, 44, 35
92-94: 33, 42, 46, 58
94-96: 33, 35, 34, 37
96-98: 22, 44, 56, 68
98-100: 35, 43, 52, 50

"Rite in the Rain"

Scotia Naval Depot 2/22/13
WP-05 Borings WJW

0700 On site
0800 Resume mud-rotary
1105 ~~Trip~~ Down to -75'
1115 Trip out Mud Rotary
1120 Trip in spoons
1130 Trip out Spoons, on w/ mud-rotary
1310 Mud-rotary to -85
1315 Trip out mud-rotary
Trip in spoons
1325 Trip Out Spoons
(Break down to 10' white topping)
1340 Sample collected

Pull out conductor casing, clean out hoses/mud ~~tub~~ tub, etc...

Drillers off site

"Rite in the Rain"

Location Glenville, NY Date 2/4/13

Project / Client Scotia Nave Depot / USACE

LSR/DSL

Synoptic water level measurements - called PID to ~~ppm~~ ppm TOB.

Well ID	Water level (ft btoc)	PID (ppm)	
B-1	~~73.12~~ 60.47	~~0.0~~ DL 0.2	~~Grasp~~ DL Post
B-2	~~73.0~~ 60.84	~~0.0~~ DL 0.0	
B-3	59.83	0.0	
B-6	CNL	CNL	
GEP-1	20.17	0.0	
GEP-2	20.17	15.5	Protect Lock Cap Broken
GEP-3	67.40	0.0	
GEP-4	69.48	22.6	
MW-1	73.12	0.0	Grasp Post
MW-2	73.08	0.0	
MW-3	70.10	0.0	Cut lock
MW-4	73.70	0.0	
MW-5	71.56	0.2	Broken cap/lock
MW-6	70.08	0.1	No cap
MW-7	68.66	0.1	
MW-9	69.84	0.0	Cut lock
MW-10	62.40	0.0	Cut Lock
MW-11	70.26	0.0	
MW-12	71.12	0.0	
MW-13	69.78	0.0	No Cap
MW-14	70.02	0.0	No Cap

Location Glenville, NY Date 2/4/13

Project / Client Scotia Navy Depot LSR/DSL

Scale

Well ID	Water level (ft btoc)	PID	
MW-15	68.07	0.0	
MW-16	65.72	0.0	Cut lock
MW-17	68.98	0.0	Cut lock
MW-18	69.20	4.3	
MW-19	70.35	0.0	
MW-20	73.51	15.4	
MW-21	~~72.24~~ DL 70.49	~~4.0~~ 4.0	~~No lock~~ DL
MW-22	71.49	0.0	No Lock
MW-23	71.50	0.0	
PMW-1	73.86	0.0	
PMW-2	72.21	0.0	No lock
PMW-3	71.26	0.0	
PMW-7	17.58	0.0	No cap
S-1D	19.00	0.0	
well6	22.74	0.0	No lock No Cap

APPENDIX B: SAMPLING AND INSTRUMENT CALIBRATION FORMS

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/20/13
STONE CREW:
SAMPLER NAME: Wesley Myles
SAMPLER SIGNATURE:
CHECKED BY: TWM DATE: 2/20/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 6600XL-25-0
UNIT ID NO. 08D0808

AM CALIBRATION Start Time 7:30 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	3.33 Cal	+/- 0.1 pH Units
pH (7)	SU	7.0	8.33 cal	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	240	238.4 Cal	+/- 10 mV
Conductivity	mS/cm	1.413	1474 Cal	+/- 0.5% of standard
DO (saturated)	%	100		+/- 2% of standard
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L
Temperature	°C			
Baro. Press.	mmHg			

POST CALIBRATION CHECK Start Time /End Time

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	6.45	+/- 0.3 pH Units
250 240	196.9	+/- 10 mV
1.413	1357	+/- 5% of standard
		+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE MicroTPW
MODEL NO. 20000
UNIT ID NO. 16220

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00 ✓	<0.1		+/- 0.3 NTU of stan.
10 20 Standard	NTU	20	10.28 Cal	10 20	10.07	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
1000 800 Standard	NTU	800	984.7 Cal	1000 800	987.3	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20810	3/30/15
pH (10)	-	-
ORP	BP104QH-100	-
Conductivity	Oakton QU1	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	-	-
800 Turb. Stan.	8080	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/21/13
STONE CREW:
SAMPLER NAME: Wesley Nuttle
SAMPLER SIGNATURE:
CHECKED BY: TDM DATE: 2/21/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600XL-25-0
UNIT ID NO. 04B04804

AM CALIBRATION Start Time 7:30 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.50 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.37 cal	+/- 0.1 pH Units	7.0	6.95	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	240	249 ✓	+/- 10 mV	240	235.4	+/- 10 mV
Conductivity	mS/cm	1.413	1268 cal	+/- 0.5% of standard	1.413	1348	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

POST CALIBRATION CHECK Start Time /End Time

TURBIDITY METER

METER TYPE MicroTPW
MODEL NO. 20000
UNIT ID NO. 1820

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00 ✓	<0.1	0.00	+/- 0.3 NTU of stan.
20 Standard	NTU	20	10.02 ✓	20	9.75	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
800 Standard	NTU	800	961.5 cal	800L	1026	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20810	3/30/15
pH (10)	-	-
ORP	BP104QH-100	-
Conductivity	Oakton QUI	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	-	-
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/22/13
STONE CREW:
SAMPLER NAME: Weston
SAMPLER SIGNATURE:
CHECKED BY: WW DATE: 2/22/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600XL-25-D
UNIT ID NO. 08D0806

AM CALIBRATION Start Time 7:30 /End Time

POST CALIBRATION CHECK Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.32 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.15 cal	+/- 0.1 pH Units	7.0	6.63	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	240	250.2 ✓	+/- 10 mV	~~250~~ 240	233	+/- 10 mV
Conductivity	mS/cm	1.413	1532 cal	+/- 0.5% of standard	1.413	1.440	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE Micro TPW
MODEL NO. 20000
UNIT ID NO. 1820

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00 ✓	<0.1	0.00	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	20	9.68 cal	~~20~~ 10	9.88	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
~~1000~~ 800 Standard	NTU	800	1022 cal	~~800~~ 100	98.6	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO.

DO	100	100		100	Pass	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20810	3/30/15
pH (10)		
ORP	BP104Q+/-100	
Conductivity	Oakton QVI	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.		
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDIT[illegible]M):
WEATHER CONDIT[illegible]M):

TASK NO: DATE: 3/4/13
STONE CREW:
SAMPLER NAME: J Waterstraat
SAMPLER SIGNATURE:
CHECKED BY: DJC DATE: 3/4/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 600 XL
UNIT ID NO.: 09734

AM CALIBRATION Start Time 0730 /End Time

POST CALIBRATION CHECK Start Time 1545 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.11	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.4 cal	+/- 0.1 pH Units	7.0	7.08	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	mV	~~240~~ 250	251	+/- 10 mV	~~240~~ 250	252.5	+/- 10 mV
Conductivity	cm	1.413	1.407	+/- 0.5% of standard	1.413	1.555	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE: Scientific
MODEL NO.: Micro TPW
UNIT ID NO.: 7034

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00	+/- 0.3 NTU of stan.
~~20~~ 10 Standard	NTU	20	10.70	~~20~~ 10	11.17	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
~~800~~ 1000 Standard	NTU	~~800~~ 1000	972.2 cal	~~800~~ 1000	969.5	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE: Hach
MODEL NO.: HQ30
UNIT ID NO.: 90567

DO	✓	—		✓	✓	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20910	3/30/13
pH (10)	—	—
ORP	BP104QM-100	9/14
Conductivity	Oakton QW1	6/14
<0.1 Turb. Stan.	8000	7/13
~~20~~ 10 Turb. Stan.	3014	7/13
100 Turb. Stan.	—	—
~~800~~ 1000 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: WDW
SAMPLER SIGNATURE:
CHECKED BY: PJL
DATE: 3/6/13 (DATE: 3/6/13)

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 6000XL
UNIT ID NO.: 0934

AM CALIBRATION Start Time 0506 /End Time

POST CALIBRATION CHECK Start Time ____ /End Time ____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.91 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.03	+/- 0.1 pH Units	7.0	7.26	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	257 cal	+/- 10 mV	~~240~~ 250	248	+/- 10 mV
Conductivity	mS/cm	1.413	1.446	+/- 0.5% of standard	1.413	1.453	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE: Scientific
MODEL NO.: Micro TPW
UNIT ID NO.: 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.01	~~<0.1~~	0.00	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	~~10~~ 20	10.15	~~10~~	10.03	+/- 5% of standard
100 Standard	NTU	100	993.7	100	—	+/- 5% of standard
~~800~~ Standard	NTU	~~800~~	—	~~800~~/1000	1037	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE: Hach
MODEL NO.: HQ30
UNIT ID NO.: 70557

DO	✓	—		✓	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20816	3/30/15
pH (10)	—	—
ORP	BP10ORP-100	9/14
Conductivity	Oakton QU1	6/14
<0.1 Turb. Stan.	8000	9/13
~~10~~ 20 Turb. Stan.	8014	7/13
~~100~~ Turb. Stan.	—	—
~~800~~/1000 Turb. Stan.	5030	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defe[illegible]onal Stockpile Center Seneca Depot
PROJECT NUMBER: [illegible]05-R C
PROJECT LOCATION: Glen[illegible] NY
WEATHER CONDITIONS:
SITE CONDITIONS (PM):
TASK: [illegible]
STONE CREW:
SAMPLER NAME: [illegible]
SAMPLER SIGNATURE:
CHECKED BY: DJL
DATE: 3/4/13
DATE: 3/4/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 6000XL
UNIT ID NO.: 0934

AM CALIBRATION Start Time 1120 /End Time

POST CALIBRATION CHECK Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.97 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.23 cal	+/- 0.1 pH Units	7.0	6.95	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	254	+/- 10 mV	~~240~~ 250	251.6	+/- 10 mV
Conductivity	mS/cm	1.413	1471 cal	+/- 0.5% of standard	1.413	1.344	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE: Spectrum
MODEL NO.: Micro TPW
UNIT ID NO.: 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	2.68	<0.1		+/- 0.3 NTU of stan.
~~10~~ ~~20~~ Standard	NTU	10 20	12.85 cal	~~20~~ 10	10.34	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
~~1000~~ ~~800~~ Standard	NTU	800	857 cal	~~1000~~ ~~800~~	986.7	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE: Hach
MODEL NO.: HQ30
UNIT ID NO.: 90557

DO	—	—		—	—	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	208116	3/31/15
pH (10)	—	
ORP	BP104QH-100	9/14
Conductivity	Oakton QH	6/14
<0.1 Turb. Stan.	0.000	7/13
20 Turb. Stan.	20.14	7/13
100 Turb. Stan.	—	
800 Turb. Stan.	800	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense N[illegible]onal Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenv[illegible], NY
WEATH[illegible] CONDITIONS (AM):
[illegible] CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: WJW
SAMPLER SIGNATURE:
CHECKED BY: PJL DATE: 3/5/13
DATE: 3/5/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE
MODEL NO.
UNIT ID NO.

AM CALIBRATION Start Time _____ /End Time _____

POST CALIBRATION CHECK Start Time 1645 /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.30 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.95	+/- 0.1 pH Units	7.0	7.21	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	251.6	+/- 10 mV	~~240~~ 250	243.4	+/- 10 mV
Conductivity	mS/cm	1.413	1.344	+/- 0.5% of standard	1.413	1.455	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L		—	
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 3036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.15	<0.1	0.00	+/- 0.3 NTU of stan.
~~10~~ ~~20~~ Standard	NTU	~~20~~ 10	10.84	~~20~~ 10	11.44	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
~~100~~ ~~800~~ Standard	NTU	~~800~~ 1000	986.9	~~800~~ 1000	999.3	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70857

DO	—	✓		✓		See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209007	9/15/15
pH (7)	20810	3/30/15
pH (10)	—	—
ORP	BR104011-100	7/14
Conductivity	Dakota GV1	6/14
<0.1 Turb. Stan.	8000	7/13
~~10~~ ~~20~~ Turb. Stan.	3014	7/13
100 Turb. Stan.	—	—
~~800~~ Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): ~32° F Overcast
WEATHER CONDITIONS (PM): 32°F Sunny

TASK NO: _____ DATE: 3/4/13
STONE CREW: _____
SAMPLER NAME: TWM
SAMPLER SIGNATURE: _____
CHECKED BY: _____ DATE: 3/4/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE _____
MODEL NO. _____
UNIT ID NO. _____

AM CALIBRATION Start Time 1126 /End Time 1139

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	3.89 cal	+/- 0.1 pH Units
pH (7)	SU	7.0	7.14 cal	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	~~240~~ 250	244.3	+/- 10 mV
Conductivity	mS/cm	1.413	1.423	+/- 0.5% of standard
DO (saturated)	%	100		+/- 2% of standard
DO (saturated)	mg/L[1] (see Chart 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L
Temperature	°C			
Baro. Press.	mmHg			

POST CALIBRATION CHECK Start Time 929 /End Time 936

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	6.80	+/- 0.3 pH Units
~~240~~ 250	242.8	+/- 10 mV
1.413	1.443	+/- 5% of standard
		+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 1826

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.22	<0.1	0.18	+/- 0.3 NTU of stan.
~~20~~ 10 Standard	NTU	~~20~~ 10	9.95	~~20~~ 10	10.08	+/- 5% of standard
100 Standard	NTU	100	~	100		+/- 5% of standard
~~800~~ 1000 Standard	NTU	~~800~~ 1000	1002	~~800~~ 1000	996.7	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE _____
MODEL NO. _____
UNIT ID NO. _____

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE _____
MODEL NO. _____
UNIT ID NO. _____

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE DO
MODEL NO. Hach HQ30
UNIT ID NO. _____

100%	100%			100%	100%

See Notes Below for Additional Information

☐ Equipment calibrated within the A[illegible]ted for each of the parameters listed above.
☐ Equipment (no[illegible] for each of the parameters listed above**.

MATERIALS RECO[illegible]

Deionized Water Source: [illegible]
Lot#/Date Produced: [illegible]
Trip Blank Source: [illegible]
Sample Preservatives Source: [illegible]
Disposable Filter Type: [illegible]ulose
Calibration Fluids / Standar[illegible]
- DO Calibration Fluid (<0[illegible]
- Other _____
- Other _____
- Other _____

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1-15-15
pH (7)	3TXP4	5-30-15
pH (10)		
ORP	SP104 QH-13	9/14
Conductivity	Oakton QH	6/14
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	P04	"
100 Turb. Stan.	P015	
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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** = If meter reading is not within a[illegible]lean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data[illegible]k entries.
1 = DO Saturated standard value[illegible]d on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): ~33°F Overcast
WEATHER CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: TWM
SAMPLER SIGNATURE:
CHECKED BY:
DATE: 3/5/13
DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE
MODEL NO.
UNIT ID NO.

AM CALIBRATION Start Time 7:33 /End Time

POST CALIBRATION CHECK Start Time 1712 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.14 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.64 cal	+/- 0.1 pH Units	7.0	7.07	Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~256	259.1 cal	+/- 10 mV	~~240~~250	238.2	mV
Conductivity	mS/cm	1.413	1.420 cal	+/- 0.5% of standard	1.413	1.334	5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			+/- 0.5 mg/L of standard
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 1820

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.16	<0.1	0.35	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	~~10~~20	18.06	~~10~~20	18.07	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
~~100~~ 800 Standard	NTU	~~800~~1000	1002	~~800~~1000	977.4	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppm	25		25	+/- 10% of standard
CO	ppm	50		50	+/- 10% of standard

[illegible] METER

TYPE DO
[illegible] Hach HQ30
UNIT I[illegible]

	100%	108%		See Notes Below for Additional Information

☐ [illegible]d within the A[illegible]
☐ Equipme[illegible]ve**.

MATERIALS REC[illegible]

	Cal. Standard Lot Number	Exp. Date
Deionized Water Sour[illegible]		
Lot#/Date Prod[illegible]		
Trip Blank Source:		
Sample Preservatives Sourc[illegible]		
Disposable Filter Type:		
Calibration Fluids / Stand[illegible]		
- DO Calibration Fluid[illegible]		
- Other		
- Other		
- Other		
[illegible](4)	209009	1/3/15
[illegible](7)	20816	3/30/15
[illegible](10)	—	—
ORP	BP104QM-100	9/14
Conductivity	Oakton QUI	6/14
<0.1 Turb. Stan.	8000	7/13
~~10~~20 Turb. Stan.	8014	7/13
100 Turb. Stan.	—	—
~~100~~800 Turb. Stan.	8080	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-Calibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): 35°F Overcast
WEATHER CONDITIONS (PM): 35°F Overcast
TASK NO:
DATE: 6/6/13
STONE CREW:
SAMPLER NAME: TWM
SAMPLER SIGNATURE:
CHECKED BY:
DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 6000 XL
UNIT ID NO.: 25-0

AM CALIBRATION Start Time 731 /End Time 800

POST CALIBRATION CHECK Start Time 328 /End Time 340

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.06 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.07 cal	+/- 0.1 pH Units	7.0	6.82	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	244.2	+/- 10 mV	~~240~~ 250	243.1	+/- 10 mV
Conductivity	mS/cm	1.413	1.403	+/- 0.5% of standard	1.413	1.432	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE: Scientific
MODEL NO.: Micro TPW
UNIT ID NO.: TP20

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
0 Standard	NTU	<0.1	0.41 cal	<0.1	0.00	+/- 0.3 NTU of stan.
20 Standard	NTU	~~20~~ 19	18.42 cal	~~20~~ 19	18.69	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
800 Standard	NTU	~~800~~ 1000	974.3 cal	~~800~~ 1000	1100	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE: DO
MODEL NO.: Hach HQ30
UNIT ID NO.:

100%	100%			100%	100%

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	20906	1-16-15
pH (7)	20816	3-30-15
pH (10)		
ORP	B1104 QH-160	9-14
Conductivity	Oakton Qu1	6-14
<0.1 Turb. Stan.	8000	7-13
20 Turb. Stan.	R1004	9-13
~~100~~ Turb. Stan.		
~~800~~ 1000 Turb. Stan.	8050	7-13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Overcast 35°F
WEATHER CONDITIONS (PM):
TASK NO.:
STONE CREW:
SAMPLER NAME: TWM
SAMPLER SIGNATURE:
CHECKED BY:
DATE: 3/7/13
DATE: 3/7/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 600 XL
UNIT ID NO.: 25-0

AM CALIBRATION Start Time 7:10 /End Time

POST CALIBRATION CHECK Start Time 16:03 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.13 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.02	+/- 0.1 pH Units	7.0	6.88	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	250.8	+/- 10 mV	~~240~~ 250	242.3	+/- 10 mV
Conductivity	mS/cm	1.413	1.515 cal	+/- 0.5% of standard	1.413	1.331	+/- 5% of standard
DO (saturated)	%	100	100	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)			+/- 0.2 mg/L	100%	100%	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE: Scientific
MODEL NO.: TN100TPW
UNIT ID NO.: 1820

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00	+/- 0.3 NTU of stan.
20 Standard	NTU	~~20~~ 10	9.97	20	9.63	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
800 Standard	NTU	~~800~~ 1000	1015	~~800~~ 1000	1013	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE: DO
MODEL NO.: Hach HQ3
UNIT ID NO.:

100%	100%			100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209004	1-15-15
pH (7)	3TX 20816	3-30-15
pH (10)		
ORP	BPOY QH-160	9-14
Conductivity	Oakton QC1	6-14
<0.1 Turb. Stan.	8000	7-13
10 ~~20~~ Turb. Stan.	P014	2-13
100 Turb. Stan.		
100~~800~~ Turb. Stan.	P050	2-13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): 35°F Clear
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/25/13
STONE CREW: TWM
SAMPLER NAME: TWM
SAMPLER SIGNATURE:
CHECKED BY: DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 556 MPS
UNIT ID NO. 12.13

AM CALIBRATION Start Time 10:10 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.04 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.89 cal	+/- 0.1 pH Units	7.0	6.73	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	263.1 cal	+/- 10 mV	~~240~~ 250	244.9	+/- 10 mV
Conductivity	mS/cm	1.413		+/- 0.5% of standard	1.413	1.425	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 1920

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.0	<0.1	0.02	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	20 10	10.5 cal	~~10~~ 20 10	10.21	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
~~800~~ 1000 Standard	NTU	~~800~~ 1000	991.4 cal	~~800~~ 1000	1024	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE DO
MODEL NO. YSI 6820
UNIT ID NO.

100%	100%			100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1-15-15
pH (7)	3TX P4	3/30/15
pH (10)		
ORP	(Oakton Cal) ORP104QA-100	9/2014
Conductivity	4mM 2580 Oakton Cal	6/2014
<0.1 Turb. Stan.	0000	7/13
~~10~~ 20 Turb. Stan.	2014	7/13
~~100~~ 100 Turb. Stan.	8050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: TWN
SAMPLER SIGNATURE:
CHECKED BY: DATE:

DATE: 8/26/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 556 MPS
UNIT ID NO. 12.13

AM CALIBRATION Start Time 1029 /End Time

POST CALIBRATION CHECK Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.06	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.91	+/- 0.1 pH Units	7.0	7.05	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	243.3 cal	+/- 10 mV	~~240~~ 250	239.4	+/- 10 mV
Conductivity	mS/cm	1.413	1136 cal	+/- 0.5% of standard	1.413	1.333	+/- 5% of standard
DO (saturated)	%	100	100	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00	+/- 0.3 NTU of stan.
20 Standard	NTU	0.1 ~~20~~	0.76	20		+/- 5% of standard
100 Standard	NTU	10 ~~100~~	9.96	100	Error	+/- 5% of standard
800 Standard	NTU	800		800L		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1-15-15
pH (7)	3TXF4	3-30-15
pH (10)		
ORP	Oakton ORP	9/2014
Conductivity	9WYES	6/2014
<0.1 Turb. Stan.		
20 Turb. Stan.		
100 Turb. Stan.		
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): 20°F Overcast
WEATHER CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: TUM
SAMPLER SIGNATURE:
CHECKED BY:
DATE: 2/26/13
DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 556 MPS
UNIT ID NO. 1313

AM CALIBRATION Start Time 818 /End Time

POST CALIBRATION CHECK Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.08 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0		+/- 0.1 pH Units	7.0	7.04	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	240 250	240.5 cal	+/- 10 mV	350 240	241.2	+/- 10 mV
Conductivity	mS/cm	1.413	1.507 cal	+/- 0.5% of standard	1.413	1.433	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 1820

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.0	<0.1	0.13	+/- 0.3 NTU of stan.
20 Standard	NTU	20 10	10.49 cal	20 10	11.71	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
800 Standard	NTU	800 1000	1001 cal	1000 800	1010	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE PID
MODEL NO. Hach HQ30
UNIT ID NO.

100%	100%			100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1-15-15
pH (7)	3TXF4	3/30/15
pH (10)		
ORP	Oakton QH+TW12	9/2014
Conductivity	TW12 Oakton QH	6/2014
<0.1 Turb. Stan.	2000	7/13
20 Turb. Stan.	2014	7/13
100 Turb. Stan.	2050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Rain 32+
WEATHER CONDITIONS (PM): Rain 32+
TASK NO:
STONE CREW:
SAMPLER NAME: TWM
SAMPLER SIGNATURE:
CHECKED BY:
DATE: 2/27/13
DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600XL
UNIT ID NO.

AM CALIBRATION Start Time 7:50 /End Time 7:59

POST CALIBRATION CHECK Start Time 1657 /End Time 1704

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.0	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.96	+/- 0.1 pH Units	7.0	6.98	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	250	+/- 10 mV	~~240~~ 280	240.6	+/- 10 mV
Conductivity	mS/cm	1.413	1413	+/- 0.5% of standard	1.413	1.310	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE Scientific
MODEL NO. MicroTPW
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.0	<0.1	0.1	+/- 0.3 NTU of stan.
20 Standard	NTU	~~20~~ 10	10.63 cal	~~20~~ 10	10.49	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
~~800~~ 1000 Standard	NTU	~~800~~ 1000	1043 cal	~~800~~L 1006	977.8	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE DO
MODEL NO. Hach HQ30
UNIT ID NO.

100%	100%			100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1-15-15
pH (7)	3TXF4	3-30-16
pH (10)		
ORP	ISP104 QH-100	9/14
Conductivity	Oakton Cal	6/14
<0.1 Turb. Stan.	0000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	8050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Overcast / Rain 32°F
WEATHER CONDITIONS (PM): Overcast 40°F

TASK NO: _____ DATE: 2/28/13
STONE CREW: TW
SAMPLER NAME: TWM
SAMPLER SIGNATURE: TWM
CHECKED BY: _____ DATE: 2/28/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600XL
UNIT ID NO. 25-0

AM CALIBRATION Start Time 7:20 /End Time 7:47

POST CALIBRATION CHECK Start Time 1630 /End Time 1633

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.38 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.86 cal	+/- 0.1 pH Units	7.0	6.89	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	260.7 cal	+/- 10 mV	~~240~~ 250	237	+/- 10 mV
Conductivity	mS/cm	1.413	1.315 cal	+/- 0.5% of standard	1.413	1.333	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. _____

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.15	<0.1	0	+/- 0.3 NTU of stan.
20 Standard	NTU	~~20~~ 10	11.1 cal	~~20~~ 10	9.23	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
800 Standard	NTU	~~800~~ 1000	970.1 cal	~~800~~ L 1000	1011	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE _____
MODEL NO. _____
UNIT ID NO. _____

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE _____
MODEL NO. _____
UNIT ID NO. _____

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE DO
MODEL NO. Hach HQ30
UNIT ID NO. _____

	100%	100%			100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: _____
Lot#/Date Produced: _____
Trip Blank Source: _____
Sample Preservatives Source: _____
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L) _____
- Other _____
- Other _____
- Other _____

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1-15-15
pH (7)	3YX F4	3-30-15
pH (10)		
ORP	ISP 104 QH-100	9/14
Conductivity	Oakton Qual	6/14
<0.1 Turb. Stan.	0000	7/13
10 Turb. Stan.	8014	7/13
100 Turb. Stan.	8015	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Overcast 35°F+
WEATHER CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: TWM
SAMPLER SIGNATURE:
CHECKED BY:
DATE: 3/1/13
DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600XL
UNIT ID NO. 25-9

AM CALIBRATION Start Time 719 /End Time 736

POST CALIBRATION CHECK Start Time 1630 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.8 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.07 cal	+/- 0.1 pH Units	7.0	7.02	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	246.4 cal	+/- 10 mV	~~240~~ 250	240	+/- 10 mV
Conductivity	mS/cm	1.413	1.302 cal	+/- 0.5% of standard	1.413	1.573	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.09	<0.1	0.11	+/- 0.3 NTU of stan.
20 Standard	NTU	20 10	9.88	~~20~~ 10	10.02	+/- 5% of standard
100 Standard	NTU	100		100	-	+/- 5% of standard
800 Standard	NTU	~~800~~ (100)	99.2	~~1000~~ ~~800~~	100.9	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE DO
MODEL NO. Each FIQO
UNIT ID NO.

	100%	100%				See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209006	1-15-15
pH (7)	3YXP4	3-30-15
pH (10)		
ORP	BP1040H-100	9/14
Conductivity	Oakton 641	6/14
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	
100 Turb. Stan.	8015	
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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I = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Clear, ~15°F
WEATHER CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: LJK
SAMPLER SIGNATURE: Lee Rosbert
CHECKED BY: WJW
DATE: 2/7/13 (DATE: 2/7/13)

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO.
UNIT ID NO.

AM CALIBRATION Start Time 07:00 /End Time 13:00 (07:30)

POST CALIBRATION CHECK Start Time 13:00 /End Time 13:30

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.11	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.99	+/- 0.1 pH Units	7.0	6.98	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240 (240)	252.3	+/- 10 mV	240 (240)	247.2	+/- 10 mV
Conductivity	mS/cm	1.413	1472	+/- 0.5% of standard	1.413	1415	+/- 5% of standard
DO (saturated)	%	100	98.3	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)			+/- 0.2 mg/L	100%	97.4	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE LaMotte 2020e
MODEL NO. 2020e
UNIT ID NO. 11836

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.03	<0.1	2.33	+/- 0.3 NTU of stan.
1.0 20 Standard	NTU	20	1.27	1.0-20	3.94	+/- 5% of standard
10 100 Standard	NTU	100	7.99	10 100	4.87	+/- 5% of standard
800 Standard	NTU	800		800L		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TX51	1/15/15
pH (7)	208016	3/30/15
pH (10)	—	—
ORP	BP164014-100	05/2014
Conductivity	Oakton QU1	06/2014
<0.1 Turb. Stan.	2000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	8050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Partly Sunny ~15°F
WEATHER CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: ~~LTR~~ WJW
SAMPLER SIGNATURE:
CHECKED BY: LTR
DATE: 2/5/13
DATE: 2/5/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600 XL
UNIT ID NO. 0934

AM CALIBRATION Start Time _____ /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	~~3.91~~ 4.08 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.08 cal	+/- 0.1 pH Units	7.0	6.98	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	226 cal	+/- 10 mV	~~240~~ 250	250.7	+/- 10 mV
Conductivity	mS/cm	1.413	1.624 cal	+/- 0.5% of standard	1.413	1.467 cal	+/- 5% of standard
DO (saturated)	%	100	106	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		NC				
Baro. Press.	mmHg		NC				

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 20070228

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.74	<0.1	0.57 cal	+/- 0.3 NTU of stan.
~~20~~ 10 Standard	NTU	~~20~~ 10	11.02	~~20~~ 10	11.47 cal	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
~~800~~ 1000 Standard	NTU	~~600-800~~	977.4	~~800~~ 1000	975.5	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE DO
MODEL NO. Hach HQ30
UNIT ID NO. green case

100%	100%			100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXF1	1/15/15
pH (7)	208010	3/30/15
pH (10)	—	—
ORP	BP104Q14-100	09/2014
Conductivity	Oakton QU1	06/2014
<0.1 Turb. Stan.	6000	7/13
20 Turb. Stan.	6014	7/13
100 Turb. Stan.	6050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
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① WJW 2/5/13

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Partly Sunny, Teens
WEATHER CONDITIONS (PM):
TASK NO:
DATE: 2/5/13
STONE CREW: LSR
SAMPLER NAME: ~~LSR~~ WAN
SAMPLER SIGNATURE: See Binder
CHECKED BY: LSR DATE: 2/5/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE Scientific Micro TPW LSR 2/5/13
MODEL NO. ~~Micro TPW~~
UNIT ID NO. ~~1820~~ 1

Hydrolab MS5 62751

AM CALIBRATION Start Time 07:15 /End Time

POST CALIBRATION CHECK Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.03 ✓	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.72 cal	+/- 0.1 pH Units	7.0	7.06	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 240	248 ✓	+/- 10 mV	~~240~~ 250	222 cal	+/- 10 mV
Conductivity	mS/cm	1.413	1.162 cal	+/- 0.5% of standard	1.413	1.408 ✓	+/- 5% of standard
DO (saturated)	%	100	100.7 ✓	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)		—	+/- 0.2 mg/L	100%	102.4% ✓	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		NL				
Baro. Press.	mmHg		NL				

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 1820

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00 ✓	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	20	13.53	10 ~~20~~	1.64 cal	+/- 5% of standard
100 Standard	NTU	100	NA	100		+/- 5% of standard
~~1000~~ 800 Standard	NTU	800	1100	~~1000~~ 800	573.9 cal	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)		
pH (7)		
pH (10)		
ORP		
Conductivity		
<0.1 Turb. Stan.		
20 Turb. Stan.		
100 Turb. Stan.		
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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1 EE 2/5/13 SMK

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): 19° Clear
WEATHER CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: BSC
SAMPLER SIGNATURE:
CHECKED BY: CSR
DATE: 2/5/13
DATE: 1/5/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 556
UNIT ID NO. 1213

AM CALIBRATION Start Time 7:15 /End Time 7:50

POST CALIBRATION CHECK Start Time 12:05 /End Time 12:20

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.10	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.98	+/- 0.1 pH Units	7.0	7.13	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	250.1	+/- 10 mV	240	218.7	+/- 10 mV
Conductivity	mS/cm	1.413	1.831	+/- 0.5% of standard	1.413	0.927	+/- 5% of standard
DO (saturated)	%	100	95.5	+/- 2% of standard		95.5 %	
DO (saturated)	mg/L [1] (see Chart 1)			+/- 0.2 mg/L	—	—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C		4.95			10.14 c	
Baro. Press.	mmHg		725.1			748.8	

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 2035

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.02	<0.1	0.04	+/- 0.3 NTU of stan.
20 Standard	NTU	~~20~~ 10	10.13	10 ~~20~~	6.67	+/- 5% of standard
100 Standard	NTU	100	100.2	100	568.1	+/- 5% of standard
800 Standard	NTU	~~800~~		~~800~~		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE Scientific DL
MODEL NO. Micro PTPW
UNIT ID NO. 2035 DL

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	T3YF1	1/15/15
pH (7)	20810	8/30/15
pH (10)	—	—
ORP	YSI 4Q H-100	9/14
Conductivity	0.1K 4Q1	06/14
<0.1 Turb. Stan.	8003	7/13
10 ~~20~~ Turb. Stan.	8014	7/13
100 Turb. Stan.	8030	7/13
~~800~~ Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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535 Stone Cutters Way, Montpelier Vermont 05602

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Partly Sunny ~15°F
WEATHER CONDITIONS (PM):
TASK NO:
STONE CREW:
SAMPLER NAME: LJR
SAMPLER SIGNATURE: Lee Ryan
CHECKED BY: WSW
DATE: 2/5/13 (DATE: 2/5/13)

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: 07F101213

AM CALIBRATION — Start Time 0715 /End Time

POST CALIBRATION CHECK — Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.76	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.97	+/- 0.1 pH Units	7.0	7.47	+/- 0.3 pH Units
pH (10)	SU	10.0	NA	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 350	256	+/- 10 mV	~~350~~ 240	226	+/- 10 mV
Conductivity	mS/cm	1.413	1.615	+/- 0.5% of standard	1.413	1.457	+/- 5% of standard
DO (saturated)	%	100	124	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C		5.11				
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE: LaMotte
MODEL NO.: 2020e
UNIT ID NO.: 11836

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00	+/- 0.3 NTU of stan.
~~1.020~~ Standard	NTU	20	0.74	1.020	1.89	+/- 5% of standard
10 ~~100~~ Standard	NTU	100	5.10	10 ~~100~~	5.41	+/- 5% of standard
800 Standard	NTU	800		800L		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	35TXF1	1/15/15
pH (7)	203010	3/30/15
pH (10)		
ORP	BP104QH-100	09/2014
Conductivity	Oakton 201	06/2014
<0.1 Turb. Stan.	3000	7/13
~~1020~~ Turb. Stan.	3014	7/13
~~1000~~ 100 Turb. Stan.	3050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/6/13
STONE CREW:
SAMPLER NAME: LSR
SAMPLER SIGNATURE: See Previous
CHECKED BY: LSR DATE: 2/6/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 556 MPS
UNIT ID NO. 07F101212

AM CALIBRATION Start Time _____/End Time _____

POST CALIBRATION CHECK Start Time _____/End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.23	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.07	+/- 0.1 pH Units	7.0	7.04	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240/250	260	+/- 10 mV	240/250	245.6	+/- 10 mV
Conductivity	mS/cm	1.413	1355	+/- 0.5% of standard	1.413	1411	+/- 5% of standard
DO (saturated)	%	100	100.7	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L		89.3	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C		6.85				
Baro. Press.	mmHg		—				

TURBIDITY METER

METER TYPE LaMotte
MODEL NO. 2020e
UNIT ID NO. 11236

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	-0.10	<0.1	0.48	+/- 0.3 NTU of stan.
1.020 Standard	NTU	20	0.92	1.020	6.15	+/- 5% of standard
10.100 Standard	NTU	100	7.70	10.100	7.52	+/- 5% of standard
800 Standard	NTU	800		800L		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXF1	1/15/15
pH (7)	205010	3/30/15
pH (10)	—	—
ORP	13P1640H-100	09/2014
Conductivity	Oakton QU1	06/2014
<0.1 Turb. Stan.	9006	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	9050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot | TASK NO: | DATE: 1/6/13
PROJECT NUMBER: 102305-R C | STONE CREW:
PROJECT LOCATION: Glenville, NY | SAMPLER NAME: DJC
WEATHER CONDITIONS (AM): 20° overcast | SAMPLER SIGNATURE:
WEATHER CONDITIONS (PM): | CHECKED BY: LSR | DATE: 1/6/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 556
UNIT ID NO. 1213

AM CALIBRATION Start Time 730 /End Time 945

POST CALIBRATION CHECK Start Time 4:45 /End Time 5:00

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.01	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.02	+/- 0.1 pH Units	7.0	6.96	+/- 0.3 pH Units
~~pH (10)~~	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	250	+/- 10 mV	~~240~~ 250	248.2	+/- 10 mV
Conductivity	mS/cm	1.413	1.414	+/- 0.5% of standard	1.413	1.421	+/- 5% of standard
DO (saturated)	%	100	99.4	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)		—	+/- 0.2 mg/L		104%	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		10.69			11.92	
Baro. Press.	mmHg		751.8			760.1	

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 2035

		Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.01	<0.1	0.90	+/- 0.3 NTU of stan.
20 Standard	NTU	~~10~~ 20	9.83	~~10~~ 20	15.07	+/- 5% of standard
100 Standard	NTU	100	1060	100	804.6	+/- 5% of standard
800 Standard	NTU	~~800~~		~~800~~		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE ~~Scientific~~ DC
MODEL NO. ~~Micro TPW~~ DC
UNIT ID NO. 2035 DC

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	TBYF1	1/15/15
pH (7)	20810	3/30/15
pH (10)	—	—
ORP	TBP104QL1-100	9/14
Conductivity	ONE 001	6/14
<0.1 Turb. Stan.	6000	7/13
~~10~~ 20 Turb. Stan.	8014	7/13
~~100~~ 100 Turb. Stan.	8050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/6/13
STONE CREW:
SAMPLER NAME: WJW
SAMPLER SIGNATURE:
CHECKED BY: WJW DATE: 2/6/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600 XL
UNIT ID NO. 0934

AM CALIBRATION Start Time _____ /End Time _____

POST CALIBRATION CHECK Start Time _____ /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.98	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.95	+/- 0.1 pH Units	7.0	7.12	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	261	+/- 10 mV	240 250	246	+/- 10 mV
Conductivity	mS/cm	1.413	1.453 cal	+/- 0.5% of standard	1.413	1.559 cal	+/- 5% of standard
DO (saturated)	%	100	NC	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]		NC	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	NC	≤ 0.5 mg/L			
Temperature	°C		NC			—	
Baro. Press.	mmHg		NC			—	

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 20070 1226

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.19	<0.1	0.15	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	~~10~~ 20 10	9.79	20 10	9.97	+/- 5% of standard
100 Standard	NTU	100		100	—	+/- 5% of standard
~~100~~ 800 Standard	NTU	~~800~~ 1000	1004	~~800~~ 1000	1000	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE D.O.
MODEL NO. Hach HQ30
UNIT ID NO. 120400 10837

	100%	100%			100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	37XF1	1/15/15
pH (7)	20-8010	3/30/15
pH (10)	—	—
ORP	BP104QH-100	09/2014
Conductivity	Oakton QU1	06/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	8050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Overcast, Freezing
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/6/13
STONE CREW:
SAMPLER NAME: WAN
SAMPLER SIGNATURE:
CHECKED BY: WSW DATE: 2/6/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE Hydrolab
MODEL NO. 1205000627S1
UNIT ID NO. 62751

AM CALIBRATION — Start Time 7:25 /End Time 7:30

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	3.98 ✓	+/- 0.1 pH Units
pH (7)	SU	7.0	7.28 Cal	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	240		+/- 10 mV
Conductivity	mS/cm	1.413	1442 Cal	+/- 0.5% of standard
DO (saturated)	%	100	104.7 Cal	+/- 2% of standard
DO (saturated)	mg/L[1] (see Chart 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L
Temperature	°C			
Baro. Press.	mmHg			

POST CALIBRATION CHECK — Start Time /End Time

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.01	+/- 0.3 pH Units
240	228	+/- 10 mV
1.413	1.391	+/- 5% of standard
100%	98.3%	+/- 0.5 mg/L of standard
	—	
	—	

TURBIDITY METER

METER TYPE MicroTPW
MODEL NO. 20000
UNIT ID NO. 1820

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00 ✓	<0.1	0.00 ✓	+/- 0.3 NTU of stan.
10 ~~20~~ Standard	NTU	20	10.14 ✓	10 ~~20~~	10.25 ✓	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
1000 ~~800~~ Standard	NTU	800	982.3 Cal	1000 ~~800~~	987.5 cal	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	TBYF1	1/15/15
pH (7)	70S10	3/30/15
pH (10)		
ORP	BP104QM-100	9/14
Conductivity	ONCQ03	6/14
<0.1 Turb. Stan.	6000	7/13
20 Turb. Stan.	6014	7/13
100 Turb. Stan.	6050	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): 250
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/7/13
STONE CREW:
SAMPLER NAME: DSZ
SAMPLER SIGNATURE:
CHECKED BY: LSRC DATE: 2/7/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 556
UNIT ID NO. 1213

AM CALIBRATION Start Time 710 /End Time 735

POST CALIBRATION CHECK Start Time ____ /End Time ____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.07	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.04	+/- 0.1 pH Units	7.0	7.18	+/- 0.3 pH Units
~~pH (10)~~	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	200 ~~240~~	250.5	+/- 10 mV	250 ~~240~~	242.3	+/- 10 mV
Conductivity	mS/cm	1.413	1.411	+/- 0.5% of standard	1.413	1.386	+/- 5% of standard
DO (saturated)	%	100	100	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)		—	+/- 0.2 mg/L	—	10.44	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		9.61			11.68	
Baro. Press.	mmHg		767.4			762.1	

TURBIDITY METER

METER TYPE Siemens
MODEL NO. Micro TPW
UNIT ID NO. 2035

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.5	<0.1	0.00	+/- 0.3 NTU of stan.
10 ~~20~~ Standard	NTU	10 ~~20~~	10.17	~~20~~ 10	12.09	+/- 5% of standard
1000 Standard	NTU	1000	1041	1000	1038	+/- 5% of standard
~~800 Standard~~	~~NTU~~	~~800~~		~~800~~		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	TBXF1	1/15/15
pH (7)	70810	3/30/15
pH (10)	—	—
ORP	BP10HQH-100	9/14
Conductivity	0.01	6/14
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	8030	7/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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535 Stone Cutters Way, Montpelier Vermont 05602

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: W.SW
SAMPLER SIGNATURE:
CHECKED BY: WAW DATE: 2/9/13

DATE: 2/7/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600XL
UNIT ID NO. 0937

AM CALIBRATION Start Time 0800 /End Time

POST CALIBRATION CHECK Start Time 1700 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.05	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.06	+/- 0.1 pH Units	7.0	6.95	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240 230	263.2 cal	+/- 10 mV	240 240	236	+/- 10 mV
Conductivity	mS/cm	1.413	1.293 cal	+/- 0.5% of standard	1.413	1.285	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE Micro TPW
MODEL NO.
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.53	<0.1	0.36	+/- 0.3 NTU of stan.
10 20 Standard	NTU	20 10	10.03	10 20	9.85	+/- 5% of standard
100 Standard	NTU	100		100	—	+/- 5% of standard
1000 800 Standard	NTU	800 1000	922.6 cal	1000 800L	1005	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 708S7

	DO	100%	100%		100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TX151	1/15/15
pH (7)	20810	3/30/15
pH (10)	—	
ORP	BP104QH-100	
Conductivity	Oakton QV1	6/2014
<0.1 Turb. Stan.	8006	7/13
20 Turb. Stan.	—	
10 100 Turb. Stan.	8014	7/13
1000 800 Turb. Stan.	8056	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/7/13
STONE CREW:
SAMPLER NAME: WJW
SAMPLER SIGNATURE:
CHECKED BY: WJR DATE: 2/7/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600XL
UNIT ID NO. 0934

AM CALIBRATION Start Time _____ /End Time _____

POST CALIBRATION CHECK Start Time _____ /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.72 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.78 cal	+/- 0.1 pH Units	7.0	7.64	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240250	254 cal	+/- 10 mV	240	220	+/- 10 mV
Conductivity	mS/cm	1.413	1372 cal	+/- 0.5% of standard	1.413	1.434	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]		—	+/- 0.2 mg/L	—	10.0%	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	NC	≤ 0.5 mg/L		—	
Temperature	°C		NC				
Baro. Press.	mmHg		NC				

TURBIDITY METER

METER TYPE MicroTPW
MODEL NO.
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.25	<0.1	0.05	+/- 0.3 NTU of stan.
10 ~~20~~ Standard	NTU	10 ~~20~~	9.81	~~20~~ 10	8.97	+/- 5% of standard
100 Standard	NTU	100		100	93.8.8	+/- 5% of standard
1000 ~~800~~ Standard	NTU	800	1002	~~800~~		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70857

DO	100%	100%				See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXF1	1/15/13
pH (7)	208.10	3/30/13
pH (10)	—	
ORP	BP104QH-106	
Conductivity	Oakton CAL	06/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	—	—
~~800~~ Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 7/8/13
STONE CREW:
SAMPLER NAME: WJW
SAMPLER SIGNATURE:
CHECKED BY: WAN DATE: 7/8/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600 XL
UNIT ID NO. 0434

AM CALIBRATION Start Time _____ /End Time _____

POST CALIBRATION CHECK Start Time _____ /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.93	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.05	+/- 0.1 pH Units	7.0	7.02	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	234	+/- 10 mV	240	243	+/- 10 mV
Conductivity	mS/cm	1.413	1.361	+/- 0.5% of standard	1.413	1.311	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE Micro TPW
MODEL NO.
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	~~10~~ 20	9.32	10 ~~20~~	9.63	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
~~100~~ 800 Standard	NTU	~~800~~ 800	1074	~~100~~ ~~800~~	977.5	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 140857

DO	100%	100%		100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXF1	1/15/15
pH (7)	20810	3/30/15
pH (10)	—	
ORP	Oakton QV1 5	—
Conductivity	BP104924-100	6/2014
<0.1 Turb. Stan.	8008	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.		
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: WSW
SAMPLER SIGNATURE:
CHECKED BY: DJL
DATE: 2/10/13
DATE: 2/10/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 600 XL
UNIT ID NO.: 09734

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
		AM CALIBRATION Start Time 830 /End Time			**POST CALIBRATION CHECK** Start Time 1645 /End Time		
pH (4)	SU	4.0	4.16	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.82 cal	+/- 0.1 pH Units	7.0	7.29	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240 250	247	+/- 10 mV	240 250	238.7	+/- 10 mV
Conductivity	mS/cm	1.413	1.409	+/- 0.5% of standard	1.413	1.253	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)		—	+/- 0.2 mg/L	—	—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE: Standard
MODEL NO.: Micro TPW
UNIT ID NO.: 20316

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.62	<0.1	1.47	+/- 0.3 NTU of stan.
10 20 Standard	NTU	10 20	10.03	20 10	10.67	+/- 5% of standard
100 Standard	NTU	1000	1000	100	—	+/- 5% of standard
800 Standard	NTU	800	—	800 1000	1057 cal	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE: Hach
MODEL NO.: HQ30
UNIT ID NO.: 20857

DO	100%	100%		100	100	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXF1	1/15/15
pH (7)	20310	3/30/15
pH (10)	—	—
ORP	BP104NH-100	—
Conductivity	Dalton 601	6/2014
<0.1 Turb. Stan.	8210	7/13
20 Turb. Stan.	—	—
10 100 Turb. Stan.	5014	7/13
100 800 Turb. Stan.	0105-0	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Freezing Rain
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/14/13
STONE CREW:
SAMPLER NAME: WJW
SAMPLER SIGNATURE:
CHECKED BY: DSL DATE: 2/14/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600 XL
UNIT ID NO. 09371

AM CALIBRATION Start Time 0720 /End Time

POST CALIBRATION CHECK Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.93 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.04	+/- 0.1 pH Units	7.0	7.15	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	250.5	+/- 10 mV	~~240~~ 250	242	+/- 10 mV
Conductivity	mS/cm	1.413	1.246 cal	+/- 0.5% of standard	1.413	1.526	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE Scientific
MODEL NO. MicroTPW
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	~~10~~ 20	9.76	~~10~~ 20	9.57	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
~~1000~~ 800 Standard	NTU	~~1000~~ 800	955.9	~~1000~~ 800	1006	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70857

DO	100%	100%		100	100	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXE1	1/15/13
pH (7)	2081U	3/30/15
pH (10)	—	—
ORP	BP104 QH-100	—
Conductivity	Oakton Qv1	6/2014
<0.1 Turb. Stan.	6000	7/13
~~10~~ 20 Turb. Stan.	8014	7/13
100 Turb. Stan.	—	—
~~1000~~ 800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): High 30's
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: WLW
SAMPLER SIGNATURE:
CHECKED BY: DJL DATE: 2/12/13

DATE: 2/12/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 600 XL
UNIT ID NO.:

AM CALIBRATION Start Time 0710 /End Time

POST CALIBRATION CHECK Start Time 1645 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.01	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.24 cal	+/- 0.1 pH Units	7.0	7.02	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	245	+/- 10 mV	~~240~~ 250	228.6	+/- 10 mV
Conductivity	mS/cm	1.413	1.345 cal	+/- 0.5% of standard	1.413	1.497	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE: Scientific
MODEL NO.: Micro TPW
UNIT ID NO.: 2036

		Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1	<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00	+/- 0.3 NTU of stan.
10-~~20~~	~~20~~ Standard	NTU	10-~~20~~	4.34	10-~~20~~	9.36	+/- 5% of standard
	100 Standard	NTU	100		100		+/- 5% of standard
100-~~800~~	~~800~~ Standard	NTU	100-~~800~~	910.1 cal	100-~~800~~	1100	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE: Hach
MODEL NO.: HQ30
UNIT ID NO.: 70857

DO	100	100		100	100	*See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXF1	1/15/14
pH (7)	20810	3/30/14
pH (10)	—	—
ORP	BP 104 ORP-100	—
Conductivity	Oakton 6W1	6/2014
<0.1 Turb. Stan.	3010	7/13
10-~~20~~ Turb. Stan.	3014	7/13
100 Turb. Stan.	—	—
100-~~800~~ Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/13/13
STONE CREW:
SAMPLER NAME: WJW
SAMPLER SIGNATURE:
CHECKED BY: WJW DATE: 2/13/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600 XL
UNIT ID NO. 04F34

AM CALIBRATION Start Time 0726 /End Time

POST CALIBRATION CHECK Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.02	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.16	+/- 0.1 pH Units	7.0	7.39	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 240	247	+/- 10 mV	240	245.2	+/- 10 mV
Conductivity	mS/cm	1.413	1.519	+/- 0.5% of standard	1.413	1.501	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE Scientific
MODEL NO. MicroTPW
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.00	+/- 0.3 NTU of stan.
10 20 Standard	NTU	~~10~~ 20	9.41	~~10~~ 20 ~~100~~	9.34	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
800 Standard	NTU	~~100~~ 800	852	~~100~~ 800L	1100	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70857

DO	100	100		100	100	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXF1	1/15/1
pH (7)	20810	3/30/1
pH (10)	—	—
ORP	BP109GH-100	—
Conductivity	Oakton QUI	6/20/14
<0.1 Turb. Stan.	8006	7/13
10 20 Turb. Stan.	8014	7/13
100 Turb. Stan.	—	—
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/18/13
STONE CREW:
SAMPLER NAME: TW/M
SAMPLER SIGNATURE:
CHECKED BY: JWJW DATE: 2/18/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 6820XL
UNIT ID NO. 0734

AM CALIBRATION Start Time 1035 /End Time

POST CALIBRATION CHECK Start Time 1710 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.89 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.94	+/- 0.1 pH Units	7.0	7.04	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	254.1 cal	+/- 10 mV	~~240~~ 250	243.3	+/- 10 mV
Conductivity	mS/cm	1.413	1.420 cal	+/- 0.5% of standard	1.413	1.320	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)		—	+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—				
Baro. Press.	mmHg		—				

TURBIDITY METER

METER TYPE Scientific
MODEL NO. MicroTPW
UNIT ID NO. 2036

		Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
	<0.1 Standard	NTU	<0.1	0.14	<0.1	.13	+/- 0.3 NTU of stan.
10	20 Standard	NTU	20	9.69	20	9.93	+/- 5% of standard
	100 Standard	NTU	100	—	100		+/- 5% of standard
1000	800 Standard	NTU	800	936 cal	~~1000~~ 800	996	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70867

PD	100%	100%		DO 100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209007	1/15/15
pH (7)	20810	3/20/15
pH (10)	—	
ORP	BP10+QH-100	9/2014
Conductivity	Oakton QW1	6/2014
<0.1 Turb. Stan.	8010	6/13
~~10~~ 20 Turb. Stan.	6014	7/13
100 Turb. Stan.	—	~~7/13~~
~~1000~~ 800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: Wesley Wyles
SAMPLER SIGNATURE:
CHECKED BY: WSW
DATE: 2/7/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: Hydrolab
MODEL NO.:
UNIT ID NO.:

AM CALIBRATION Start Time _____/End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	3.98 Cal	+/- 0.1 pH Units
pH (7)	SU	7.0	6.86 Cal	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	240 250	261 ✓	+/- 10 mV
Conductivity	mS/cm	1.413		+/- 0.5% of standard
DO (saturated)	%	100	99.1 ✓	+/- 2% of standard
DO (saturated)	mg/L [1] (see Chart 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L
Temperature	°C			
Baro. Press.	mmHg			

POST CALIBRATION CHECK Start Time _____/End Time _____

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.14 Cal	+/- 0.3 pH Units
250 240	197 Cal	+/- 10 mV
1.413	1452 Cal	+/- 5% of standard
DO	104.6 Cal	+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE: MicroTPW
MODEL NO.: 20000
UNIT ID NO.: 1620

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
			0.00 ✓			
<0.1 Standard	NTU	<0.1	997.4 ✓	<0.1	0.00 ✓	+/- 0.3 NTU of stan.
10 ~~20~~ Standard	NTU	20	10.37 ✓	10 ~~20~~	10.21 Cal	+/- 5% of standard
1000 ~~100~~ Standard	NTU	100	997.4 ✓	100 ~~100~~	1004 ✓	+/- 5% of standard
800 Standard	NTU	800		800L		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	Z09009	1/15/15
pH (7)	Z0810	3/30/15
pH (10)	–	–
ORP	ZP104QH-100	–
Conductivity	Oakton QV1	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	–	–
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/8/13
STONE CREW:
SAMPLER NAME: Wesley Wyckoff
SAMPLER SIGNATURE:
CHECKED BY: WDW DATE: 2/8/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE Hydrolab
MODEL NO.
UNIT ID NO.

	Units	Standard Value	AM CALIBRATION Meter Value	*Acceptance Criteria (AM)	POST CALIBRATION CHECK Standard Value	Meter Value	*Acceptance Criteria (PM)
Start Time ____ /End Time ____							
pH (4)	SU	4.0	4.21 Cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	~~7.69~~ 6.96	+/- 0.1 pH Units	7.0	7.09 ✓	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	280 Cal	+/- 10 mV	250 240	229 Cal	+/- 10 mV
Conductivity	mS/cm	1.413	1310 Cal	+/- 0.5% of standard	1.413	1259 Cal	+/- 5% of standard
DO (saturated)	%	100	97.3 Cal	+/- 2% of standard		100.6 ✓	
DO (saturated)	mg/L [1] (see Chart 1)			+/- 0.2 mg/L	DO2	~~9.1.0 Cal~~	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE MicroTPW
MODEL NO. 20000
UNIT ID NO. 1826

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00 ✓	<0.1	0.00 ✓	+/- 0.3 NTU of stan.
10 20 Standard	NTU	20	9.70 Cal	10 20	10.38 Cal	+/- 5% of standard
~~100~~ 1000 Standard	NTU	100	980.4 Cal	100		+/- 5% of standard
800 Standard	NTU	800		1000 800E	1018 Cal	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

	Cal. Standard Lot Number	Exp. Date
pH (4)	2090089	1/15/15
pH (7)	20810	3/30/15
pH (10)	–	–
ORP	BP104QH-100	–
Conductivity	Oakton QUI	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	–	–
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/9/13
STONE CREW:
SAMPLER NAME: Wesley Nysten
SAMPLER SIGNATURE: Wesley Nysten
CHECKED BY: WSW DATE: 2/9/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE Hydrolab
MODEL NO.
UNIT ID NO.

AM CALIBRATION — Start Time _____ /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.03 ✓	+/- 0.1 pH Units
pH (7)	SU	7.0	7.02 ✓	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	~~250~~240	272 Cal	+/- 10 mV
Conductivity	mS/cm	1.413	1515 Cal	+/- 0.5% of standard
DO (saturated)	%	100	99.8 ✓	+/- 2% of standard
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L
Temperature	°C			
Baro. Press.	mmHg			

POST CALIBRATION CHECK — Start Time _____ /End Time _____

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	~~6.95~~ ✓	+/- 0.3 pH Units
~~240~~ 280	274 ✓	+/- 10 mV
1.413	~~98.3 Cal~~ 1867 cal	+/- 5% of standard
	98.3 cal	+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE MicroTPW
MODEL NO. 20000
UNIT ID NO. 1620

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1		<0.1		+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	20	10.31	~~10.20~~	9.15	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
~~1000~~ 800 Standard	NTU	800	1003 ✓	800L	1100 cal	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20810	3/30/15
pH (10)	–	–
ORP	B#1040H-100	–
Conductivity	Oakton QUI	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	–	–
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/10/13
STONE CREW:
SAMPLER NAME: Wesley Nutter
SAMPLER SIGNATURE:
CHECKED BY: WSW DATE: 2/10/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE Aquaread
MODEL NO.
UNIT ID NO.

AM CALIBRATION Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.08 ✓	+/- 0.1 pH Units
pH (7)	SU	7.0	6.82 cal	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	~~250~~ 240	240 cal	+/- 10 mV
Conductivity	mS/cm	1.413	1409 ✓	+/- 0.5% of standard
DO (saturated)	%	100	104.3 cal	+/- 2% of standard
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L
Temperature	°C			
Baro. Press.	mmHg			

POST CALIBRATION CHECK Start Time /End Time

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.04 ✓	+/- 0.3 pH Units
240	216 cal	+/- 10 mV
1.413	1307 cal	+/- 5% of standard
100%	99.0 % Cal	+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE MicroTPW
MODEL NO. 20000
UNIT ID NO. 16620

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00 ✓	<0.1	0.00 ✓	+/- 0.3 NTU of stan.
~~10~~ 20 Standard	NTU	20	11.05 cal	~~10~~ 20	10.72 cal	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
~~1000~~ 800 Standard	NTU	800	753.5 cal	~~1000~~ 800	1006 ✓	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	20909	1/15/15
pH (7)	20810	3/30/15
pH (10)	—	—
ORP	BP104QH-100	
Conductivity	Oakton QVI	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	—	—
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: W Wesley Ritzler
SAMPLER SIGNATURE: W Wesley Ritzler
CHECKED BY: WSW

DATE: 2/11/13
DATE: 2/11/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE Hydrolab
MODEL NO.
UNIT ID NO.

	Units	Standard Value	AM CALIBRATION Meter Value	*Acceptance Criteria (AM)	POST CALIBRATION CHECK Standard Value	Meter Value	*Acceptance Criteria (PM)
			Start Time /End Time				
pH (4)	SU	4.0	4.02 ✓	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.09 ✓	+/- 0.1 pH Units	7.0	7.03 ✓	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	240	266 cal	+/- 10 mV	240	227 cal	+/- 10 mV
Conductivity	mS/cm	1.413	1534 cal	+/- 0.5% of standard	1.413	1419 ✓	+/- 5% of standard
DO (saturated)	%	100	97.4 cal	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L	100%	9.70 Cal	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE Micro TPW
MODEL NO. 79000
UNIT ID NO. 1870

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00 ✓	<0.1	0.00 ✓	+/- 0.3 NTU of stan.
10 20 Standard	NTU	20	10.21 ✓	10 20	10.48 cal	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
1000 800 Standard	NTU	800	1050 cal	1000 800	970 cal	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE ~~Micro TPW~~ GC
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE
MODEL NO.
UNIT ID NO.

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20810	3/30/15
pH (10)	—	—
ORP	ZP1040H-100	—
Conductivity	Daxton QVI	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	—	—
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: Wesley Mullen
SAMPLER SIGNATURE:
CHECKED BY: WJW
DATE: 2/12/13 (DATE: 2/12/13)

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 6600XL-26-0
UNIT ID NO. 09D0803

AM CALIBRATION Start Time _____ /End Time _____

POST CALIBRATION CHECK Start Time _____ /End Time _____

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.9 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.91 cal	+/- 0.1 pH Units	7.0	6.64 Cal	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	240	260.1	+/- 10 mV	240	235.7 cal	+/- 10 mV
Conductivity	mS/cm	1.413	1793	+/- 0.5% of standard	1.413	1240 cal	+/- 5% of standard
DO (saturated)	%	100	NA	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE M1250 TPW
MODEL NO. 200000
UNIT ID NO. 1820

		Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard		NTU	<0.1	0.00 ✓	<0.1	0.00 ✓	+/- 0.3 NTU of stan.
10	20 Standard	NTU	20	9.24 cal	10, 20	10.21 ✓	+/- 5% of standard
	100 Standard	NTU	100		100		+/- 5% of standard
1000	800 Standard	NTU	800	1006 ✓	1000 800	1015 ✓	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE Hach HQ30d
MODEL NO.
UNIT ID NO.

DO	100%	100%				See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	208110	3/30/15
pH (10)		
ORP	BP104QH-100	
Conductivity	Oakton QU1	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.		
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: WAW
SAMPLER SIGNATURE:
CHECKED BY: TWM
DATE: 2/19/13
DATE: 2/19/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 600XL-25-0
UNIT ID NO. 08D0808

AM CALIBRATION Start Time 9?? /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.02 ✓	+/- 0.1 pH Units
pH (7)	SU	7.0	7.95 cal	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	240	273.2 cal	+/- 10 mV
Conductivity	mS/cm	1.413	1435 cal	+/- 0.5% of standard
DO (saturated)	%	100		+/- 2% of standard
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L
Temperature	°C			
Baro. Press.	mmHg			

POST CALIBRATION CHECK Start Time /End Time

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	6.35	+/- 0.3 pH Units
240 240	234.5	+/- 10 mV
1.413	1478	+/- 5% of standard
		+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE MicroTPW
MODEL NO. 20000
UNIT ID NO. 1820

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.0 ✓	<0.1	0.00 ✓	+/- 0.3 NTU of stan.
10 20 Standard	NTU	20	10.12 ✓	10 20	6.75	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
1000 800 Standard	NTU	800	1026 cal	1000 800	1044	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE Hach HQ30d
MODEL NO.
UNIT ID NO.

DO	100%	100%			See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20810	3/30/15
pH (10)		
ORP	BP104GH-100	
Conductivity	Oakton QV1	6/2014
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.		
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: TWM
SAMPLER SIGNATURE:
CHECKED BY: WJW DATE: 2/21/13 2/21/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 4000 XL
UNIT ID NO. 0934

AM CALIBRATION Start Time 736 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)
pH (4)	SU	4.0	4.17 cal	+/- 0.1 pH Units
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units
Redox	+/- mV	~~240~~ 250	253.9 cal 1.294 cal	+/- 10 mV
Conductivity	mS/cm	1.413	1.299 cal	+/- 0.5% of standard
DO (saturated)	%	100		+/- 2% of standard
DO (saturated)	mg/L[1] (see Chart 1)			+/- 0.2 mg/L
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L
Temperature	°C			
Baro. Press.	mmHg			

POST CALIBRATION CHECK Start Time 1625 /End Time

Standard Value	Meter Value	*Acceptance Criteria (PM)
7.0	7.02	+/- 0.3 pH Units
~~240~~ 250	246.0	+/- 10 mV
1.413	1.345	+/- 5% of standard
		+/- 0.5 mg/L of standard

TURBIDITY METER

METER TYPE Scientific
MODEL NO. MicroTPW
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.00	<0.1	0.0	+/- 0.3 NTU of stan.
10 ~~20~~ Standard	NTU	~~200~~	10.01	~~20~~ 10	10.34	+/- 5% of standard
100 Standard	NTU	100		100		+/- 5% of standard
1000 ~~800~~ Standard	NTU	~~800~~ 1000	921 cal	1000 ~~800~~	1037	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70887

DO	100%	100%		100	100

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	208110	3/26/15
pH (10)		
ORP	BP104 QH-100	9/14
Conductivity	CalStan QH1	6/14
<0.1 Turb. Stan.	8000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.		
800 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/28/13
STONE CREW:
SAMPLER NAME: W Waterstrat
SAMPLER SIGNATURE:
CHECKED BY: DJL DATE: 2/28/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 1000XL
UNIT ID NO. 0534

AM CALIBRATION Start Time 0800 /End Time

POST CALIBRATION CHECK Start Time 1615 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.09	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.37	+/- 0.1 pH Units	7.0	7.31	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	251.5	+/- 10 mV	~~240~~ 250	244	+/- 10 mV
Conductivity	mS/cm	1.413	1.467 cal	+/- 0.5% of standard	1.413	1.365	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 2036

		Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard		NTU	<0.1	0.0	<0.1	0.010	+/- 0.3 NTU of stan.
~~10~~ 20 Standard		NTU	~~20~~ 10	8.20 cal	10 ~~20~~	10.30	+/- 5% of standard
100 Standard		NTU	100	—	100		+/- 5% of standard
1000 ~~800~~ Standard		NTU	~~800~~ 1000	964.3	1000 ~~800~~	977.9	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 90687

DO	—	—		—	—	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

	Cal. Standard Lot Number	Exp. Date
pH (4)	209057	1/15/13
pH (7)	20810	3/30/13
pH (10)	—	—
ORP	BP104AH-100	9/14
Conductivity	Oakton 6M1	6/14
<0.1 Turb. Stan.	8060	7/13
~~10~~ 20 Turb. Stan.	8014	7/13
100 Turb. Stan.	—	—
~~800~~ 1000 Turb. Stan.	9050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: W. Whitbeck
SAMPLER SIGNATURE:
CHECKED BY: TWM DATE: 2/27/13

DATE: 2/27/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE 451
MODEL NO. 600 XL
UNIT ID NO. 0934

AM CALIBRATION Start Time 0800 /End Time

POST CALIBRATION CHECK Start Time 1615 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.0	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.01	+/- 0.1 pH Units	7.0	7.41	+/- 0.3 pH Units
pH (10)	SU	10.0	–	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	250	+/- 10 mV	~~240~~ 250	241	+/- 10 mV
Conductivity	mS/cm	1.413	1.763	+/- 0.5% of standard	1.413	1.507	+/- 5% of standard
DO (saturated)	%	100	–	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)		–	+/- 0.2 mg/L		–	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	–	≤ 0.5 mg/L			
Temperature	°C		–			–	
Baro. Press.	mmHg		–			–	

TURBIDITY METER

METER TYPE Seven Go
MODEL NO. Micro TPW
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.0	<0.1	0.00	+/- 0.3 NTU of stan.
10 ~~20~~ Standard	NTU	~~20~~ 10	10.02	~~20~~ 10	7.37	+/- 5% of standard
100 Standard	NTU	100	–	100		+/- 5% of standard
1000 ~~800~~ Standard	NTU	~~800~~ 1000	1007	~~800~~ 1000	536.3	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70357

DO	✓	–		✓	–	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20810	3/30/15
pH (10)	–	–
ORP	BP104QH100	9/14
Conductivity	Dalton QU	6/14
<0.1 Turb. Stan.	3000	7/13
20 Turb. Stan.	8014	7/13
100 Turb. Stan.	–	–
800 Turb. Stan.	8050	7/13
PID Span Gas	–	
O_2-LEL Span Gas	–	
Other	–	

NOTES:

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: W Wahlstrom
SAMPLER SIGNATURE:
CHECKED BY: Team DATE: 2/26/13

DATE: 2/26/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 6600 XL
UNIT ID NO. 06324

AM CALIBRATION Start Time 0720 /End Time

POST CALIBRATION CHECK Start Time 1540 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.14 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.96	+/- 0.1 pH Units	7.0	7.22	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	298	+/- 10 mV	~~240~~ 250	291	+/- 10 mV
Conductivity	mS/cm	1.413	1.535 cal	+/- 0.5% of standard	1.413	1.472	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—				
Baro. Press.	mmHg		—				

TURBIDITY METER

METER TYPE Scientific
MODEL NO. Micro TPW
UNIT ID NO. 20316

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.01	<0.1	0.00	+/- 0.3 NTU of stan.
10 ~~20~~ Standard	NTU	~~20~~ 10	10.13	10 ~~20~~	9.07	+/- 5% of standard
100 Standard	NTU	100		100	—	+/- 5% of standard
1000 ~~800~~ Standard	NTU	~~800~~ 1000	1003	1000 ~~800~~	1100 + cal	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70567

DO	100	100		100	100	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

	Cal. Standard Lot Number	Exp. Date
pH (4)	204049	11/14/13
pH (7)	205110	3/30/13
pH (10)	—	—
ORP	BP104-QH100	9/14
Conductivity	Oakton EU1	6/14
<0.1 Turb. Stan.	5000	7/13
~~10~~ 20 Turb. Stan.	3014	7/13
100 Turb. Stan.	—	—
~~800~~ 1000 Turb. Stan.	3050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

NOTES:

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535 Stone Cutters Way, Montpelier Vermont 05602

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I = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO: DATE: 2/25/13
STONE CREW:
SAMPLER NAME: W. Waterstraat
SAMPLER SIGNATURE:
CHECKED BY: TWM DATE: 2/25/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 6000XL
UNIT ID NO. 0934

AM CALIBRATION Start Time 1125 /End Time

POST CALIBRATION CHECK Start Time /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.11	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.97	+/- 0.1 pH Units	7.0	6.93	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~256~~ 240	247.6	+/- 10 mV	~~256~~ 240	245.3	+/- 10 mV
Conductivity	mS/cm	1.413	1.375	+/- 0.5% of standard	1.413	1.391	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L [1] (see Chart 1)		—	+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C		—				
Baro. Press.	mmHg		—				

TURBIDITY METER

METER TYPE Surface Water
MODEL NO. Micro TPW
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.68	<0.1	0.6	+/- 0.3 NTU of stan.
10 ~~20~~ Standard	NTU	20	19.34	16 ~~20~~	18.16	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
~~100~~ 800 Standard	NTU	800	Site cal	~~100~~ 800	1000	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

		Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE Hach P
MODEL NO. H934
UNIT ID NO. 705837

DO	100	100		100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209009	1/15/15
pH (7)	20810	3/30/15
pH (10)	—	—
ORP	3PH104-QH-160	9/14
Conductivity	Oakton QUI	6/14
<0.1 Turb. Stan.	8040	7/13
10 ~~20~~ Turb. Stan.	8014	7/13
100 Turb. Stan.	—	—
~~800~~ Turb. Stan.	8050	9/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

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1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM): Overcast
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: TWH
SAMPLER SIGNATURE:
CHECKED BY: WJW
DATE: 2/20/13 (DATE:)

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: Sonde YSI
MODEL NO.: 6000XL
UNIT ID NO.: 0934

AM CALIBRATION Start Time 7:19 /End Time

POST CALIBRATION CHECK Start Time 13:10 /End Time 17:20

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.96 cal	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.13 cal	+/- 0.1 pH Units	7.0	7.07	+/- 0.3 pH Units
pH (10)	SU	10.0		+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 260	241 cal	+/- 10 mV	~~240~~ 260	238.6	+/- 10 mV
Conductivity	mS/cm	1.413	1.300 cal	+/- 0.5% of standard	1.413	1371	+/- 5% of standard
DO (saturated)	%	100		+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]			+/- 0.2 mg/L			+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L			
Temperature	°C						
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE: Scientific
MODEL NO.: micro TPW
UNIT ID NO.: 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0	<0.1	0.0	+/- 0.3 NTU of stan.
10 20 Standard	NTU	20 10	9.7 cal	20 10	10.96	+/- 5% of standard
100 Standard	NTU	100		100	—	+/- 5% of standard
1000 800 Standard	NTU	~~800~~ 1000	987.1 cal	~~800~~ 1000	1104 cal	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE: Hach
MODEL NO.: 40 30
UNIT ID NO.: 30887

DO	100%	100%	100%		100%	100%	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	204009	11/15
pH (7)	20910	3/20/15
pH (10)		
ORP	BP104 ZoBHC-100	9/14
Conductivity	OaKton QHC	6/14
<0.1 Turb. Stan.	DIW	3/13
20 Turb. Stan.	20 14	2/13
100 Turb. Stan.		
800 Turb. Stan.	8050	2/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Defense National Stockpile Center Scotia Depot
PROJECT NUMBER: 102305-R C
PROJECT LOCATION: Glenville, NY
WEATHER CONDITIONS (AM):
WEATHER CONDITIONS (PM):

TASK NO:
STONE CREW:
SAMPLER NAME: NJW
SAMPLER SIGNATURE:
CHECKED BY: DJL DATE: 3/7/13

DATE: 3/7/13

MULTI-PARAMETER WATER QUALITY METER

METER TYPE YSI
MODEL NO. 6000 XL
UNIT ID NO. 0934

AM CALIBRATION Start Time 0710 /End Time

POST CALIBRATION CHECK Start Time 1130 /End Time

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.16	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.09	+/- 0.1 pH Units	7.0	7.31	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	~~240~~ 250	250	+/- 10 mV	~~240~~ 250	256.2	+/- 10 mV
Conductivity	mS/cm	1.413	1.450	+/- 0.5% of standard	1.413	1.408	+/- 5% of standard
DO (saturated)	%	100	—	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)		—	+/- 0.2 mg/L		—	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L		—	
Temperature	°C		—			—	
Baro. Press.	mmHg		—			—	

TURBIDITY METER

METER TYPE Scientific
MODEL NO. MicroTPW
UNIT ID NO. 2036

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.01	<0.1	0.00	+/- 0.3 NTU of stan.
~~20~~ 10 Standard	NTU	~~20~~ 10	10.33	~~20~~ 10	9.77	+/- 5% of standard
100 Standard	NTU	100	—	100	—	+/- 5% of standard
~~800~~ 1000 Standard	NTU	~~800~~ 1000	971.9	~~800~~ 1000	1074	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE
MODEL NO.
UNIT ID NO.

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE
MODEL NO.
UNIT ID NO.

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE Hach
MODEL NO. HQ30
UNIT ID NO. 70887

DO	—	—		—	See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source:
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	209007	1/15/15
pH (7)	20810	3/30/15
pH (10)	—	
ORP	BP104AH-100	9/14
Conductivity	Dalitan QVI	6/14
<0.1 Turb. Stan.	8006	7/13
~~20~~ 10 Turb. Stan.	8014	7/13
100 Turb. Stan.		
~~800~~ 1000 Turb. Stan.	8050	7/13
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

STONE ENVIRONMENTAL INC
535 Stone Cutters Way, Montpelier Vermont 05602

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter readings not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Scotia Naval Depot — TASK: Sample MW-26 — DATE:
PROJECT NUMBER: 102305-R 107
PROJECT LOCATION: Scotia, NY — SAMPLER NAME: Lee Rosbert
WEATHER CONDITIONS (AM): Sunny, cool — SAMPLER SIGNATURE: See Rosbert
WEATHER CONDITIONS (PM): Sunny ~65° F — CHECKED BY: — DATE:

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: Hydrolab
MODEL NO.: MS5
UNIT ID NO.: 45358

AM CALIBRATION Start Time 07:30 / End Time 08:00

POST CALIBRATION CHECK Start Time 10:30 / End Time 10:45

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	3.846	+/- 0.1 pH Units			
pH (7)	SU	7.0	6.72	+/- 0.1 pH Units	7.0	7.15	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
No Cal Sol. Redox	+/- mV	250	N/A	+/- 10 mV	250	N/A	+/- 10 mV
Conductivity	mS/cm	~~1.413~~ 1.477	2.98	+/- 0.5% of standard	~~1.413~~ 1.477	3.44	+/- 5% of standard
DO (saturated)	%	100	95.0	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)		—	+/- 0.2 mg/L	100%	100.2	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	≤ 0.5 mg/L			
Temperature	°C/F		53.9				
Baro. Press.	mmHg						

TURBIDITY METER

METER TYPE: LaMotte
MODEL NO.: 2020e
UNIT ID NO.: 11836

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
		0.00		0.00		
<0.1 Standard	NTU	~~<0.1~~	-0.19	~~<0.1~~	0.00	+/- 0.3 NTU of stan. 1.0
1.0 Standard	NTU	~~1.00 20~~	0.76	1.0	1.36	+/- 5% of standard
10 Standard	NTU	~~10 100~~	9.95	10	10.27	+/- 5% of standard
800 Standard	NTU	800		800		+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE: Ion Science
MODEL NO.: Phocheck
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1	0.0	<0.1	0.0	within 5 ppmv of BG
Span Gas	ppmv	100	99.8	100	100.1	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Poland Spring Distilled
Lot#/Date Produced: 04101315B0WP193
Trip Blank Source: N/A
Sample Preservatives Source: Test America
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source
- DO Calibration Fluid (<0.1 mg/L)
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	3TXF1	1/15/15
pH (7)	3TXF4	3/30/15
pH (10)	—	—
ORP	—	—
Conductivity	Q01	6/2013
<0.1 Turb. Stan.	C149657B	07/13
1.0 Turb. Stan.	C039305	07/13
10 Turb. Stan.	C145909	07/13
800 Turb. Stan.		
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

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** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

APPENDIX C: GROUNDWATER SAMPLING LOGS

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	B-1		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	14436
Sampling Personnel	LJR	Water Quality Sonde SN	YSI 07F1C1212
Weather	light snow ~25°F	Turbidimeter	LaMotte 2020e

Calculate Purge Volumes

Time of water level measurement (military): 10:33 Depth of Pump/Intake: 64.0 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
64.30 feet	61.0 feet	= 3.30 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 2.04 liters

	3 X One Well Volume	6.12 liters
PID=0.0 ppm	5 X One Well Volume	10.20 liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(uS)~~ mS (+/- 3%)	Turbidity (NTU)
NC	250	10:19	15.6	8.86	98.7	6.69	7.52	0.159	>4000
NC	500	11:24	50	8.37	66.6	6.71	0.25	0.160	>4000
NC	550	11:30	8'	6.96	49.6	6.79	1.80	NC	NC
								Flow cell drained	
Pulled pump to clear check valve									
NC	600	11:35	8	6.84	53.1	6.79	2.42	0.162	>4000
NC	700	11:40	20	6.43	47.2	6.78	1.36	0.163	>4000
NC	800	11:45	24	5.72	46.5	6.75	1.20	0.163	>4000
NC	900	11:50	16	5.33	44.2	6.76	1.28	0.164	>4000
NC	1080	11:57		5.44	42.6	6.77	1.32	0.167	>4000

Total Vol. Removed: 1.1 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW81-64.0-GW	11:57	3X50	LJR

Comments: 10:37 began purging
could not get pump past ~53 Ft btoc due to PDB in well, pulled PDB and reset pump
11:03 Resumed purging

Sampling Personnel Signature Lee Rosberg Date 2/6/13

11:19 water drawn down below top of bladder pump, unable to collect water level measurements

11:26 check valve filled w/silt, water in discharge line drained back, emptying flow cell

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	B-2		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	14438
Sampling Personnel	LSR	Water Quality Sonde SN	YSI 07F10212
Weather	Mostly Cloudy ~25°F	Turbidimeter	LaMotte 2020

Calculate Purge Volumes

Time of water level measurement (military): 0910 Depth of Pump/Intake: 66.0 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
68.60 feet	60.90 feet	= 7.7 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 4.75 liters

3 X One Well Volume	14.25	liters
5 X One Well Volume	23.75	liters

PID = 0.0 ppm

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(uS)~~ mS (+/- 3%)	Turbidity (NTU)
60.95	1100	09:13	138	10.14	194.0	7.43	3.96	0.586	NC
60.95	2000	09:18	180	10.75	182.5	7.44	3.98	0.584	91.7
60.95	2900	09:23	180	10.72	164.8	7.44	4.06	0.587	51.7
60.95	3900	09:28	200	10.80	152.7	7.43	4.29	0.606	34.2
60.95	5000	09:33	220	10.89	130.0	7.40	4.29	0.611	30.0
60.95	5950	09:38	190	10.86	115.0	7.40	4.28	0.614	21.0
60.95	6950	09:43	200	11.08	102.3	7.40	4.33	0.616	12.9
60.95	7950	09:48	200	11.04	93.6	7.40	4.34	0.619	11.7
60.95	8950	09:53	200	11.02	85.2	7.39	4.32	0.617	10.71

Total Vol. Removed: 8.9 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW32-66.0-GW	09:53	3x40	JSR

Comments: 09:05 began purging

Sampling Personnel Signature Lee Rodberg Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	3-3		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	14438
Sampling Personnel	LSR	Water Quality Sonde SN	YSI 07F101212
Weather	Partly Sunny ~25°F	Turbidimeter	LaMotte 2020e

Calculate Purge Volumes

Time of water level measurement (military): 08:04 Depth of Pump/Intake: 62.0 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
64.90 feet	59.8 feet	= 5.10 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 3.15 liters

	3 X One Well Volume	9.45 liters
PID=0.0	5 X One Well Volume	15.75 liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(us)~~ mS (+/- 3%)	Turbidity (NTU)
59.85	70	08:16	11.7	7.89	189.5	7.20	11.52	0.619	163
59.85	750	08:20	~~170~~ LSR 2/6/13	10.80	170.2	7.37	6.70	0.645	77.7
59.85	1450	08:25	140	11.00	168.6	7.38	6.78	0.656	46.7
59.85	2500	08:30	210	10.90	167.5	7.37	6.76	0.650	34.6
59.85	3450	08:35	190	11.00	166.6	7.38	6.57	0.651	20.2

Total Vol. Removed: 3.4 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW03-62.0-GW	08:35	3x40	LSR

Comments: 08:10 began purging

Sampling Personnel Signature Lee Rodberg Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	GEP-1		
Sample Date	2/7/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	1775
Sampling Personnel	LJR	Water Quality Sonde SN	YSI 07F101212
Weather	Cloudy, 20's	Turbidimeter	LaMotte 2020e

Calculate Purge Volumes

Time of water level measurement (military): 11:04 Depth of Pump/Intake: 73.0 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
74.60 feet	70.20 feet	= _____ feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= _____ liters

3 X One Well Volume	liters
5 X One Well Volume	liters

PID = 0.0 ppm

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(uS)~~ NC (+/- 3%)	Turbidity (NTU)
70.20	1400	11:32	58	9.14	88.4	7.49	6.57	0.358	NC
70.20	2100	11:38	117	9.01	88.3	7.54	6.35	0.361	132
70.20	2800	11:42	175	9.13	90.8	7.53	6.24	0.355	81.9
70.20	3550	11:47	150	9.57	92.7	7.52	6.25	0.390	67.3
70.20	4100	11:50	153	9.38	93.8	7.52	6.31	0.359	59.5

Total Vol. Removed: 4.1 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MWGEP1-73.0-GW	11:50	3x40	SJR

Comments: 11:05 began purging

Sampling Personnel Signature Lee Rosberg Date 2/7/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	GEP-2		
Sample Date	2/7/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	1775
Sampling Personnel	LSL	Water Quality Sonde SN	YSI 07F101212
Weather	Mostly cloudy, 20's	Turbidimeter	LaMotte 2020e

Calculate Purge Volumes

Time of water level measurement (military): ~~09~~ 1,52 Depth of Pump/Intake: 76.0 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
78.35 feet	76.17 feet	= 3.13 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 5.05 liters

3 X One Well Volume	15.15	liters
5 X One Well Volume	25.25	liters

PID = 0.0 ppm

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(uS)~~ mS (+/- 3%)	Turbidity (NTU)
NC	200	10:08	20	8.18	-5.2	7.34	7.52	0.393	NC
NC	850	10:14	108	7.13	14.8	7.40	7.02	0.379	243
NC	1500	10:19	130	8.60	28.0	7.42	6.61	0.377	189
70.18	3200	10:28	150	8.30	46.1	7.39	6.70	0.376	~~89~~ 99.1 LJE 2/7/13
70.18	5770	10:32	143	8.36	50.9	7.39	6.68	0.376	70.0
70.18	4200	10:37	86	8.52	54.2	7.39	6.67	0.375	30.5

Total Vol. Removed: 4.2 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MWGEP2-76.0-GW	10:37	3x40	SJR
MWGEP2-76.0-MS	10:37	3x40	SJR
MWGEP2-76.0-MSD	10:37	3x40	SJR

Comments: 09:55 began purging

Sampling Personnel Signature Joe Zoldos Date 2/7/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	GEP-3		
Sample Date	2/7/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	Keic 1775
Sampling Personnel	DJL	Water Quality Sonde SN	YSI 1213
Weather	16° Overcast		

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: 73 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
75.70 feet	67.39 feet	= 8.31 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 5.12 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
67.45	150	1025	150	10.43	139	7.59	13.90	294	—
67.45	900	1030	150	9.30	141.4	7.49	10.27	286	—
67.45	1650	1035	150	9.68	142.2	7.48	10.22	285	—
67.45	2400	1040	150	9.46	142.0	7.49	10.81	4	878.3
67.46	3150	1045	150	9.42	142.3	7.46	10.04	283	840.8
67.45	3900	1050	150	9.51	142.4	7.48	9.86	285	—
67.48	4650	1055	150	9.68	143.1	7.48	9.84	285	—
67.48	5400	1100	150	9.67	143.3	7.48	9.79	286	486.7

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
GEP3-73-GW	1100	3x40	DJL

Comments: Bottom 2' very silty

Sampling Personnel Signature _____ Date 2/7/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	GEP-4		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	1775
Sampling Personnel	LSR	Water Quality Sonde SN	YSI 07F101213
Weather	Clear, High 20's, windy	Turbidimeter	LaMotte 2020e

Calculate Purge Volumes

Time of water level measurement (military): LSR 2/6/13 Depth of Pump/Intake: ~~68.0~~ feet 73.0

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
75.15 feet	69.98 feet	= 5.17 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 3.19 liters

	3 X One Well Volume	9.57 liters
	5 X One Well Volume	15.95 liters

710 - 0.0 ppm

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(uS)~~ mS (+/- 3%)	Turbidity (NTU)
70.00	330	15:54	37	8.13	128.3	7.48	5.44	0.359	NC
70.00	1270	16:00	157	9.13	129.0	7.50	5.38	0.398	245
70.00	2000	16:05	196	8.56	129.6	7.50	5.46	0.393	175
70.00	2930	16:10	186	9.21	129.7	7.51	5.34	0.396	134
70.00	3800	16:15	174	9.20	130.4	7.51	5.38	0.399	114

Total Vol. Removed: 3.8 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MWGEP4-~~68.0~~-73.0-GW LSR 2/6/13	16:15	3x40	SJR
MWGEP4-73.0-D	16:15	3x40	SJR

Comments: 15:45 began purging

Sampling Personnel Signature See Rosbrugh Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-5		
Sample Date	2/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	1443C3
Sampling Personnel	LSR	Water Quality Sonde SN	YSI 07E101213
Weather	Mix clouds and sun 20's	Turbidimeter	Lamotte 2020

Calculate Purge Volumes

LSR 2/5/13

Time of water level measurement (military): 2/4/13 Depth of Pump/Intake: ~~70~~ 72 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
72.5 feet	71.86 feet	= 0.64 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 0.39 liters

3 X One Well Volume	1.18	liters
5 X One Well Volume	1.95	liters

PID = 0.0 ppm

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(uS)~~ mS (+/- 3%)	Turbidity (NTU)
NC	300	09:58		10.92	193	7.71	8.67	1.912	100.2
NC	820	10:06	65	8.41	199	7.78	10.08	1.896	63.8
NC	1100	10:11	56	9.20	201	7.73	9.39	1.848	41.9
NC	1310	10:17	35	9.09	202	7.72	9.39	1.856	28.6
NC	1490	10:23	30	8.37	204	7.69	9.27	1.851	22.9
NC	1950	10:28	42	8.40	204	7.69	8.95	1.832	14.1

Total Vol. Removed: 1.8 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW5-72.0-GW	10:28	3x40	JR

Comments: 08:52 began purging ~~wtr level indicator not working~~ LSR 2/5/13
09:02 Lowered pump to ~ 72 ft btoc
cannot get wtr. level ind. calibrated bladder pump
Pump control keeps not pressurizing
10:40 resumed purging

Sampling Personnel Signature See Doklozza Date 2/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-6		
Sample Date	2/7/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	Keck 1775
Sampling Personnel	DSL	Water Quality Sonde SN	YSI 1213
Weather	18° Overcast		

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
71.55 feet	70.10 feet	= 1.45 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 0.89 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
—	160	1340	80	8.71	182.7	7.23	14.16	436	538.4
—	560	1345	80	8.50	172.1	7.30	10.47	463	—
—	960	1350	80	8.82	169.7	7.27	9.66	453	302.3
—	1760	1400	80	9.39	168.7	7.27	8.83	453	—
—	2160	1405	80	9.74	167.7	7.32	9.31	454	252.1

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW6-71-GW	1405	3X40	DSL

Comments: Attempting to collect sample
unable to measure ground water

Sampling Personnel Signature _____ Date 2/7/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-6		
Sample Date	2/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	Keck 1775
Sampling Personnel	DC	Water Quality Sonde SN	YSI 1213
Weather	21° clear		

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
70.10 feet	71.55 feet	= _____ feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= _____ liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)

Comments:
- Tried pump above water level can not water well.
- Less than 1.5 L of water in well
- Talked to SS, Pulled pump no sample

Sampling Personnel Signature _____ Date 2/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-7		
Sample Date	2/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	14438
Sampling Personnel	LSR	Water Quality Sonde SN	YSI 07F101212
Weather	Mostly Sunny, ~28°F	Turbidimeter	LaMotte 2020

Calculate Purge Volumes

Time of water level measurement (military): 11:00 Depth of Pump/Intake: 70.5 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
70.70 feet	68.70 feet	= 2.00 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 1.23 liters

3 X One Well Volume	3.69	liters
5 X One Well Volume	6.15	liters

PID = 0.0 ppm

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(uS)~~ mS (+/- 3%)	Turbidity (NTU)
NC	120	12:04		7.20	212.4	8.33	9.91	1.551	NC
NC	380	12:20	10	7.07	214.4	8.46	10.48	1.560	NC
	Pump discharging air w/water, likely not enough water in well to fill								
	bladder pump, removed pump + checked pump/tubing all OK, reset pump + continued purge								
NC	650	12:26	45	7.55	216.6	8.49	10.26	1.536	1260
NC	850	12:30		8.74	216.3	8.41	10.73	1.544	2098
NC	1300	13:38		5.81	217.5	7.76	9.94	1.583	NC
NC	1400	13:45		4.83	216.4	7.66	10.11	1.575	NC
NC	1480	13:50		5.22	211.7	7.63	10.86	1.599	191

Total Vol. Removed: 1.5 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW7-70.5-GW	13:50	3x40	SMR

Comments: 11:55 began purging
TOC of DI is higher than B, unable to collect wtr. level data
12:04 well purged dry, let recharge
12:50 Put new pump in well, air was leaking past bladder and up discharge line

Sampling Personnel Signature Lee Rodberg Date 2/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-9		
Sample Date	7/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other ___	Wtr Level Indicator	Keck 1775
Sampling Personnel	DSL	Water Quality Sonde SN	YSI 1213
Weather	16°F Partly Cloudy		

Calculate Purge Volumes

Time of water level measurement (military): 935 Depth of Pump/Intake: 110 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
113 feet	- 69.90 feet	= 43.1 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 26.5 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
69.95	140	945	140	7.51	-7.3	7.57	2104	277	60.9
69.95	1400	955	140	7.36	-4.6	8.01	9.87	200	161.1
69.95	2,100	1000	140	7.47	-5.16	7.90	9.63	224	50.89
69.95	2800	1005	140	10.16	-3.8	7.93	9.26	222	—
69.95	3500	1010	140	10.01	10.2	7.96	9.22	215	40.08
69.95	4200	1015	140	9.98	21.1	7.89	8.43	211	—
69.95	4900	1020	140	9.67	19.7	7.89	7.97	211	37.74
69.96	5600	1025	140	7.91	18.9	7.91	7.35	224	16.62
69.95	6300	1030	140	7.90	17.2	7.89	6.98	223	—
69.96	7,000	1040	140	7.94	17.0	7.88	6.29	231	20.39

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW9-110-GW	1040	3x40mL	DL

Comments: Total Depth 113'
Pump set at 110'
- Pump leak / failed + Replaced per Mackup

Sampling Personnel Signature _____ Date 7/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-11		
Sample Date	2/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	
Sampling Personnel		Water Quality Sonde SN	
Weather			

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
78.20 feet	- 10.24 feet	= _____ feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= _____ liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)

Comments: Well Bent / Bladder Pump will not fit down well

Sampling Personnel Signature _____ Date 2/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-12		
Sample Date	2/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump___ Bailer ___ Other ___	Wtr Level Indicator	14433
Sampling Personnel	LSR	Water Quality Sonde SN	YSI 07=101212
Weather	Mostly Sunny ~25°F	Turbidimeter	Lenotte 2020

Calculate Purge Volumes

Time of water level measurement (military): 14:50 Depth of Pump/Intake: 78.0 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
80.0 feet	71.14 feet	= 8.86 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 5.47 liters

	3 X One Well Volume	16.41 liters
PID=0.0 ppm	5 X One Well Volume	27.35 liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(µS)~~ mS (+/- 3%)	Turbidity (NTU)
71.20	270	14:59	39	5.68	183.3	8.03	7.29	0.404	1035
71.20	1150	15:05	147	10.53	185.2	8.07	4.98	0.390	NC
71.20	1840	15:10	138	11.00	189.3	8.08	4.90	0.389	1140
71.20	2420	15:15	116	10.55	190.5	8.05	4.83	0.395	1140
71.20	3100	15:20	136	10.57	191.5	8.10	4.52	0.359	1044

Total Vol. Removed: 3.1 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW12-78.0-GW	15:20	3x40	SJR

Comments: 14:52 began purging

Sampling Personnel Signature See Posivera Date 2/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-13		
Sample Date	2/7/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	Keck 1775
Sampling Personnel	DSL	Water Quality Sonde SN	YSI 1213
Weather	16° Overcast		

Calculate Purge Volumes

Time of water level measurement (military): 1150 Depth of Pump/Intake: 74 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
80.10 feet	69.79 feet	= 10.31 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 6.36 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
69.85	150	1245	150	7.14	139.3	7.60	12.10	337	—
69.85	900	1270	150	7.45	155.6	7.40	10.32	340	98.9
69.85	1650	1225	150	7.89	152.8	7.42	10.13	346	—
69.84	2400	1230	150	8.79	152.0	7.42	9.81	345	—
69.84	3150	1235	150	8.85	152.3	7.42	9.60	345	573.2
69.86	3900	1240	150	9.16	152.3	7.40	9.64	345	524.8

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Comments:
MW13-74-GW	1240	6 x 40mL	DSL	

Sampling Personnel Signature _____ Date 2/7/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-14		
Sample Date	2/7/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	Keck 1775
Sampling Personnel	DSL	Water Quality Sonde SN	YSI 1213
Weather	16° clear		

Calculate Purge Volumes

Time of water level measurement (military): 815 Depth of Pump/Intake: ~~76~~ feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
~~79.00~~ feet	~~70.05~~ feet	= 8.95 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 5.52 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
70.00	300	825	150	8.33	168.0	7.07	10.44	425	—
70.00	1050	830	150	8.43	155.0	7.22	23.99	426	858.4
70.00	2550	840	150	9.27	152.0	7.21	9.61	427	—
70.00	3300	845	150	9.45	~~9.44~~ DV	7.24	9.52	424	—
70.00	4800	855	150	9.66	~~9.44~~ DV 133	7.26	9.39	423	609.0
70.00	5,500	900	150	9.74	132.7	7.30	9.60	422	—
70.00	6300	905	150	9.80	134.1	7.28	9.66	421	339.9
70.00	7050	910	150	9.35	134.6	7.25	9.70	420	321.3

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
~~MW14-76-GW~~ DL	910	3x40mL	DSL
MW14-76-MS	910	3x40	DSL
MW14-76-MSD	910	3x40	DSL

MW14-76-GW

Comments: Collected MS/MSD

Sampling Personnel Signature _____ Date 2/7/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-15		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	Keck
Sampling Personnel	DSL	Water Quality Sonde SN	YSI
Weather	28° windy		

Calculate Purge Volumes

Time of water level measurement (military): 1545 Depth of Pump/Intake: 79.5 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
81.90 feet	68.05 feet	= 13.75 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 8.48 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
68.05	350	1600	130	12.00	169.6	7.44	17.99	494	—
68.05	~~700~~ 1000	1605	130	10.91	170.5	7.38	7.68	494	973.4
68.05	1650	1610	130	9.94	174.5	7.34	7.93	490	—
68.05	2300	1615	130	10.12	173.0	7.36	7.54	494	1100
68.05	2950	1620	130	10.33	173.1	7.35	7.55	496	1008
68.05	3600	1625	130	10.43	172.7	7.35	7.51	496	1002

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW15-79-GW	1625	3x40mL	DL

Comments: Eq Blank collected @ 17:00 -> MW15-X-EB

Sampling Personnel Signature _____ Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-16		
Sample Date	2/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other ___	Wtr Level Indicator	KECK 1775
Sampling Personnel	DSL	Water Quality Sonde SN	YSI 1213
Weather	21° Clear		

Calculate Purge Volumes

Time of water level measurement (military): 1340 Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
65.72 feet	- 64.50 feet	= 3.76 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 2.33 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
65.72	700	1350	135	7.97	63.0	7.31	9.70	376	830.9
65.70	1,375	1355	135	8.90	74.9	7.19	8.50	380	—
65.70	2050	1400	135	9.68	83.0	7.25	8.49	375	—
65.70	2725	1405	135	9.90	86.1	7.27	8.58	377	511.8
65.70	3400	1410	135	10.13	93.5	7.26	8.48	375	—
65.70	4050	1415	135	10.15	98.4	7.26	8.60	376	150.9

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Comments:
MW-16-6716	1415	3x40mL	DL	

Sampling Personnel Signature _____ Date 2/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-17		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	14438
Sampling Personnel	LSR	Water Quality Sonde SN	YSI 07F101213
Weather	Mostly Sunny, 30's	Turbidimeter	LaMotte 2020e

Calculate Purge Volumes

Time of water level measurement (military): 14:09 Depth of Pump/Intake: 75.0 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
76.95 feet	69.00 feet	= 7.95 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 4.90 liters

3 X One Well Volume	14.70	liters
5 X One Well Volume	24.50	liters

PID = 0.0 ppm, no lock

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity ~~(uS)~~ mS (+/- 3%)	Turbidity (NTU)
NC (dead battery)	270	14:22	39	8.03	113.4	7.32	7.21	0.445	164
NC	1100	14:27	166	9.03	109.8	7.44	7.21	0.451	NC
NC	2000	14:33	150	9.02	112.1	7.43	7.16	0.445	56.4
NC	3300	14:40	186	9.15	113.4	7.43	7.15	0.454	32.5
NC	4100	14:45		9.25	114.5	7.43	7.12	0.452	27.6
↳ Unable to repair water level indicator, batteries were not the problem									

Total Vol. Removed: 4.1 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW17-75.0-GW	14:45	3x40	SJR

Comments: 14:15 began purging

Sampling Personnel Signature Lee Rosberg Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-18		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	Keck 1775
Sampling Personnel	DSL	Water Quality Sonde SN	YSI 1213
Weather	25° Clear Windy		

Calculate Purge Volumes

Time of water level measurement (military): 1410 Depth of Pump/Intake: 75 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
77.10 feet	69.20 feet	= 7.9 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 4.87 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

150

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
69.25	600	1425	150	11.37	179.4	7.45	13.48	492	—
69.25	1350	1435	150	8.70	190.9	7.25	9.31	453	—
69.25	2100	1440	150	9.45	190.2	7.25	8.74	447	226.8
69.25	2850	1445	150	9.59	187.4	7.27	8.63	452	—
69.25	3600	1455	150	9.53	191.7	7.18	8.18	466	183.3
69.25	4350	1500	150	9.97	183.9	7.28	8.10	475	—
69.25	5100	1510	150	10.04	180.5	7.30	8.00	476	53.02

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Comments:
MW18-75-GW	1510	3x40mL	DSL	

Sampling Personnel Signature _____ Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-19		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	Keck 1775
Sampling Personnel	DSL	Water Quality Sonde SN	YSI 1213
Weather	25° windy		

Calculate Purge Volumes

Time of water level measurement (military): 1310 Depth of Pump/Intake: 75 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
77.00 feet	- 70.35 feet	= 6.65 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 4.10 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
70.38	150	1320	150	11.00	170.4	7.51	14.23	511	1100
70.34	900	1325	150	9.97	179.9	7.26	10.51	503	—
70.38	1650	1330	150	10.12	188.1	7.16	9.85	504	867.1
70.36	2400	1335	150	10.14	193.4	7.12	10.25	505	—
7034	3150	1340	150	9.79	196.2	7.11	10.18	504	473.0
70.34	3900	1345	150	9.03	196.5	7.12	10.30	510	313.4

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW19-75-GW	1345	3x40mL	

Comments:

Sampling Personnel Signature _____ Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-20		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other ___	Wtr Level Indicator	Heck 1775
Sampling Personnel	DSL	Water Quality Sonde SN	YSI 1213
Weather	25° Overcast		

Calculate Purge Volumes

Time of water level measurement (military): 8:15 Depth of Pump/Intake: ~~78.0~~ feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
80.0 feet	73.46 feet	= 6.54 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 4.03 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
73.50	~~70~~ 140	835	70	5.30	202.3	6.16	13.85	548	—
73.50	490	840	70	7.15	199.4	7.02	10.43	516	—
73.50	840	845	70	6.98	196.9	7.10	10.10	519	188.2
73.50	1190	855	70	7.93	192.6	7.17	10.12	523	149.7
73.50	1540	900	70	8.15	189.2	7.21	10.14	524	—
73.50	1890	905	70	8.63	188.9	7.23	10.15	524	—
73.50	2,240	910	70	8.71	187.2	7.34	10.18	524	146.4

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Comments:
MW-20-78-60	910	3x40mL	DSL	

Sampling Personnel Signature _____ Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-22		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	Keck 1775
Sampling Personnel		Water Quality Sonde SN	YSI 1213
Weather	25° Snowy		

Calculate Purge Volumes

Time of water level measurement (military): 1015 Depth of Pump/Intake: 73 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
74.50 feet	- 71.49 feet	= 3.31 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 2.04 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
—	400	1125	60	8.33	146.2	7.43	27.82	482	—
—	400	1130	60	9.53	151.4	7.33	12.80	479	—
—	700	1135	60	9.75	161.2	7.24	11.25	480	—
—	1000	1140	60	9.70	163.0	7.22	10.56	477	—
—	1300	1150	60	9.73	167.8	7.23	10.54	486	—
—	1600	1155	60	9.72	168.9	7.23	10.51	485	—
—	1900	1205	60	9.73	169.9	7.24	10.59	485	—

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW22-73-GW	1205	3x40mL	DJL

Comments: Water level not above Pump top. Can not measure ▽ really silty, check balls on Pump clogging ~40mL too turbid to get NTU

Sampling Personnel Signature _____ Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-23		
Sample Date	2/6/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump ___ Bailer ___ Other ___	Wtr Level Indicator	14435
Sampling Personnel	LSR	Water Quality Sonde SN	YSI 07-101212
Weather	Mostly Cloudy, windy, ~32°F	Turbidimeter	LaMotte 2020e

Calculate Purge Volumes

Time of water level measurement (military): 12:57 Depth of Pump/Intake: 80.0 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
82.50 feet	71.80 feet	= 10.70 feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 6.60 liters

3 X One Well Volume	19.80	liters
5 X One Well Volume	33.00	liters

PID = 0.0 ppm, No well locks

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%) MS	Turbidity (NTU)
71.90	180	13:11	22.5	6.60	82.5	7.37	7.34	0.470	>4000
71.90	660	13:16	96	7.95	85.1	7.42	6.76	0.473	1619
71.90	1400	13:21	148	8.95	86.1	7.44	6.63	0.474	1644
71.90	2150	13:26	150	9.34	88.4	7.46	6.70	0.471	1276
71.90	2870	13:31	144	9.38	90.0	7.48	6.67	0.472	254

Total Vol. Removed: 2.8 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW23-80.0-GW	13:31	3x40	SJR

Comments: 13:03 begin purging

Sampling Personnel Signature Lee Rodberg Date 2/6/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	PMW-3		
Sample Date	8/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump X Peri Pump ___ Whale Pump___ Bailer ___ Other ___	Wtr Level Indicator	Keck 1775
Sampling Personnel		Water Quality Sonde SN	YST 1213
Weather	25° overcast		

Calculate Purge Volumes

Time of water level measurement (military): 15:20 Depth of Pump/Intake: 82.5 feet

Total Well Depth (btoc) 84.50 feet - Depth to Water (btoc) 71.24 feet = Height of Water Column 13.26 feet X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well) One Well Volume = 8.16 liters

3 X One Well Volume ___ liters

5 X One Well Volume ___ liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
84.50	250	15:35	100	7.60	139.7	7.41	10.80	324	724.0
84.50	750	15:40	100	7.49	138.8	7.49	9.29	318	—
84.50	1250	1545	100	8.66	137.7	7.46	8.63	319	—
84.50	1750	1550	100	8.87	135.3	7.49	8.50	324	—
84.50	2250	1555	100	9.46	134.4	7.48	8.39	323	734.4
84.50	2750	1600	100	8.81	79.8	7.59	6.73	328	—
84.50	3250	1605	100	8.97	98.2	7.48	5.70	323	693.3
84.50	3750	1610	100	9.03	102.4	7.47	5.92	327	—
84.50	4250	1615	100	8.83	106.1	7.46	5.73	328	135.1
84.50	4750	1620	100	8.79	104.1	7.48	5.56	327	133.2

Total Vol. Removed: ___ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Comments:
PMW-3	1620	3x40	DC	
PMW3-82-6W				

Sampling Personnel Signature _____ Date 8/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	WP OU4 -76.0 -GW		
Sample Date	2/26/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ___ Peri Pump ___ Whale Pump___ Bailer ___ Other X	Wtr Level Indicator	—
Sampling Personnel	DSZ	Water Quality Sonde SN	YSI Geotech
Weather	45° Sunny		

Calculate Purge Volumes

Time of water level measurement (military): — Depth of Pump/Intake: 76' feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
76' feet	— feet	= ____ feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= ____ liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
—	4,440	1112	1,110	10.82	14.4	-26.8	8.53	480	—
—	8,880	1116	1,110	11.03	28.7	7.14	7.91	468	—
—	13,320	1120	1,110	11.03	31.3	7.14	8.06	4.67	—
—	17,760	1124	1,110	11.03	29.1	7.15	8.08	466	—
—	22,200	1126	1,110	10.09	28.2	7.15	8.15	465	—
—	26,640	1132	1,110	11.14	28.1	7.16	8.07	465	4.557

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
WP OU4-76.0	1132	13 bottles	DSZ

Comments: WLP will not fit down a sample pipe

Sampling Personnel Signature _____ Date 2/26/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	WP-05-95'		
Sample Date	2/28/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ___ Peri Pump ___ Whale Pump___ Bailer ___ Other: Waterra	Wtr Level Indicator	—
Sampling Personnel	DSL / WW	Water Quality Sonde SN	YSI 09349
Weather	35°		

Calculate Purge Volumes

Time of water level measurement (military): — Depth of Pump/Intake: 95' feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
95' feet	— feet	= — feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= — liters

3 X One Well Volume	— liters
5 X One Well Volume	— liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
NC	2L	1040	~500	8.00	54.6	7.50	1.20	594	—
	5L	1046	"	8.93	-30	7.60	0.43	589	—
	8L	1052		8.95	-78	7.64	0.29	590	—
	11L	1057	"	9.20	-98.2	7.68	0.24	586	622
	14L	1104	"	9.39	-106.5	7.73	0.23	584	—
	17L	~~1108~~ 1110	"	9.22	-107.5	7.76	023	582	496
	20L	1116	"	9.41	-109.8	7.78	0.15	580	458
	23L	1122	"	9.49	-110.7	7.80	0.13	578	414

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Comments:
WP05-95-GW	1122		DSL	

Sampling Personnel Signature _____ Date 2/28/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	WP-03-95.0-GW		
Sample Date	3/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ___ Peri Pump ___ Whale Pump___ Bailer ___ Other Waterra	Wtr Level Indicator	
Sampling Personnel	WJW / DJC	Water Quality Sonde SN	
Weather	Mid-High 30's, partly cloudy		

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)		Depth to Water (btoc)		Height of Water Column			One Well Volume
_____	feet	_____	feet	= _____	feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= _____ liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
NC	1000	953	500	7.62	-90.2	6.29	1.50	681	—
	2000	956	500	7.44	-138.6	6.08	1.04	610	—
	3000	1000	~300	7.57	-146.9	6.63	0.64	569	—
	4000	1003	"	7.67	-146.8	6.44	0.51	557	—
	5000	1006	"	7.87	-144.9	6.46	0.44	545	
	6000	1008	"	7.76	-143.7	6.46	0.34	540	55.09

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
WP-03-95.0-GW	1008	6 L	WJW

Comments:

Sampling Personnel Signature _____ Date 3/5/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	WP02-105.0-GW		
Sample Date	3/7/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ___ Peri Pump ___ Whale Pump___ Bailer ___ Other X	Wtr Level Indicator	
Sampling Personnel	DSZ / WW	Water Quality Sonde SN	YSI 0934
Weather	20° Overcast		

Calculate Purge Volumes —

Time of water level measurement (military): Depth of Pump/Intake: 105 feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
— feet	— feet	= — feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= — liters

3 X One Well Volume	— liters
5 X One Well Volume	— liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
—	50	853	140	6.45	130.5	5.64	4.66	565	—
—	700	858	140	8.36	26.6	6.24	4.89	503	—
—	1400	903	140	8.39	36.1	6.62	4.75	496	—
—	2100	908	140	8.12	46.5	6.98	4.31	438	—
—	2800	913	140	8.14	57.9	7.14	4.29	393	—
—	3,500	918	140	8.31	64.7	7.23	4.30	392	—
—	4,200	923	140	8.63	70.5	7.39	3.96	391	—
—	4900	928	140	8.40	73.2	7.42	4.20	389	—
—	5,600	933	140	8.66	72.0	7.51	4.21	389	385.1

Total Vol. Removed: ~~6~~ Liters (√) ✓ Meters Calibrated (√) — Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
WP02-105.0-GW	933		DSZ
WP02-105.0-GW-D	933		DSZ

Comments:

Sampling Personnel Signature _____ Date 3/7/13

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STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-26		
Sample Date	4/24/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ✓ Peri Pump ___ Whale Pump___ Bailer ___ Other ___	Wtr Level Indicator	SEI #4
Sampling Personnel	LSR	Water Quality Sonde SN	Hydrolab 45358
Weather	Sunny 40's → 50's	Turbid meter	LaMotte 2020 11836

Calculate Purge Volumes

Time of water level measurement (military): 08:00 Depth of Pump/Intake: ~105 feet bgs

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
Meter only 100' tape well ~110' bgs ___ feet	- 62.40 feet	= ___ feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= ___ liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
62.68	200	08:25	—	13.62	13	10.28	6.46	762	180
62.70	560	08:30	72	12.88	1	9.62	8.16	787	312
62.70	1100	08:35	108	12.55	-11	9.59	2.68	798	186
62.70	1900	08:43	100	12.52	-36	9.32	1.84	803	99.3
62.70	2270	08:48	74	12.56	-38	9.19	1.75	799	99.3
62.70	3000	08:55	104	13.27	-48	8.94	1.67	808	93.9
62.70	4100	09:02	157	12.63	-53	8.62	1.60	803	41.3
62.70	4600	09:07	100	13.30	-62	8.80	1.11	817	43.4
62.70	5100	09:12	100	13.21	-69	8.70	0.92	814	43.4
62.70	5700	09:17	120	13.16	-73	8.75	0.85	817	40.3

Total Vol. Removed: 5.7 Liters (√) ✓ Meters Calibrated (√) ___ Min. 3 Well Vol. Purged (√) ✓ Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)
MW26-105.0-GW	09:17	2x500 Amber 2x250 Amber	SJR
		1x500 Plastic 2x250 Plastic	
		6x125 Plastic	

Comments: 07:55 opened well, PID = 0.2 ppm v/v
08:15 began purging

Sampling Personnel Signature Sara Rosberg Date 4/24/13

APPENDIX D: VERTICAL GROUNDWATER PROFILE NOTES

NYLD

NEW YORK LEAK DETECTION, INC.

Job Information

Date & Time: 1/24/2013 and 1/29/2013 Technician: Mark Manzari

Customer: Stone Environmental, Inc.

Site Address: Former Scotia Naval Depot- Glenville, NY @ Scotia Industrial Park

Contact Person: Joseph Schmidle Phone: 603-455-0946

Office Notes/Scope of Work:

Clear for borings

Type of Service

☐ *Leak Detection* ☒ *Utility Location/GPR* ☐ *Video Inspection*

Type of Equipment Used

☐ *LC2100 Leak Correlator* ☒ *RD4000* ☐ *Video Inspection Camera*

☐ *LC2500 Leak Correlator* ☐ *Noggin 250 mHz* ☐ *Gas Detector*

☐ *S-30 Surveyor* ☒ Noggin 500 mHz ☐ Other: _____

☐ *Sonde* ☐ Conquest 1000 mHz

Marking Used

☒ *Paint* ☐ *Flags*

☐ *Chalk* ☒ *Other:*

Mag Nails with pink & blue ribbon

Instructions from Customer Contact:

Clear utilities for 19 boring locations (30 ft. radius if possible)

Notes/Testing Results:

19 boring locations cleared. Mag nail with blue and pink ribbon set at each cleared location to drill. All boring locations should be drilled at set Mag nails that are at or near wood stakes installed by Stone Environmental unless otherwise indicated below. A 10 foot radius of clearance exists at each boring location.

Travel Time: 3.0 hrs. on 1/24 – 1.25 hrs. on 1/28 Arrival Time: 9:30 AM on 1/24 – 8:00 AM on 1/29

Onsite Hours: 7.0 hrs. on 1/24 – 6.0 hrs. on 1/29

Information Transfer

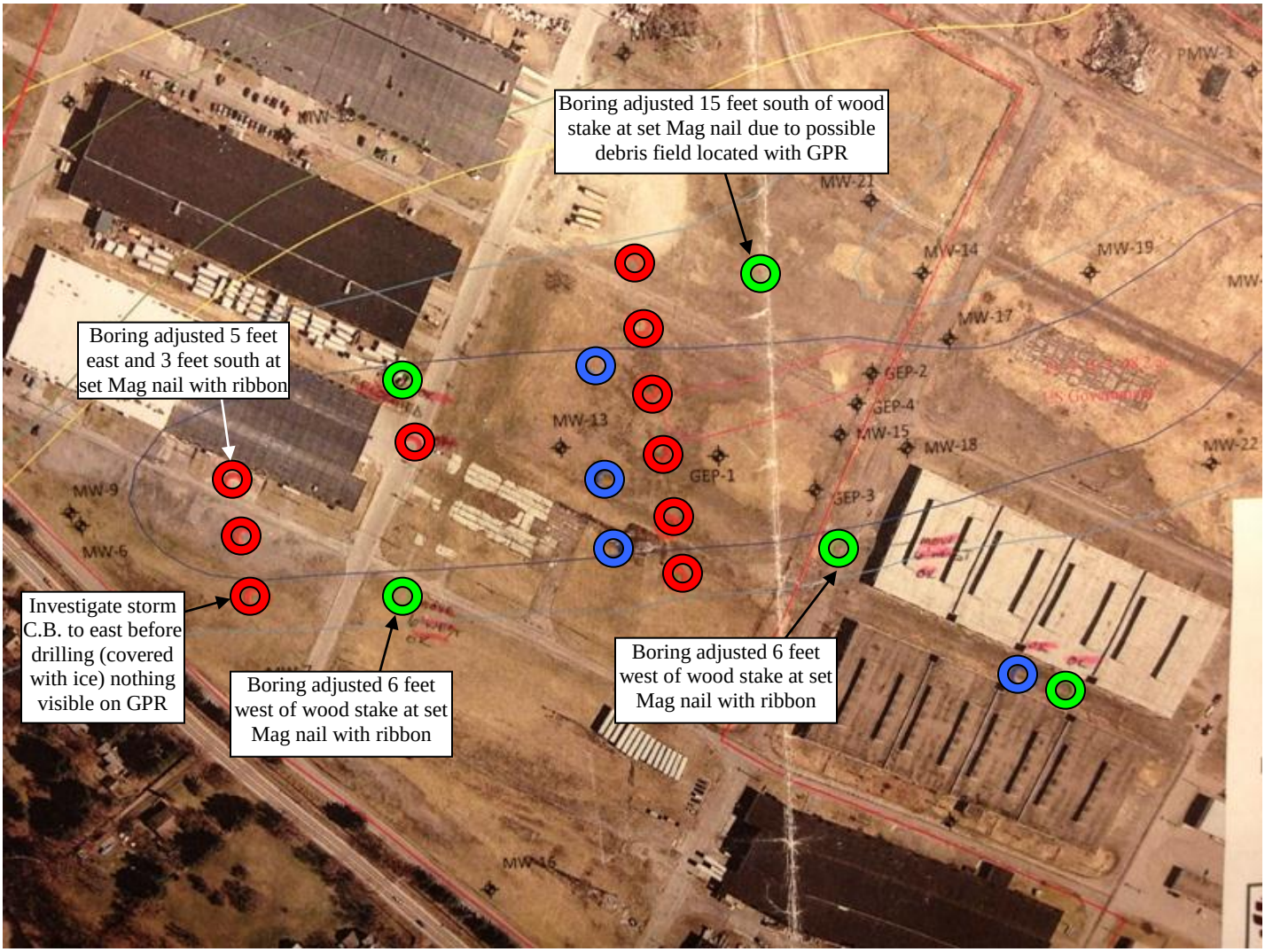
☒ *Information relayed on site to:* ☐ *Hand drawn map (forward to office for digital remake)* ☐ *All markings picked up by surveyors*

Joseph Schmidle

NYLD

NEW YORK LEAK DETECTION, INC.

Job Information





NYLD

NEW YORK LEAK DETECTION, INC.

Job Information

Date & Time: 2/15/2013 Technician: Mark Manzari

Customer: Stone Environmental, Inc.

Site Address: Former Scotia Naval Depot- Glenville, NY @ Scotia Industrial Park

Contact Person: Joseph Schmidle Phone: 603-455-0946

Office Notes/Scope of Work:

Clear for 3 additional boring locations

Type of Service

☐ *Leak Detection* ☒ *Utility Location/GPR* ☐ *Video Inspection*

Type of Equipment Used

☐ *LC2100 Leak Correlator* ☒ *RD4000* ☐ *Video Inspection Camera*

☐ *LC2500 Leak Correlator* ☐ *Noggin 250 mHz* ☐ *Gas Detector*

☐ *S-30 Surveyor* ☒ Noggin 500 mHz ☐ Other: _____

☐ *Sonde* ☐ Conquest 1000 mHz

Marking Used

☒ *Paint* ☐ *Flags*

☐ *Chalk* ☒ *Other:*

Mag Nails with pink & blue ribbon

Instructions from Customer Contact:

Clear utilities for 19 boring locations (30 ft. radius if possible)

Notes/Testing Results:

19 boring locations cleared. Mag nail with blue and pink ribbon set at each cleared location to drill. All boring locations should be drilled at set Mag nails that are at or near wood stakes installed by Stone Environmental unless otherwise indicated below. A 10 foot radius of clearance exists at each boring location.

(3 additional borings cleared on 2/15/13 with a 10 foot radius of clearance and are shown below in yellow)

Travel Time: 4.0 hrs. on 2/14 – 3.0 hrs. on 2/15 (7.0 total) Arrival Time: 8:00 AM

Onsite Hours: 2.5 hrs.

Information Transfer

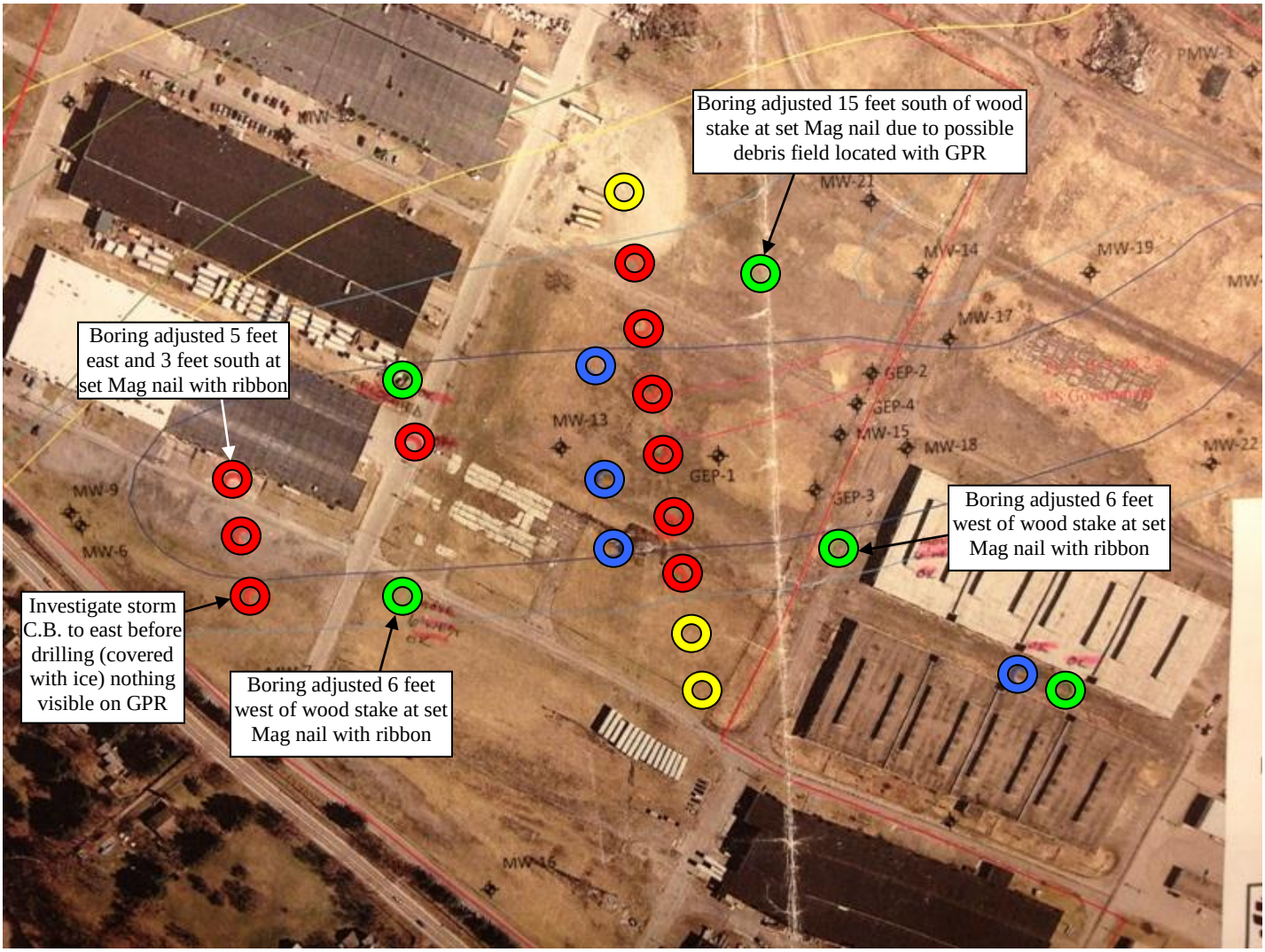
☒ *Information relayed on site to:* ☐ *Hand drawn map (forward to office for digital remake)* ☐ *All markings picked up by surveyors*

Joseph Schmidle

NYLD

NEW YORK LEAK DETECTION, INC.

Job Information





NYLD

NEW YORK LEAK DETECTION, INC.

Job Information

Date & Time: 2/25/2013 Technician: Mark Manzari

Customer: Stone Environmental, Inc.

Site Address: Former Scotia Naval Depot- Glenville, NY @ Scotia Industrial Park

Contact Person: Joseph Schmidle Phone: 603-455-0946

Office Notes/Scope of Work:

Clear for 6 additional boring locations

Type of Service

☐ *Leak Detection* ☒ *Utility Location/GPR* ☐ *Video Inspection*

Type of Equipment Used

☐ *LC2100 Leak Correlator* ☒ *RD4000* ☐ *Video Inspection Camera*

☐ *LC2500 Leak Correlator* ☐ *Noggin 250 mHz* ☐ *Gas Detector*

☐ *S-30 Surveyor* ☒ Noggin 500 mHz ☐ Other: _____

☒ *Sonde* ☐ Conquest 1000 mHz

Marking Used

☒ *Paint* ☐ *Flags*

☐ *Chalk* ☒ *Other:*

Mag Nails with pink & blue ribbon

Instructions from Customer Contact:

Clear utilities for 19 boring locations (30 ft. radius if possible)

Notes/Testing Results:

19 boring locations cleared. Mag nail with blue and pink ribbon set at each cleared location to drill. All boring locations should be drilled at set Mag nails that are at or near wood stakes installed by Stone Environmental unless otherwise indicated below. A 10 foot radius of clearance exists at each boring location.

(3 additional borings cleared on 2/15/13 with a 10 foot radius of clearance and are shown below in yellow)

(6 additional borings cleared on 2/25/13 with a 10 foot radius of clearance and are shown below in purple)

Travel Time: 2.5 hrs. Arrival Time: 12:00 PM Onsite Hours: 4.0 hrs.

Information Transfer

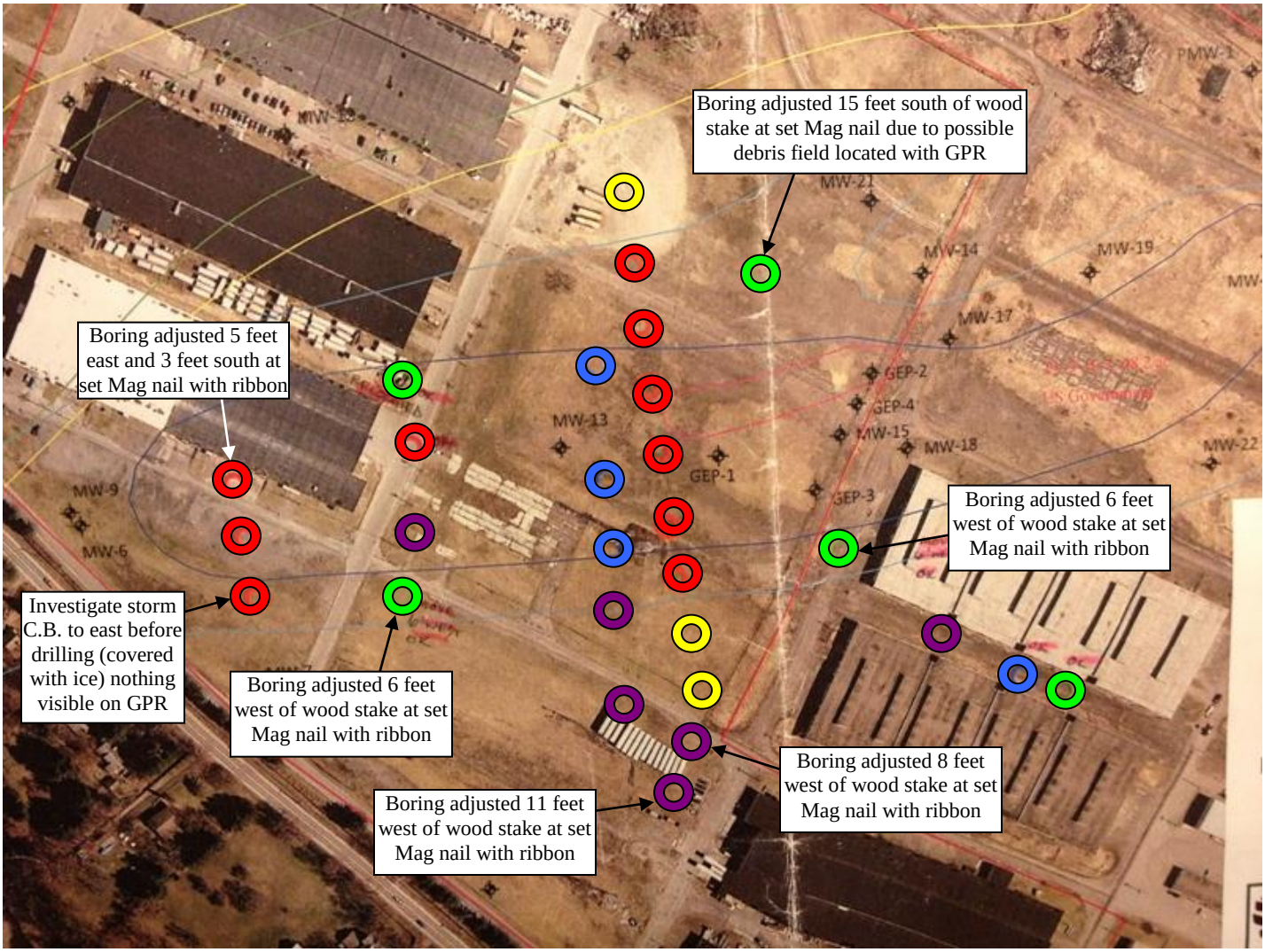
☒ *Information relayed on site to:* ☐ *Hand drawn map (forward to office for digital remake)* ☐ *All markings picked up by surveyors*

Joseph Schmidle

NYLD

NEW YORK LEAK DETECTION, INC.

Job Information





GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE | Profile Location: WP-01

Started / Completed

Dates: 2/4/13

Location: Scotia, NY

SEI #: 102305-C

Sampler(s): W&W

KPRO Box Serial # / Acquisition Laptop: 803/Rasch

Troll Serial #: YSI 0934

Drilling Contractor: Geologic/P-W

Average Depth to Water: #DIV/0!

Gas Drive or Peri Pump: 695

Atmospheric Pressure: 0 32.04

KPRO N_2 Pressure (set via P transducer): 0 69.23

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
		On Site @ 0700, calibrate all probes, instruments						
	0900	Calibrate Box						
	0930	Pressure Test Pump, Collect EB						
	1200	Zero Box. Trip in @ ~1300						TURBIDITY (NTU)
2/5/13 -70.0	1406	500	NL	190	10.71	7.22	103	319.3
		No Flow 70 → 79.5. Not frozen... Pulling up to -68						
		SS, ok, no crimps or clogs. Pushed back through						
		interval, high 1K. WTF. Sampling @ -75.0						
-75.0	1618	520	NC	260	10.06	7.83	81	1022
-80.0	1735	570	NL	335	10.55	8.09	71	972.9
2/6/13	0800	Zero Box, Cal Instruments						Atm = 32.06, Res = 78.40
		Drove to -85, pulled up to -84.5, SS=120'						
-84.5	0920	510	~~215~~	~~215~~	10.40	6.27	92	TURBIDITY = 376.7 *
-91.5	1009	500	NC	233	9.90	7.04	88	878.2 *
-95.0	1116	550	NC	242	9.80	7.74	85	901.3 **
		Purged ~1L extra for metals, etc; taking to lung; aborted						
			SS=140'					
-100.0	1415	850	NC	157	9.87	~~7.88~~ 7.80	100	358.5 *
-105.0	1523	710	NC	380	9.33	7.76	54	624.8 *
-110.0	1622	700	NC	369	10.07	7.86	46	665.6 *
-114.0	1711	760	NC	384	9.66	7.91	51	610.3 *
	Cont'd pg 2							

~~* split collected~~

* = split collected

** = split, metals, Mn, etc collected

1

\\FILES\NetDrv-L\RASC\Forms\Groundwater Profiling Forms\Groundwater Profiling Log_with Plot V 2.1.xls

103 x
68 x
70 x
73 x
75 x
78 x
80 ↓
83 x
85 ↓
88 ↓
90.6 ↓
91.5 ↓
* 93 x
95 x
98 ↓
100 ↓
103 x
105 x
* 108 x
* 113 x
115 x

WP-01, cont'd.

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE (Started / Completed)

Profile Location: WP-01

Dates: 2/6/13

Location: Scotia, NY

SEI #: 102305-C

Sampler(s): WSW

KPRO Box Serial # / Acquisition Laptop: 803 / pw=6

Troll Serial #: YSI 0934

Drilling Contractor: Geologic / P-W

Average Depth to Water: #DIV/0!

Gas Drive or Perl Pump: Gas

Atmospheric Pressure: 0

KPRO N_2 Pressure (set via P transducer): 0

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
2/7/13	0755	Cal. Instruments, Zero Box						~~36~~ Atm = 32.82, Res = 70.52
		SS = 160'		Wait for prg...			Begin Purge	0845
120.0	0935	820	NC	270	10.27	6.76	78	736.3 Turbidity
125.0	1020	670	NC	315	9.20	7.44	47	856.0
130.0	1114	680	NC	334	9.27	7.76	41	777.4
135.0	1227	970	NC	340	9.05	7.91	33	524.0
		SS = 160'		Wait 45 min for drillers				
140.0	1358	860	NC	289	9.16	8.12	46	574.8
	1415	Refusal @ -141.6 (ROP too slow)						
141.6	1456	920	NC	351	9.36	8.04	45	407.5

118 x
120 x
123 x
125 x
128 x
130 x
133 x
135 x
138 x
140 x
141.6 x

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: CENAN / CENAS (Started / Completed)

Profile Location: WP02

Dates: 2/5/13 2/8/13

Location: Scotia, NY

SEI #: 107305-R-C

Sampler(s): WAN

KPRO Box Serial # / Acquisition Laptop: 804 / Rose7

Troll Serial #: 62751

Drilling Contractor: Parratt-Wolff

Average Depth to Water: 68

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 33.94

KPRO N_2 Pressure (set via P transducer): 69.69

Gas Drive Pump N_2 Pressure: 100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
-67.80	—	—	—	Sample stopped				First sample started at 16:30
-70.60	1729	530	NE	223	10.10	7.42	158	412.1 Turbidity
2/6/13 -75.0	10:07	870	NC	400	4.82	7.82	37	NC
-80.0	—	—	NC	Yield	dreamed too slow			
-79.5	1236	800	NC	382	3.48	7.79	10	218.8 Turb.
-87.15	1344	410	NC	212	8.38	7.48	80	197.5 "
-92.0	1503	470	NC	288	7.37	7.57	98	176.4 "
-96.4	1726	1000	NC	409	2.92	7.87	-20	412.8 "
2/7/13 -102.14	955	970	NC	422	3.37	7.91	42	439.8 " Found N_2 coming out of N_2 line on harness when turned off. Replaced 5 way valve - Higher whack yield flows.
-107.00	1120	1200	NC	438	1.74	8.02	-35	169.5 "
-110.25	1250	1140	NC	419	1.50	8.08	-89	232.1 "
-115.00	1432	1280	NC	437	1.28	8.02	-58	717.0 "
-120.0	1541	1260	NC	433	0.69	8.03	-46	911.5 " Replaced regulator on attempt to get higher flow rate. Success
-125.0	1646	~~1370~~ 1440	NC	440	0.46	8.04	-51	808.3 "
-129.0	—	Refusal @ ROP slowed to 1 cm/min consistently						
2/8/13 -129.0	900	1540	NC	450	0.58	7.88	-57	305.6 "
		Attempted to advance in the am after sample						
		drive rate worse. ~.99 Refusal						
		Final depth - 129.82						

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: ~~USACE~~ USACE (Started / Completed)

Profile Location: WP-02 (A)

Dates: 2/12/13

Location: Scotia, NY

SEI #: 102305-C

Sampler(s): WJW

KPRO Box Serial # / Acquisition Laptop: 903 / Rose 6

Troll Serial #: YSI 0934

Drilling Contractor: Geologic / PW

Average Depth to Water: #DIV/0! -60S

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 0 31.52

KPRO N_2 Pressure (set via P transducer): 0 69.10

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	TURBIDITY COMMENTS
	This hole is continuation of WP-02, which WAN started.							
	0945 Zero Box, Collect Equip Blank (WP-02A-EB)							
	1045 Trip In to -130.7. Push to -132.8 (1120)							
-132.8	1218	1000	NC	420	2.47	6.71	-61	48.13 SS=1600'
-137.5	1312	700	NC	400	3.75	7.41	9	145.1
-142.0	1429	1300	NC	504	1.49	7.72	-57	138.5
			SS=180'					
-147.1	1544	870	NC	438	3.72	7.85	2	64.64
		Drive to -152.2, Pulling Up Drive Cap severed						
		SS. Pulling up 5' to Repair, Then back down to -151.0						
-151.0	1713	840	NC	361	5.75	7.93	-34	68.09
	0745	Zero Box, Cal Instruments						ATM=X, Res=68.9
	0800	Refusal @ -153.1, ROP too slow.						
-153.1	0928	1160	NC	497	1.80	7.17	-50	13.87
	Pulling Up, then pushing Back to see if things loosen up...							
	Broken Rod, 5 feet down. Pulled out successfully.							
	Pulled up 30', drove back down, pushed 0.2',							
	Drive Rate <1.0'/min. Refused again.							

2/12/13

2/13/13

132.8 ↓
137.5 ↓
142 ↓
147.1 ↓
152.2 ↓
151 ↓
153 ↓
153.1 x

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE (Started / Completed)

Profile Location: WP-03

Dates: 2/6/13

Location: Scotia, NY

SEI #: 102305-C

Sampler(s): WSW

KPRO Box Serial # / Acquisition Laptop: 603 / Rasc-6

Troll Serial #: YSI 0934

Drilling Contractor: Geologic / P-W

Average Depth to Water: #DIV/0! 16.5

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 0 32.4

KPRO N_2 Pressure (set via P transducer): 0 70.33

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	0750	Collect Equip Blank						(WP-03-EB)
	0810	Zero Box, Cal Sonde						TURBIDITY
	0900	Trip in to -63.0', wait for GeoProbe						
	0950	Something clogged or frozen down hole, trying to resolve						
-72.0	1119	700	NC	159	9.62	6.07	130	957.5
-77.1	1214	500	NC	157	10.65	6.93	123	366.4
-82.7	1411	500	NC	139	9.80	7.36	99	628.5
			SS=120'					
-87.5	1501	510	NC	202	9.42	7.38	83	619.2
-92.5	1544	510	NC	102	9.18	7.14	89	557.7
	1600	Hard Refusal @ -93.7'						
-93.7	1640	710	NC	372	8.96	7.48	34	507.7

68 x
72 ^
77.1 x
83 ↓
87.5 ↓
92.5 ↓
93.7 x

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: CENAN / CENAE (Started / Completed)

Profile Location: WP03a

Dates: 2/11/13 2/13/13

Location: Scotia, NY

SEI #: 102305-R-C

Sampler(s): WAN

KPRO Box Serial # / Acquisition Laptop: 806 / Rasc7

Troll Serial #: 62951 / 600XL-25-0

Drilling Contractor: Parratt / Wolff

Average Depth to Water: 68

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 33.13

KPRO N_2 Pressure (set via P transducer): 68.77

Gas Drive Pump N_2 Pressure: 100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
-		Continuation of hole WP03						
		Mud rotary down to 103'						Replaced 3 way valve before jig (leaking)
		Tripped in and pushed to 107.8'						
-107.8	1311	1890	NC	514	0.67	7.88	+71	331.8 turbidity
-112.8	1455	1000	NC	509	0.44	7.94	-92	204.8 "
-117.8	1601	1540	NC	496	0.39	7.95	-99	159.2 " Dup Collected
-122.8	1712	1590	NC	500	0.58	7.91	-85	104.2 "
2/12/13 -127.8			Flow dropped					Changed to YSI today
-127.3	935	2040	NC	499	0.89	7.67	-60	56.44 "
-132.4	1100	1790	NC	508	0.59	7.80	-73	59.57 "
-137.5	1208	1400	NC	498	1.25	7.91	-84	34.48 turb.
-142.6	1337	1406	NC	492	1.18	7.85	-81	11.35
-146.1			Refusal - No Flow - Drive rate dropped too low					
-145.6	~~1430~~ 1451	1530	NC	496	0.71	7.89	-84	66.67 turb
		Mud rotary. Will trip back in tomorrow.						

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: CENAW / CENAE (Started / Completed)

Profile Location: WP036

Dates: 2/19/13 2/19/13

Location: Scotia, NY

SEI #: 102305-R-C

Sampler(s): WAN

KPRO Box Serial # / Acqulsition Laptop: 806/Rasc7

Troll Serial #: 600XL-25-0 YSI

Drilling Contractor: Parratt/Wolff

Average Depth to Water: 68

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 32.4

KPRO N_2 Pressure (set via P transducer): 70.33

Gas Drive Pump N_2 Pressure: 100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
159.0	11:42	1700	NC	570	0.77	6.77	-52	53.58 turb. Duplicate & Split
163.9	12:55	1650	NC	590	0.54	7.17	-94	142.1 turb.
164.8	14:29	1520	NC	589	0.52	7.11	-85	45.8 turb.
			Refusal - Drive rate dropped to 0.9 ft/min					

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: CENAN/CENAES (Started / Completed)

Profile Location: WP04

Dates: 2/8/13 2/11/13

Location: Scotia, NY

SEI #: 102305-R-C

Sampler(s): WAN

KPRO Box Serial # / Acquisition Laptop: 804 / Rasc7

Troll Serial #: 62751

Drilling Contractor: Parratt-Wolff

Average Depth to Water: 68

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 34.14

KPRO N_2 Pressure (set via P transducer): 68.82

Gas Drive Pump N_2 Pressure: 100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
72.7	1214	890	NC	475	5.99	7.64	77	170.0 Turbity
77.5	1346	810	NC	432	5:38	7.72	78	488.3 "
82.5	1426	720	NC	327	5.59	8.04	75	630.1 "
87.7	1509	570	NC	2.97	6.31	8.11	92	1100 "
92.7	1541	680	NC	298	4.82	8.09	89	948.4 "
97.7	1653	1120	NC	418	6.70	8.09	-24	441.1 "
2/9/13 102.70	1252	380	NC	436	0.64	8.10	37	Not holding pressure. Pulled up 20' to check stainless. Able to get 40-50 ml per whack. Drove back down and will work with slow return. 199.6 turb.
Tr. Pulled out & Backfilled								
Collected another Equipment blank -> WP04-EB-20 1630								
2/10/13 107.5	1251	650	NC	298	2.56	8.56	710	82.77 turbidity - looks way more. checked calibration OK. ✓
See excel log for morning explanation 112.5	1449	1100	NC	346	0.15	8.31	-252	545.1 "
117.6	1622	700	NC	427	1.04	8.17	-115	1.17 ← incorrect reading. sample opaque instrument still calibrated correctly.
120.55		Drive rate dropped to 1.00 ft/min						
		Refusal — Sample in the can						
2/11/13 120.55	910	390	NC	176	6.94	8.56	75	654.9 Kept sparging Purged 390 mL total/recorded
		Rods broke upon retrieval. 105' of rod recovered no stainless						

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE

Profile Location: WP-05

Started / Completed

Dates: 2/9/13 - 2/11/13

Location: Scotia, NY

SEI #: 102365-C

Sampler(s): WSW

KPRO Box Serial # / Acquisition Laptop: 803 / Rasc6

Troll Serial #: YSI 0934

Drilling Contractor: Cascade / PW

Average Depth to Water: #DIV/0!

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 0 32.71

KPRO N_2 Pressure (set via P transducer): 0 70-04

Gas Drive Pump N_2 Pressure: 50 - 100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	1225	Collect Equip Blank (WP-05-EB)						
	1235	Zero Box						
	1320	Trip In to -63.0'.			Wait for Probe...			SS=100'
67.7	1523	500	NC	191	11.50	6.74	110	TURBIDITY 835.3
73.0	1635	600	NC	208	10.99	7.29	98	524.0
	0725	Zero Box, Cal Instruments						Atm=33.11, Res=69.81
78.0	0936	500	NC	208	2.45	6.92	103	399.4
82.8	1106	550	NC	315	10.78	7.39	84	876.9
			SS=120'					
87.8	1211	550	NC	235	10.01	7.65	89	776.9
92.8	1308	520	NC	192	9.65	7.79	93	725.2
97.7	1356	500	NC	212	10.29	7.86	86	823.7
102.9	1440	570	NC	240	10.13	7.90	82	654.7 ← SS=140'
107.9	1546	710	NC	345	10.37	7.76	53	722.7
112.8	1632	560	NC	240	10.21	7.88	81	699.3
	0745	Calibrate Box	Zero	Box:	Atm=31.66,	Res=69.4		
117.3	0853	630	NC	236	11.17	6.48	115	480.5
122.2	0950	670	NC	270	10.60	7.12	95	471.7
				SS=160'				~~444.5~~
127.5	1113	880	NC	346	9.81	7.37	76	444.5
132.4	1201	570	NC	865	9.07	7.53	79	559.0
137.3	1300	760	NC	441	8.70	7.62	62	428.6 FD collected
142.4			NC					309.2 FD collected

Refusal @ -142.4, ROP Too slow.

END OF HOLE

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: CENAN/CENAE (Started / Completed)

Profile Location: WP06

Dates: 2/22/13

Location: Scotia, NY

SEI #: 102305-R-C

Sampler(s): WAN/TWM

KPRO Box Serial # / Acquisition Laptop: 886/Rage 7

Troll Serial #: YSI 600XL-25-0

Drilling Contractor: Prasratt Wolff

Average Depth to Water: 68

Gas Drive or Peri Pump: Gas

Atmospheric Pressure:

KPRO N_2 Pressure (set via P transducer):

Gas Drive Pump N_2 Pressure: ~100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
66.0				CNPW				
68.0				CNPW				
72.0	1319	850	NC	539	4.56	6.83	84	1100 turbidity
77.0	1401	460	NC	352	6.49	7.04	78	812.8 "
82.0	1510	1180	NC	689	~~0.95~~ 1.89	6.95	-12	1100 Duplicate
87.0	1559	630	NC	386	3.80	7.33	3	
2/25 Began cal @ 950								~~291.0 turb~~
92.0	1151	700	NC	497	3.73	6.99	48	291.0 turb
97.0	1253	770	NC	470	3.4	6.78	2	1009 turb
		Hole complete						
		3 clean Samples						

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE

Profile Location: ~~GP-07~~ WP-07

Started / Completed

Dates: 2/18/13 2/21/13

Location: Scotia, NY

SEI #: 102305-C

Sampler(s): TWM

KPRO Box Serial # / Acquisition Laptop: 803/Rasc6

Troll Serial #: YSI 0934

Drilling Contractor: Parratt-Wolff

Average Depth to Water: #DIV/0! -65

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 0

KPRO N_2 Pressure (set via P transducer): 0

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	1108	Calibrate Box, Sondes, etc.						
2/18	1136	Collect Equip Blank @ 1136						
2/19	357	Tripped in						
	405	- First Sample try						
-67.6	1708	550	NC	362	4.26	6.79	93	Turb: 983.5 NTU
2/19	Redal check complete @ 17:24							
2/20	805	Drove to next Sample						
-72.4	854	540	NC	408	5.07	6.86	62	Turb: 378.7 NTU
-77.4	1000	570	NC	493	4.35	7.39	38	Turb: 718.3 NTU
-82.4	1104	700	NC	479	3.94	7.6	53	Turb: 357.4 NTU
		~~70~~ - Flow dropped to 65 w/ hammer stopped						
	@ 87 Ft bgs - Flow @ ~9							120 Ft SS
	drive rate dropping							
-90.2	1222	540	NC	436	4.42	7.67	46	TBU - 677.4 NTU
-95.2	1328	620	NC	515	3.47	7.72	46	Turb: 775.0 NTU
-100.3	1427	740	NC	523	2.07	7.72	33	Turb: 652.6 NTU
-105.2	1532	800	NC	552	1.22	7.76	20	Turb: 635.4 NTU
2/20 -110.0	1655	730	NC	508	4.19	7.85	33	Turb: 527.5 NTU
2/21	@ 736 - cal Sonde + zero							
-115.2	907	1200	NC	494	1.74	6.85	40	Turb: 517.2 NTU
	END of Hole							

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: CENAN/CENAE (Started / Completed)

Profile Location: LWP08

Dates: 2/20/13 2/21/13

Location: Scotia, NY

SEI #: 102305-R-C

Sampler(s): WAN

KPRO Box Serial # / Acquisition Laptop: 806/Rasc7

Troll Serial #: YSI 600XL-25-0

Drilling Contractor: Parratt Wolff

Average Depth to Water: 68

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 31.78

KPRO N_2 Pressure (set via P transducer): 69.94

Gas Drive Pump N_2 Pressure: ~100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
65.9	1109	500	NC	307	6.71	6.13	101	952.5 turbidity
70.96	—	—	—	— Flow dropped	to	0		
70.4	1147	560	NC	461	5.08	6.46	64	978.6 turbidity
75.7	1224	540	NC	381	5.81	6.57	69	374.0 "
80.96	1252	560	NC	402	6.17	6.69	71	501.5 "
84.9	1332	550	NC	385	5.05	6.73	67	197.5 "
90.6	1401	600	NC	378	5.38	6.78	61	144.9 "
95.0	1448	1150	NC	530	2.16	6.87	35	192.1 "
100.0	1524	600	NC	436	4.90	6.82	35	115.5 " String pot not hooked up 100.0 - 100.5. KPRO program froze. Restarted, recorded bore.
105.0	1627	1190	NC	546	1.18	6.91	-15	88.12
110.0	1712	1150	NC	519	0.97	6.77	-29	139.2
113.4	852	1100	NC	601	1.28	7.23	34	43.10
			Refusal — ROP dropped to ~1.3					

2/21/13

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE

Profile Location: WP-09

Started / Completed

Dates: 2/25/13

Location: Scotia, NY

SEI #: 102305-R

Sampler(s): WJW

KPRO Box Serial # / Acquisition Laptop: 553/Rose6

Troll Serial #: YSI 09934

Drilling Contractor: Parratt-Wolff

Average Depth to Water: #DIV/0! -65'

Gas Drive or Peri Pump: Geo

Atmospheric Pressure: 0 30.45

KPRO N_2 Pressure (set via P transducer): 0 69.22

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	1115	Calibrate Box, Samples						
	1150	Collect Equip Blank (WP-09-EB)						
	1245	Zero Box, Wait for drillers.						
	1315	Trip In to ~63', SS=100'. Begin Profile, 1415						
		SS seems to be clogged, Tripping out.						
	1530	Back on Hole, SS was clogged						TURBIDITY (NTU)
-72.0	1650	500	NC	185	4.51	6.28	70	46.85
	0730	Zero Box, Cal Instrument, Temp=34.68, Res=69.17						
-77.0	0841	510	NC	155	4.64	6.21	70	270.9
-82.1	0954	500	NC	155	7.44	6.85	63	558.7
				SS=120'				
-87.2	1043	510	NC	225	7.77	7.07	57	823.8
-92.0	1122	480	NC	238	5.12	7.20	49	755.2
-97.1	1211	500	NC	261	7.45	7.37	49	1086
-101.8	1305	600	NC	272	6.09	7.46	44	993.5
				SS=140				
-106.8	1402	610	NC	289	5.36	7.44	32	725.8
-112.0	1449	540	NC	283	5.13	7.51	40	785.9
-116.2	1534	560	NC	303	6.61	7.57	38	987.7
		Refusal @ -116.2 (ROP too slow)						~~987.7~~
	1630	Tripped Out						

2/25/13

2/26/13

68x
72x
77x
82.1x
87.2x
92x
97.1x
101.8x
106.8x
112x
116.2x

Dup collected

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE (Started / Completed)

Profile Location: WP10

Dates: 2/25/13 2/27/13

Location: Scotia, NY

SEI #: 10230S-R-C

Sampler(s): TWM

KPRO Box Serial # / Acquisition Laptop: 806 / Rasc7

Troll Serial #: RST 600XL-25-0

Drilling Contractor: Parratt Wolff

Average Depth to Water: 6'

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: _____

KPRO N_2 Pressure (set via P transducer): _____

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	@ 1S	53	began	EQ	Blank			
	1623	- EB	taken					
2/25								
2/26	916	- tripped to 63ft bgs						
-68.0	1104	610	NC	430	5.11	6.69	143	433.1 NTU
-73.0	1158	700	NC	413	6.41	7.14	126	188.1 NTU
	-Flow dropped from ~40 to ~30 when S40 ppd 179.1 NTU							
-78.0	~~1330~~ 1247	~~660~~ 800	~~NC~~	~~451~~ 397	~~6.41~~ 6.89	~~7.41~~ 7.28	~~126~~ 119	194.1 NTU
	-Sparged 1st wash - began purge again.							
-83.0	1330	660	NC	451	6.41	7.41	106	179.1 NTU
-88.0	1416	480	NC	253	6.76	7.40	119	182.6 NTU
-93.0	1505	800	NC	425	5.70	7.45	86	184.0 NTU
2/26								
-98	1604	830	NC	436	5.56	7.37	55	101.4NTU
2/27	8:00	Began drive to 103						
		-Changed 5-Way valve, Still getting some bubbles @ Beg in						
		of wash						
-103.0	859	890	NC	396	6.05	6.96	114	182.1 NTU
	-Low Flow but decsent sample return							
-108.0	1022	~~1022~~ 850	NC	380	5.07	7.69	65	277.2 NTU
	@ 112.8 - ROP dropped to 1.3 then 0 for several second							
-112.8	1123	800	NC	361	5.06	7.73	62	44.9 NTU
			-Hole refused					

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client:

Profile Location: MP-10 continued

	Started	Completed
Dates:	3/1/13	

Location: Scotia, NY

SEI #: 102305-R-C

Sampler(s): TGW

KPRO Box Serial # / Acquisition Laptop: 806 / Rose 7

Troll Serial #: VSI 600x4-250

Drilling Contractor: Parratt Wolff

Average Depth to Water: -6'

Gas Drive or Peri Pump: Gas

Atmospheric Pressure:

KPRO N_2 Pressure (set via P transducer):

Gas Drive Pump N_2 Pressure: 50-60

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	1410 -	Began drive from -115 bgs						
-118.0	1454	950	NC	458	4.80	7.34	13	95.07 NTU
-123.0	1541	880	NC	466	5.23	7.31	25	281.6 NTU
3/1 -128.0	1628	1060	NC	506	1.52	7.56	-47	251.7 NTU
3/4 -133	1231	1120	NC	499	0.91	6.34	0	31.16 NTU
		DO	ORP	Still dropping				
-136.0	1311	850	NC	487	1.38	6.91	-43	15.76 NTU
		ROP dropped to		1.12	then	nothing for 10 secs		
		-Refusal-						

71.9 c
76.9 x
81.9 x
87 ↓
91.6 ↓
94.2 x

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE (Started / Completed)

Profile Location: WP-11

Dates: 2/27/13

Location: Slotsa, NY

SEI #: 102305-C

Sampler(s): WJW

KPRO Box Serial # / Acquisition Laptop: 603 / case 6

Troll Serial #: 45 0934

Drilling Contractor: Geologic / BW

Average Depth to Water: #DIV/0!

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 0 33.83

KPRO N_2 Pressure (set via P transducer): 0 62.19

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	0745	Collect Equip Blank, Pressure Test, etc						TURBIDITY
	0815	Trip In to -63'						
	0835	Zero Box, Wait for Drillers, Begin ~0946, SS = 100'						
71.9	1052	990	NC	240	5.34	6.33	112	685.8
76.9	1142	520	NC	261	7.30	7.07	97	445.5
81.9	1248	630	NC	393	5.32	7.38	71	295.5
				SS = 120'				
87.0	1350	530	NC	300	6.25	7.58	75	171.3
91.6	1456	480	NC	308	5.50	7.66	57	87.21
94.2	1600	510	NC	221	6.62	7.71	71	46.33
	1520	Refusal @ -94.2' (ROP too slow), Sampling.						

GROUNDWATER PROFILE LOG

Client:

STONE ENVIRONMENTAL INC

Profile Location: WP-12

Started / Completed

Dates: 2/27/13 3/1/13

Location: Scotia, NY

SEI #: 102305-R-L

Sampler(s): TWM

KPRO Box Serial # / Acquisition Laptop: 806/RASC7

Troll Serial #: YSI 600XL-25-0

Drilling Contractor: Parratt Wolff

Average Depth to Water: 68

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: _____

KPRO N_2 Pressure (set via P transducer): _____

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	1327	- EB taken						
-68	- could not produce water							
-71	- could not produce water							
-73.0	1653	640	NC	418	6.04	7.65	58	255.9 NTU
		Done for day						
2/28	737	- Calibrated Sonde #turb						
	730	- Zeroed Box						
	821	- drove to next sample						
-78.0	905	670	NC	461	6.85	6.26	175	61.22 NTU - split
-83.0	955	640	NC	459	6.12	6.77	105	25.44 NTU - split
-88.0	1102	750	NC	475	4.53	7.02	42	26.48 NTU - split
-93.0	1153	800	NC	469	4.49	7.14	36	200.3 NTU
-98.0	1252	850	NC	500	4.69	7.19	28	256.7 NTU
-103.0	1356	940	NC	495	4.86	7.16	20	206.2 NTU
-108.0	1515	1000	NC	521	2.99	7.2	-6	437.2 NTU
-113.0								176.5 NTU
		drove to -118 - Sample in arm						
-118.0	832	1360	NC	651	1.14	6.86	-80	158.4 NTU
-123.0	937	1440	NC	657	0.59	7.28	-106	230.1 NTU
		@ 2+ Clean Samples						
		- Hole Complete						

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: | Profile Location: WP-13

	Started	Completed
Dates:	2/28/13	

Location: Scofia, NY
SEI #: 102305-C
Sampler(s): WJW

KPRO Box Serial # / Acquisition Laptop: 803/Rasc6
Troll Serial #: 451 0934
Drilling Contractor: Geologic/PW
Average Depth to Water: #DIV/0!

Gas Drive or Peri Pump: Gas
Atmospheric Pressure: 0 33.75
KPRO N_2 Pressure (set via P transducer): 0 68.89
Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
		On site @ 0700. Clean equip, wait for next hole						
		to be cased. Cal Instruments						
	0925	Collect Equip Blank, WP-13-EB						SS=100'
	1305	Zero Box. Trip in to -63': 1330. Begin Profile: 1400						
-68.0	1454	510	NC	218	6.18	7.86	73	TURBIDITY 117.4
-72.9	1543	510	NC	312	5.77	7.71	69	440.3
		Drove to -77.8, Sample in AM						
-77.8	0818	520	NC	194	6.94	6.40	86	672.9
	0720	Zero Box: Atm=33.79, Res=69.40						
-82.8	0948	510	NC	275	4.49	7.02	70	459.3
			SS=120'					
-87.9	1047	520	NC	318	6.62	7.18	69	498.1
		Reached Target Depth						

68 x
72.9 x
77.8 ↓
82.8 x
87.9 ↓

2/28/13

3/1/13

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client:

Profile Location: WP-14

Started / Completed

Dates: 3/4/13

Location: Scotia, NY

SEI #: 102305-R-C

Sampler(s): Twin

KPRO Box Serial # / Acquisition Laptop: 806/Rasc 7

Troll Serial #: ISI 600 x4 -25.0

Drilling Contractor: Parratt Wolff

Average Depth to Water: ~68

Gas Drive or Peri Pump: ~~Peri~~ Gas

Atmospheric Pressure:

KPRO N_2 Pressure (set via P transducer):

Gas Drive Pump N_2 Pressure: 50-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
3/4	1558	EB taken						
3/5	1049	Tripped in to 63 Ft						
-68.0	1206	430	NC	159	4.54	6.52	96	550.7 NTU
	- Could not produce water after 420 mL							
	- Sampled & drove another 5 Ft							
-73	1302	710	NC	333	2.05	7.26	-61	635.6 NTU
-78.0	1359	800	NC	457	2.17	7.35	-112	98.55 NTU
	- Very silty - Dup taken							
	- Had to wait for probe to drive screen point							
-83.0	1527	610	NC	495	4.40	7.39	-66	75.37 NTU
-88.0	1822	810	NC	539	3.30	7.43	-86	18.1 NTU
-93.0	1703	740	NC	506	0.06	580	-165	422.9 NTU
-98.0	- Silty - DO dropped to zero					7.53 Iodine	stabilize	
-98.0	827	1110	NC	459	0.01	7.04	-199	298.9 NTU
		- Very silty again DO not stabilizing						
-103.0	921	1220	NC	447	0.01	7.54	-191	10.12 NTU NOT accurate
		- Very silty - Started to clear up						
		- DO ~0						
-108.0	1032	1000	NC	472	0.00	7.72	-183	679.7 NTU
-113.0	1150	680	NC	442	1.14	7.71	-144	254.1 NTU
		- Cleared up - had to wait for rig						
-114.8	1247	700	NC	418	0.68	7.78	151	395.8 NTU
		- ROP was 1.29 - then no movement						

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE (Started / Completed)

Profile Location: WP-15

Dates: 3/6/13

Location: Watertown, NY

SEI #: 102365-C

Sampler(s): CNSW

KPRO Box Serial # / Acquisition Laptop: 803 / Rose 6

Troll Serial #: 451 0934

Drilling Contractor: GeoLogic / PW

Average Depth to Water: #DIV/0!

Gas Drive or Peri Pump: Gas

Atmospheric Pressure: 0 33 20

KPRO N_2 Pressure (set via P transducer): 0

Gas Drive Pump N_2 Pressure: 40-100

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	0730	Temp	In to	~63', Zero	Box: 0752, SS=100'			TURBIDITY
70	0925	520	NC	283	4.31	6.42	69	205.9
75.4	1040	490	NC	266	3.96	7.09	63	152.6
				SS=120'				
80.8	1152	530	NC	313	3.79	7.18	58	318.7
85.6	1254	530	NC	360	3.66	7.29	57	202.8
		... wait for drill ...				1350		
91.6	1457	500	NC	340	3.25	7.42	52	122.6
95.7	1616	600	NC	366	4.29	7.39	50	276.0
	1535	Refusal @ -95.7 (ROP < 1.0'/min)						
		Sampling						
		— End of Hole —						

-68.6
-70.1
-73.6
75.4 .1
77.8 x
80.8 x
83 x
85.6 x
88 x
91.6 x
93 x
95.7 x

GROUNDWATER PROFILE LOG

STONE ENVIRONMENTAL INC

Client: USACE

Profile Location: VP-16

Started / Completed

Dates: 3/6/13

Location: Scotia, NY

SEI #: 102305.RC

Sampler(s): TWM

KPRO Box Serial # / Acquisition Laptop: 806 / Rasc 7

Troll Serial #: YSI Cook 25-0

Drilling Contractor: Parratt Wilfr

Average Depth to Water: -68

Gas Drive or Peri Pump: Gas

Atmospheric Pressure:

KPRO N_2 Pressure (set via P transducer):

Gas Drive Pump N_2 Pressure: 50 60

PHYSICOCHEMICAL PARAMETERS

Depth (ft)	Date / Time	Volume Purged (mL)	Head (ft)	SC (uS/cm)	DO (PPM)	pH	ORP (mV)	COMMENTS
	1317	-EB taken						3/6
-68.0	920	~~900~~	NC	504	6.21	6.49	104	336.4 NTU split 3/7
-73.0	952	500	NC	419	4.85	6.93	141	248.2 NTU split
-78.0	1046	980	NC	514	1.71	7.43	5	224.9 NTU
-83.0	1136	940	NC	518	1.76	7.44	-69	99.9 NTU
-88.0	1227	1000	NC	514	1.91	7.46	-41	30.71 NTU
-93.0	1334	1000	NC	516	1.25	7.56	-67	50.75 NTU
-98.0	1434	990	NC	511	1.90	7.52	-65	24.12 NTU
-101.6	1532	1050	NC	518	1.59	7.61	-78	10.71 NTU
		ROP	1.17	then	nothing for	10+ recs		

APPENDIX E: MOBILAB ANALYTICAL RESULTS SUMMARY TABLES AND VALIDATED ANALYTICAL RESULTS

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/7/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/05/2013 - 02/06/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/05/2013 - 02/06/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-01		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		070.00		075.00		080.00		084.50		091.50		095.00		100.00	
Sample Name		WP-01-EB		WP-01-70.0		WP-01-75.0		WP-01-80.0		WP-01-84.5		WP-01-91.5		WP-01-95.0		WP-01-100.0	
Analysis Date		02/05/13 16:09	EB	02/05/13 17:22	N	02/05/13 17:37	N	02/05/13 18:15	N	02/06/13 11:30	N	02/06/13 11:45	N	02/06/13 16:29	N	02/06/13 17:44	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.27	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	0.32	J	0.31	J	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	27		22		23		17		17		24		3.1	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	0.42	J	0.26	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.27	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	16		16		16		16		16		17		16		16	

Depth		105.00		110.00		115.00		120.00		125.00		130.00		135.00	
Sample Name	CAS #	WP-01-105.0		WP-01-110.0		WP-01-115.0		WP-01-120.0		WP-01-125.0		WP-01-130.0		WP-01-135.0	
Analysis Date		02/06/13 17:58	N	02/06/13 18:28	N	02/06/13 18:43	N	02/07/13 10:26	N	02/07/13 14:38	N	02/07/13 14:07	N	02/07/13 16:29	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	0.30	J	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U	2.0	U	0.59	J	2.0	U	0.27	J
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	16		16		15		15		12		14		14	

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/13/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/12/2013 - 02/13/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/13/2013 - 02/13/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-02		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		070.00		075.00		079.50		087.15		092.00		096.40		102.14	
Sample Name		WP-02-EB		WP-02-70.0		WP-02-75.0		WP-02-79.5		WP-02-87.15		WP-02-92.0		WP-02-96.4		WP-02-102.14	
Analysis Date		02/05/13 18:46	EB	02/05/13 18:00	N	02/06/13 11:15	N	02/06/13 16:14	N	02/06/13 17:14	N	02/06/13 17:29	N	02/06/13 18:13	N	02/08/13 15:05	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.33	J	0.30	J	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	49		66		60		41		66		93		110	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	0.29	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.22	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	17		16		16		16		16		16		17		18	

Depth	CAS #	107.00		110.20		115.00		120.00		125.00		129.00		000.01		132.80	
Sample Name		WP-02-107.0		WP-02-110.2		WP-02-115.0		WP-02-120.0		WP-02-125.0		WP-02-129.0		WP-02a-EB		WP-02a-132.8	
Analysis Date		02/08/13 15:21	N	02/08/13 15:37	N	02/08/13 15:53	N	02/08/13 16:09	N	02/08/13 16:24	N	02/08/13 10:18	N	02/13/13 09:37	EB	02/13/13 09:52	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	170		0.76	J	0.21	J	2.0	U	2.0	U	2.0	U	2.0	U	0.39	J
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.18	U	0.13	J	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	17		18		17		18		17		18		94	%	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/13/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/12/2013 - 02/13/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/13/2013 - 02/13/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-02		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	137.50		142.00		147.10		151.00		153.10	
Sample Name		WP-02a-137.5		WP-02a-142.0		WP-02a-147.1		WP-02a-151.0		WP-02a-153.1	
Analysis Date		02/13/13 10:07	N	02/13/13 10:22	N	02/13/13 10:38	N	02/13/13 10:54	N	02/13/13 13:54	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	94	%	95	%	93	%	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/13/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/11/2013 - 02/12/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/11/2013 - 02/13/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	µg/L
Location ID:	WP-03		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		072.00		077.10		082.70		087.50		092.50		093.70	
Sample Name		WP-03-EB		WP-03-72.0		WP-03-77.1		WP-03-82.7		WP-03-87.5		WP-03-92.5		WP-03-93.7	
Analysis Date		02/08/13 10:02	EB	02/08/13 12:07	N	02/08/13 14:49	N	02/08/13 16:56	N	02/08/13 17:11	N	02/08/13 18:30	N	02/08/13 18:46	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	1.4	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.62	J
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	71		75		90		130		530		730	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	0.56	J	0.51	J	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	87	%	88	%	88	%	88	%	87	%	88	%	87	%

Depth	CAS #	000.01		107.80		107.80		112.80		117.80		117.80		122.80		127.30	
Sample Name		WP-03a-EB		WP-03a-107.8-FD		WP-03a-107.8		WP-03a-112.8		WP-03a-117.8-D		WP-03a-117.8		WP-03a-122.8		WP-03a-127.3	
Analysis Date		02/11/13 13:45	EB	02/11/13 15:05	FD	02/11/13 14:50	N	02/11/13 16:22	N	02/11/13 16:55	FD	02/11/13 16:39	N	02/11/13 17:40	N	02/13/13 11:11	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	89	%	85	%	87	%	87	%	88	%	88	%	87	%	92	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/13/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/11/2013 - 02/12/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/11/2013 - 02/13/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	µg/L
Location ID:	WP-03		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	132.40		137.50		142.60		145.60		159.00		159.00		163.90		164.80	
Sample Name		WP-03a-132.4		WP-03a-137.5		WP-03a-142.6		WP-03a-145.6		WP-03b-159.0-D		WP-03b-159.0		WP-03b-163.9		WP-03b-164.8	
Analysis Date		02/13/13 11:27	N	02/13/13 11:50	N	02/13/13 12:05	N	02/13/13 12:21	N	02/19/13 12:40	FD	02/19/13 12:24	N	02/19/13 13:27	N	02/19/13 15:03	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	93	%	92	%	93	%	93	%	95	%	93	%	93	%	98	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/11/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/08/2013 - 02/10/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/08/2013 - 02/10/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-04		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		000.02		072.70		077.50		082.50		087.70		092.70		097.70	
Sample Name		WP-04-EB		WP-04-EB-2		WP-04-72.7		WP-04-77.5		WP-04-82.5		WP-04-87.7		WP-04-92.7		WP-04-97.7	
Analysis Date		02/08/13 12:39	EB	02/09/13 17:25	EB	02/08/13 14:33	N	02/08/13 16:40	N	02/08/13 17:27	N	02/08/13 17:43	N	02/08/13 17:59	N	02/08/13 18:15	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	0.43	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	1.4	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	6.3		1.6	J	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	0.57	J	0.20	J	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	100		28		2.3		0.92	J	0.30	J	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	0.72	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	32		14		0.49	J	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.14	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	89	%	87	%	88	%	87	%	88	%	87	%	89	%	89	%

Depth	CAS #	102.70		107.70		112.50		117.60		120.50	
Sample Name		WP-04-102.7		WP-04-107.7		WP-04-112.5		WP-04-117.6		WP-04-120.5	
Analysis Date		02/09/13 13:55	N	02/10/13 14:11	N	02/10/13 15:58	N	02/10/13 17:23	N	02/11/13 12:45	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	4.9		0.92	J	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0		0.41	J	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	89	%	87	%	89	%	85	%	84	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/11/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/09/2013 - 02/10/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/09/2013 - 02/10/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	µg/L
Location ID:	WP-05		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		067.70		073.00		078.00		082.80		087.80		092.80		097.70	
Sample Name		WP-05-EB		WP-05-67.7		WP-05-73.0		WP-05-78.0		WP-05-82.8		WP-05-87.8		WP-05-92.8		WP-05-97.7	
Analysis Date		02/09/13 13:40	EB	02/09/13 16:43	N	02/10/13 09:33	N	02/10/13 10:11	N	02/10/13 11:40	N	02/10/13 13:40	N	02/10/13 14:41	N	02/10/13 14:57	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	0.39	J	36		57		68		160		270		330		7.8	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.14	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	89	%	85	%	87	%	88	%	84	%	84	%	87	%	83	%
Depth	**CAS #**	102.90		107.90		112.80		117.30		122.20		127.50		132.40		137.30	
Sample Name		WP-05-102.9		WP-05-107.9		WP-05-112.8		WP-05-117.3		WP-05-122.2		WP-05-127.5		WP-05-132.4		WP-05-137.3-D	
Analysis Date		02/10/13 16:13	N	02/10/13 16:29	N	02/10/13 17:39	N	02/11/13 13:00	N	02/11/13 13:15	N	02/11/13 13:30	N	02/11/13 14:04	N	02/11/13 14:34	FD
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	0.91	U	0.55	U	0.43	U	0.37	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	82	%	87	%	82	%	87	%	87	%	86	%	87	%	85	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/11/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/09/2013 - 02/10/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/09/2013 - 02/10/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	µg/L
Location ID:	WP-05		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	137.30		142.40		142.40	
Sample Name		WP-05-137.3		WP-05-142.4-D		WP-05-142.4	
Analysis Date		02/11/13 14:19	N	02/11/13 16:06	FD	02/11/13 15:20	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	86	%	85	%	83	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/25/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/21/2013 - 02/25/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/22/2013 - 02/25/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	µg/L
Location ID:	WP-06		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		072.00		077.00		082.00		082.00		087.00		092.00		097.00	
Sample Name		WP-06-EB		WP-06-72.0		WP-06-77.0		WP-06-82.0-D		WP-06-82.0		WP-06-87.0		WP-06-92.0		WP-06-97.0	
Analysis Date		02/22/13 09:16	EB	02/22/13 13:55	N	02/22/13 17:02	N	02/22/13 16:47	FD	02/22/13 17:18	N	02/22/13 16:33	N	02/25/13 12:33	N	02/25/13 13:34	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	0.71	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	0.96	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	0.31	J	0.78	U	0.39	U	0.38	U	0.33	U	0.20	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.6		1.2	J	1.7	J	1.4	J	0.79	J	0.80	J	0.64	J
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	12		4.0		1.3	J	1.1	J	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	16		6.6		3.0		2.4		2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.15	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	92	%	93	%	94	%	93	%	91	%	95	%	91	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/21/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/18/2013 - 02/21/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/18/2013 - 02/21/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-07		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		067.60		072.40		077.40		077.40		082.40		090.20		095.20	
Sample Name		WP-07-EB		WP-07-67.6		WP-07-72.4		WP-07-77.4-D		WP-07-77.4		WP-07-82.4		WP-07-90.2		WP-07-95.2	
Analysis Date		02/18/13 15:13	EB	02/19/13 17:40	N	02/20/13 09:25	N	02/20/13 10:54	FD	02/20/13 10:39	N	02/20/13 12:02	N	02/20/13 13:06	N	02/20/13 14:40	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	0.17	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	0.23	J	0.30	J	0.29	J	0.31	J	0.33	J	0.29	J	0.30	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	83		92		97		100		140		140		170	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	95	%	97	%	97	%	96	%	95	%	99	%	97	%

Depth	CAS #	100.30		105.20		110.00		115.20	
Sample Name		WP-07-100.3		WP-07-105.2		WP-07-110.0		WP-07-115.2	
Analysis Date		02/20/13 17:04	N	02/20/13 17:19	N	02/20/13 18:38	N	02/21/13 10:09	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	1.1	J	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	1.6	J	0.35	J	0.27	J	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	94	%	96	%	91	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/21/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/19/2013 - 02/21/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/19/2013 - 02/21/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-08		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		065.90		070.40		075.70		080.80		084.90		090.00		095.00	
Sample Name		WP-08-EB		WP-08-65.9		WP-08-70.4		WP-08-75.7		WP-08-80.8		WP-08-84.9		WP-08-90.0		WP-08-95.0	
Analysis Date		02/19/13 16:09	EB	02/20/13 11:47	N	02/20/13 13:38	N	02/20/13 13:54	N	02/20/13 14:09	N	02/20/13 14:55	N	02/20/13 16:01	N	02/20/13 16:16	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	0.37	J	0.26	J	0.32	J	0.36	J	0.31	J	0.40	J	0.24	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	27		68		79		84		90		120		140	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	97	%	98	%	98	%	97	%	98	%	97	%	94	%	96	%

Depth	CAS #	100.00		105.00		110.00		113.40	
Sample Name		WP-08-100.0		WP-08-105.0		WP-08-110.0		WP-08-113.4	
Analysis Date		02/20/13 17:35	N	02/20/13 18:22	N	02/20/13 18:53	N	02/21/13 09:54	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	0.42	J	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	0.40	J	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	180		0.78	J	0.19	J	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	97	%	92	%	95	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/25/2013 - 02/26/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/25/2013 - 02/26/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	µg/L
Location ID:	WP-09	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		072.00		077.00		082.10		087.20		092.00		097.10		101.80	
Sample Name		WP-09-EB		WP-09-72.0		WP-09-77.0		WP-09-82.1		WP-09-87.2		WP-09-92.0		WP-09-97.1		WP-09-101.8	
Analysis Date		02/25/13 12:49	EB	02/25/13 17:40	N	02/26/13 09:48	N	02/26/13 10:51	N	02/26/13 13:34	N	02/26/13 13:19	N	02/26/13 13:04	N	02/26/13 14:19	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	52		13		31		50		45		50		79	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	95	%	94	%	94	%	93	%	94	%	94	%	96	%

Depth		106.80		106.80		112.00		116.20	
Sample Name	CAS #	WP-09-106.8-D		WP-09-106.8		WP-09-112.0		WP-09-116.2	
Analysis Date		02/26/13 15:34	FD	02/26/13 15:19	N	02/26/13 16:19	N	02/26/13 16:49	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	69		76		77		73	J
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	96	%	95	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/4/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/25/2013 - 03/01/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/25/2013 - 03/01/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-10		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		000.02		068.00		073.00		078.00		083.00		088.00		093.00	
Sample Name		WP-10-EB		WP-10-EB-A		WP-10-68.0		WP-10-73.0		WP-10-78.0		WP-10-83.0		WP-10-88.0		WP-10-93.0	
Analysis Date		02/25/13 17:25	EB	03/01/13 13:51	EB	02/26/13 13:49	N	02/26/13 14:04	N	02/26/13 14:34	N	02/26/13 15:49	N	02/26/13 16:04	N	02/26/13 16:34	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.28	J	0.36	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	0.19	J	0.21	J	0.20	J	0.19	J	2.0	U	0.20	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	100		110		110		120		92		120	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	98	%	98	%	96	%	96	%	94	%	95	%	94	%	95	%
Depth	**CAS #**	098.00		103.00		108.00		112.80		118.00		123.00		128.00		133.00	
Sample Name		WP-10-98.0		WP-10-103.0		WP-10-108.0		WP-10-112.8		WP-10-118.0		WP-10-123.0		WP-10-128.0		WP-10-133.0	
Analysis Date		02/27/13 03:12	N	02/27/13 09:58	N	02/27/13 11:14	N	02/27/13 12:39	N	03/01/13 15:23	N	03/01/13 16:34	N	03/01/13 17:35	N	03/04/13 13:28	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	0.52	J	2.0	U	2.0	U	0.54	J	0.73	J	1.0	J	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.21	J	2.0	U
Chloroform	67-66-3	0.22	J	0.22	J	0.28	J	0.27	J	0.30	J	0.31	J	0.42	J	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	130		160		190		200		260		350		530		1.5	J
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	0.22	J	0.28	J	0.23	J	0.25	J	0.26	J	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	91	%	91	%	96	%	97	%	96	%	97	%	95	%	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/4/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/25/2013 - 03/01/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/25/2013 - 03/01/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-10		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth		136.30	
Sample Name	**CAS #**	WP-10-136.3	
Analysis Date		03/04/13 15:24	N
Vinyl Chloride	75-01-4	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U
Chloroform	67-66-3	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U
Benzene	71-43-2	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U
Trichloroethene	79-01-6	1.0	J
Toluene	108-88-3	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U
Tetrachloroethene	127-18-4	2.0	U
Ethylbenzene	100-41-4	2.0	U
m,p-Xylenes	136777612	2.0	U
o-Xylene	95-47-6	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U
Naphthalene	91-20-3	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	2/27/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/27/2013 - 02/27/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/27/2013 - 02/27/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-11		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		071.90		076.90		081.90		087.00		091.60		094.20	
Sample Name		WP-11-EB		WP-11-71.9		WP-11-76.9		WP-11-81.9		WP-11-87.0		WP-11-91.6		WP-11-94.2	
Analysis Date		02/27/13 10:14	EB	02/27/13 13:09	N	02/27/13 13:24	N	02/27/13 13:39	N	02/27/13 14:53	N	02/27/13 15:52	N	02/27/13 16:35	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	0.29	J	2.0	U	0.35	J	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	0.20	J	2.0	U	0.23	J	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	76		79		140		130		120		87	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	96	%	95	%	98	%	97	%	91	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/1/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/27/2013 - 03/01/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/27/2013 - 03/01/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-12		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		073.00		078.00		083.00		088.00		093.00		098.00		103.00	
Sample Name		WP-12-EB		WP-12-73.0		WP-12-78.0		WP-12-83.0		WP-12-88.0		WP-12-93.0		WP-12-98.0		WP-12-103.0	
Analysis Date		02/27/13 16:50	EB	02/27/13 17:23	N	02/28/13 10:54	N	02/28/13 11:09	N	02/28/13 13:45	N	02/28/13 14:00	N	02/28/13 14:15	N	02/28/13 15:01	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.49	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.22	J	0.23	J	0.26	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	38		37		38		34		33		40		40	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	0.20	J	0.26	J	0.34	J	0.36	J	0.46	J	0.47	J
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	97	%	97	%	98	%	96	%	96	%	98	%	93	%

Depth	CAS #	108.00		113.00		118.00		123.00	
Sample Name		WP-12-108.0		WP-12-113.0		WP-12-118.0		WP-12-123.0	
Analysis Date		02/28/13 15:56	N	02/28/13 17:12	N	03/01/13 09:32	N	03/01/13 10:57	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	1.9	J	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	0.47	J	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	0.23	J	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	88	%	96	%	95	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/1/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/28/2013 - 03/01/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/28/2013 - 03/01/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-13		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		068.00		072.90		072.90		077.80		082.80		087.90	
Sample Name		WP-13-EB		WP-13-68.0		WP-13-72.9-D		WP-13-72.9		WP-13-77.8		WP-13-82.8		WP-13-87.9	
Analysis Date		02/28/13 10:39	EB	02/28/13 16:11	N	02/28/13 17:45	FD	02/28/13 17:29	N	03/01/13 09:47	N	03/01/13 11:12	N	03/01/13 11:58	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	0.19	J	0.20	J	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	98	%	99	%	97	%	95	%	97	%	96	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	03/04/2013 - 03/06/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/05/2013 - 03/06/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	µg/L
Location ID:	WP-14	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		068.00		073.00		078.00		078.00		083.00		083.00		088.00	
Sample Name		WP-14-EB		WP-14-68.0		WP-14-73.0		WP-14-78.0-D		WP-14-78.0		WP-14-83.0-D		WP-14-83.0		WP-14-88.0	
Analysis Date		03/05/13 10:50	EB	03/05/13 12:49	N	03/05/13 13:59	N	03/05/13 15:12	FD	03/05/13 14:56	N	03/05/13 16:16	FD	03/05/13 16:00	N	03/05/13 16:54	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	0.24	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	3.9		27		49		50		53		54		59	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	0.23	J	0.34	J	0.24	J	0.27	J	0.28	J	0.29	J
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	0.16	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	0.35	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	UJ	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	94	%	91	%	95	%	94	%	96	%	96	%	97	%

Depth		093.00		098.00		103.00		108.00		113.00		114.80	
Sample Name	CAS #	WP-14-93.0		WP-14-98.0		WP-14-103.0		WP-14-108.0		WP-14-113		WP-14-114.8	
Analysis Date		03/05/13 17:32	N	03/06/13 09:17	N	03/06/13 10:02	N	03/06/13 11:30	N	03/06/13 13:21	N	03/06/13 13:43	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	0.32	J	0.35	J	0.26	J	0.43	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	0.20	J	0.20	J	0.20	J	0.20	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	60		56		67		93		110		110	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	0.26	J	0.29	J	0.31	J	0.39	J	0.44	J	0.33	J
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	96	%	96	%	96	%	97	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/7/2012
Location:	Scotia, NY	**Date(s) Sampled:**	03/04/2013 - 03/06/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/05/2013 - 03/06/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260B,SW8260B
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-15		

All of the tests results were perfo
NELAP standards and meet all N
parameters for which accreditatio
reports were completed according
requirements. Any exceptions to
requirements are noted and the d
accordingly.

Depth	CAS #	000.01		070.00		075.40		080.80		085.60		091.60		095.70	
Sample Name		WP-15-EB		WP-15-70.0		WP-15-75.4		WP-15-80.8		WP-15-85.6		WP-15-91.6		WP-15-95.7	
Analysis Date		03/05/13 10:35	EB	03/06/13 10:17	N	03/06/13 11:15	N	03/06/13 13:06	N	03/06/13 13:58	N	03/06/13 15:33	N	03/06/13 17:21	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	0.25	J	0.26	J	0.28	J	0.19	J	0.29	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.21	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	41		79		90		76		73		120	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	0.40	J	0.75	J	0.61	J	0.47	J	0.38	J	0.69	J
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	96	%	96	%	96	%	95	%	96	%	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	03/06/2013 - 03/07/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/07/2013 - 03/07/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	µg/L
Location ID:	WP-16	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		068.00		073.00		078.00		083.00		088.00		093.00		097.80	
Sample Name		WP-16-EB		WP-16-68.0		WP-16-73.0		WP-16-78.0		WP-16-83.0		WP-16-88.0		WP-16-93.0		WP-16-97.8	
Analysis Date		03/07/13 09:41	EB	03/07/13 10:54	N	03/07/13 11:09	N	03/07/13 11:49	N	03/07/13 12:09	N	03/07/13 13:44	N	03/07/13 14:29	N	03/07/13 15:32	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	53		34		0.22	J	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.19	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	97	%	91	%	96	%	96	%	96	%	95	%	95	%	94	%

Depth	CAS #	101.60		101.60	
Sample Name		WP-16-101.6-D		WP-16-101.6	
Analysis Date		03/07/13 16:01	FD	03/07/13 16:18	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/19/2013 - 03/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	Drums-IDW		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Sample Name	CAS #	Drums 1-6-IDW		Drums 7-12-IDW		Drums 13-18-IDW		Drums 19-24-IDW		Drums 25-27-IDW		Drums 28-30-IDW		Collective Purge-IDW		TB-01-IDW	
Analysis Date		03/22/13 12:58	N	03/22/13 13:30	N	03/22/13 13:46	N	03/22/13 14:02	N	03/22/13 17:54	N	03/22/13 18:24	N	03/05/13 15:27	N	03/22/13 17:40	TB
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	0.21	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	U	2.0	U
Trichloroethene	79-01-6	37		15		8.2		9.9		2.0	U	32		4.4		2.0	U
Toluene	108-88-3	23		7.4		1.2	J	5.6		2.8		8.0		1.1	J	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	1.0	J	1.2	J	1.4	J	0.72	J	0.73	J	0.45	J	0.36	J	2.0	U
Ethylbenzene	100-41-4	0.56	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	3.3		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	1.8	J	0.44	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	0.69	J	2.4		2.0	U	5.8		2.0	U	0.56	J	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	0.63	J	2.0	U	1.2	J	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	UJ	0.86	J	2.0	UJ	23	J	2.0	UJ	2.0	UJ	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	108	%	92	%	99	%	99	%	108	%	95	%	91	%

Sample Name	CAS #	MW-24-IDW		MW-25-50.0-IDW		MW-25-75.0-IDW		MW-26-50.0-IDW		MW-26-110.0-IDW		MW-27-25.0-IDW		MW-27-50.0-IDW	
Analysis Date		03/05/13 11:28	N	03/22/13 13:14	N	03/22/13 17:10	N	03/22/13 12:42	N	03/22/13 16:55	N	03/22/13 17:25	N	03/22/13 18:09	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	3.5		2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	0.24	J	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ	2.0	UJ
Trichloroethene	79-01-6	0.52	J	2.2		47		9.9		2.0	U	2.4		20	
Toluene	108-88-3	2.0	U	0.90	J	2.0	U	20		0.79	J	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	0.33	J	2.0	U	1.3	J	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	0.56	J	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.4		2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	1.6	J	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	3.8		2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	1.0	J	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	UJ	2.0	UJ	1.9	UJ	2.0	UJ	2.0	UJ	2.0	UJ
Bromofluorobenzene (SS)	460-00-4	95	%	98	%	106	%	95	%	97	%	99	%	100	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Final Data Report for Laboratory Services

PREPARED FOR STONE ENVIRONMENTAL, INC.

SITE ID: SCOTIA NAVY DEPOT, SCOTIA, NY

Stone Project ID: 102305-R-C

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

DATES OF PERFORMANCE: February 5 - 19, 2013 (SDG-1)
REPORT DATE: March 28, 2013



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STONE ENVIRONMENTAL INC

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MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 28, 2013

This data package presents the analytical results for groundwater samples analyzed by Stone Environmental, Inc. Laboratory (Stone) on-site at the Scotia Navy Depot Site in Scotia, New York. Samples in this sample delivery group (SDG-1) were collected at the Scotia Site between February 5 and 19, 2013. A total of 96 groundwater samples were collected during this period by Stone personnel from seven locations: MW13, MWGEP1, and WP-01 through WP-05, including five field duplicate samples and nine equipment blanks. Matrix spike and matrix spike duplicate (MS/MSD) sample pairs were analyzed in association with seven of the parent groundwater samples. All samples in SDG-1 were received and analyzed at the mobile laboratory between February 5 and 19, 2013.

After sample collection, all samples were hand delivered to the mobile laboratory and kept refrigerated until analysis; therefore, temperatures of samples were not measured at receipt. The sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. As samples were received at the on-site laboratory, they were recorded on Stone's Sample Log Sheet. A copy of the Sample Log Sheet and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with the samples presented in this report were generated under a quality system that adheres to requirements

specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS), laboratory method blanks (VBLK), matrix spike and matrix spike duplicate samples (MS/MSDs) and field duplicate samples (FD)) are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards.

Exceptions are noted below:

- VSTD Deficiencies:
    - No deficiencies noted.
- LCS Deficiencies:
    - No deficiencies noted.
- VBLK Deficiencies:
    - No deficiencies noted.
- MS/MSD Deficiencies:
    - No deficiencies noted.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

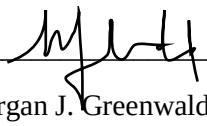
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

SAMPLE LOGIN SUMMARY

Sample Login Summary

Chain of Custody Records

List of Sample Vials Not Used in Analysis

List of Samples with Manual Integrations

102305-C Scotia Naval Depot
Sample Login Summary
SDG-1

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Comments	Lab ID Parent	Custody ID	pH	Preservative	Temperature Units	Composite Sample
SEI-26	MW13	078.00	Groundwater	MW13-78.0-GW	Normal Sample	3	DJL	2/7/2013	12:40 PM	Grab	HDE	2/7/2013	1:51 PM	6						C	FALSE
SEI-25	MWGEP1	073.00	Groundwater	MWGEP1-73.0-GW	Normal Sample	2	LJR	2/7/2013	11:50 AM	Grab	HDE	2/7/2013	12:17 PM	6						C	FALSE
SEI-1	WP-01	000.01	Groundwater	WP-01-EB	Equipment Blank	2	WJW	2/5/2013	9:30 AM	SEI 10.5.x	HDE	2/5/2013	3:45 PM	6						C	FALSE
SEI-2	WP-01	070.00	Groundwater	WP-01-70.0	Normal Sample	2	WJW	2/5/2013	2:06 PM	SEI 10.5.x	HDE	2/5/2013	3:45 PM	6						C	FALSE
SEI-3	WP-01	075.00	Groundwater	WP-01-75.0	Normal Sample	2	WJW	2/5/2013	4:18 PM	SEI 10.5.x	HDE	2/5/2013	4:39 PM	6						C	FALSE
SEI-5	WP-01	080.00	Groundwater	WP-01-80.0	Normal Sample	2	WJW	2/5/2013	5:35 PM	SEI 10.5.x	HDE	2/5/2013	5:48 PM	6						C	FALSE
SEI-8	WP-01	084.50	Groundwater	WP-01-84.5	Normal Sample	2	WJW	2/6/2013	9:20 AM	SEI 10.5.x	HDE	2/6/2013	10:47 AM	6						C	FALSE
SEI-9	WP-01	091.50	Groundwater	WP-01-91.5	Normal Sample	2	WJW	2/6/2013	10:09 AM	SEI 10.5.x	HDE	2/6/2013	10:47 AM	6						C	FALSE
SEI-10	WP-01	095.00	Groundwater	WP-01-95.0	Normal Sample	2	WJW	2/6/2013	11:16 AM	SEI 10.5.x	HDE	2/6/2013	1:15 PM	6		SEI-10				C	FALSE
SEI-10-MS	WP-01	095.00	Groundwater	WP-01-95.0-MS	Matrix Spike	2	WJW	2/6/2013	11:16 AM	SEI 10.5.x	HDE	2/6/2013	1:15 PM	6		SEI-10				C	FALSE
SEI-10-MSD	WP-01	095.00	Groundwater	WP-01-95.0-MSD	Matrix Spike Duplicate	2	WJW	2/6/2013	11:16 AM	SEI 10.5.x	HDE	2/6/2013	1:15 PM	6		SEI-10				C	FALSE
SEI-16	WP-01	100.00	Groundwater	WP-01-100.0	Normal Sample	2	WJW	2/6/2013	2:15 PM	SEI 10.5.x	HDE	2/6/2013	4:21 PM	6						C	FALSE
SEI-17	WP-01	105.00	Groundwater	WP-01-105.0	Normal Sample	2	WJW	2/6/2013	3:23 PM	SEI 10.5.x	HDE	2/6/2013	4:21 PM	6						C	FALSE
SEI-19	WP-01	110.00	Groundwater	WP-01-110.0	Normal Sample	2	WJW	2/6/2013	4:22 PM	SEI 10.5.x	HDE	2/6/2013	5:45 PM	6						C	FALSE
SEI-20	WP-01	115.00	Groundwater	WP-01-115.0	Normal Sample	2	WJW	2/6/2013	5:11 PM	SEI 10.5.x	HDE	2/6/2013	5:45 PM	6						C	FALSE
SEI-21	WP-01	120.00	Groundwater	WP-01-120.0	Normal Sample	2	WJW	2/7/2013	9:35 AM	SEI 10.5.x	HDE	2/7/2013	10:12 AM	6						C	FALSE
SEI-22	WP-01	125.00	Groundwater	WP-01-125.0	Normal Sample	2	WJW	2/7/2013	10:20 AM	SEI 10.5.x	HDE	2/7/2013	11:33 AM	6						C	FALSE
SEI-23	WP-01	130.00	Groundwater	WP-01-130.0	Normal Sample	2	WJW	2/7/2013	11:14 AM	SEI 10.5.x	HDE	2/7/2013	11:33 AM	6						C	FALSE
SEI-29	WP-01	135.00	Groundwater	WP-01-135.0	Normal Sample	2	WJW	2/7/2013	12:27 PM	SEI 10.5.x	HDE	2/7/2013	1:51 PM	6						C	FALSE
SEI-30	WP-01	140.00	Groundwater	WP-01-140.0	Normal Sample	2	WJW	2/7/2013	1:58 PM	SEI 10.5.x	HDE	2/7/2013	4:44 PM	6						C	FALSE
SEI-31	WP-01	141.60	Groundwater	WP-01-141.6	Normal Sample	2	WJW	2/7/2013	2:56 PM	SEI 10.5.x	HDE	2/7/2013	4:44 PM	6						C	FALSE
SEI-6	WP-02	000.01	Groundwater	WP-02-EB	Equipment Blank	2	WAN	2/5/2013	12:00 AM	SEI 10.5.x	HDE	2/5/2013	5:48 PM	6						C	FALSE
SEI-90	WP-02	000.01	Groundwater	WP-02a-EB	Equipment Blank	2	WJW	2/12/2013	9:45 AM	SEI 10.5.x	HDE	2/12/2013	10:05 AM	6						C	FALSE
SEI-4	WP-02	070.00	Groundwater	WP-02-70.0	Normal Sample	2	WAN	2/5/2013	5:29 PM	SEI 10.5.x	HDE	2/5/2013	5:39 PM	6						C	FALSE
SEI-7	WP-02	075.00	Groundwater	WP-02-75.0	Normal Sample	2	WAN	2/6/2013	10:07 AM	SEI 10.5.x	HDE	2/6/2013	10:47 AM	6						C	FALSE
SEI-13	WP-02	079.50	Groundwater	WP-02-79.5	Normal Sample	2	WAN	2/6/2013	12:36 PM	SEI 10.5.x	HDE	2/6/2013	1:15 PM	6						C	FALSE
SEI-14	WP-02	087.15	Groundwater	WP-02-87.15	Normal Sample	2	WAN	2/6/2013	1:44 PM	SEI 10.5.x	HDE	2/6/2013	4:21 PM	6						C	FALSE
SEI-15	WP-02	092.00	Groundwater	WP-02-92.0	Normal Sample	2	WAN	2/6/2013	3:03 PM	SEI 10.5.x	HDE	2/6/2013	4:21 PM	6						C	FALSE
SEI-18	WP-02	096.40	Groundwater	WP-02-96.4	Normal Sample	2	WAN	2/6/2013	5:26 PM	SEI 10.5.x	HDE	2/6/2013	5:45 PM	6						C	FALSE
SEI-24	WP-02	102.14	Groundwater	WP-02-102.14	Normal Sample	2	WAN	2/7/2013	9:55 AM	SEI 10.5.x	HDE	2/7/2013	11:33 AM	6						C	FALSE
SEI-27	WP-02	107.00	Groundwater	WP-02-107.0	Normal Sample	2	WAN	2/7/2013	11:20 AM	SEI 10.5.x	HDE	2/7/2013	1:51 PM	6						C	FALSE
SEI-28	WP-02	110.20	Groundwater	WP-02-110.2	Normal Sample	2	WAN	2/7/2013	12:50 PM	SEI 10.5.x	HDE	2/7/2013	1:51 PM	6						C	FALSE
SEI-32	WP-02	115.00	Groundwater	WP-02-115.0	Normal Sample	2	WAN	2/7/2013	2:32 PM	SEI 10.5.x	HDE	2/7/2013	4:44 PM	6						C	FALSE
SEI-33	WP-02	120.00	Groundwater	WP-02-120.0	Normal Sample	2	WAN	2/7/2013	3:41 PM	SEI 10.5.x	HDE	2/7/2013	4:44 PM	6						C	FALSE
SEI-34	WP-02	125.00	Groundwater	WP-02-125.0	Normal Sample	2	WAN	2/7/2013	4:46 PM	SEI 10.5.x	HDE	2/7/2013	5:42 PM	6						C	FALSE
SEI-35	WP-02	129.00	Groundwater	WP-02-129.0	Normal Sample	2	WAN	2/8/2013	9:00 AM	SEI 10.5.x	HDE	2/8/2013	9:45 AM	6		SEI-35				C	FALSE
SEI-35-MS	WP-02	129.00	Groundwater	WP-02-129.0-MS	Matrix Spike	2	WAN	2/8/2013	9:00 AM	SEI 10.5.x	HDE	2/8/2013	9:45 AM	6		SEI-35				C	FALSE
SEI-35-MSD	WP-02	129.00	Groundwater	WP-02-129.0-MSD	Matrix Spike Duplicate	2	WAN	2/8/2013	9:00 AM	SEI 10.5.x	HDE	2/8/2013	9:45 AM	6		SEI-35				C	FALSE
SEI-94	WP-02	132.80	Groundwater	WP-02-132.8	Normal Sample	2	WJW	2/12/2013	12:18 PM	SEI 10.5.x	HDE	2/12/2013	12:45 PM	6						C	FALSE
SEI-95	WP-02	137.50	Groundwater	WP-02-137.5	Normal Sample	2	WJW	2/12/2013	1:12 PM	SEI 10.5.x	HDE	2/12/2013	2:05 PM	6						C	FALSE
SEI-97	WP-02	142.00	Groundwater	WP-02-142.0	Normal Sample	2	WJW	2/12/2013	2:29 PM	SEI 10.5.x	HDE	2/12/2013	3:25 PM	6						C	FALSE
SEI-99	WP-02	147.10	Groundwater	WP-02-147.1	Normal Sample	2	WJW	2/12/2013	3:44 PM	SEI 10.5.x	HDE	2/12/2013	5:30 PM	6						C	FALSE
SEI-100	WP-02	151.00	Groundwater	WP-02-151.0	Normal Sample	2	WJW	2/12/2013	5:13 PM	SEI 10.5.x	HDE	2/12/2013	5:30 PM	6						C	FALSE
SEI-102	WP-02	153.10	Groundwater	WP-02-153.1	Normal Sample	2	WJW	2/13/2013	9:28 AM	SEI 10.5.x	HDE	2/13/2013	1:00 PM	6		SEI-102				C	FALSE
SEI-102-MS	WP-02	153.10	Groundwater	WP-02-153.1-MS	Matrix Spike	2	WJW	2/13/2013	9:28 AM	SEI 10.5.x	HDE	2/13/2013	1:00 PM	6		SEI-102				C	FALSE
SEI-102-MSD	WP-02	153.10	Groundwater	WP-02-153.1-MSD	Matrix Spike Duplicate	2	WJW	2/13/2013	9:28 AM	SEI 10.5.x	HDE	2/13/2013	1:00 PM	6		SEI-102				C	FALSE
SEI-101	WP-03	000.01	Groundwater	WP-03b-EB	Equipment Blank	2	WAN	2/13/2013	8:47 AM	SEI 10.5.x	HDE	2/13/2013	1:00 PM	6						C	FALSE
SEI-36	WP-03	000.01	Groundwater	WP-03-EB	Equipment Blank	2	WJW	2/8/2013	7:50 AM	SEI 10.5.x	HDE	2/8/2013	9:45 AM	6						C	FALSE
SEI-75	WP-03	000.01	Groundwater	WP-03a-EB	Equipment Blank	2	WAN	2/11/2013	9:43 AM	SEI 10.5.x	HDE	2/11/2013	10:58 AM	6						C	FALSE
SEI-39	WP-03	072.00	Groundwater	WP-03-72.0	Normal Sample	2	WJW	2/8/2013	11:19 AM	SEI 10.5.x	HDE	2/8/2013	11:50 AM	6						C	FALSE
SEI-41	WP-03	077.10	Groundwater	WP-03-77.1	Normal Sample	2	WJW	2/8/2013	12:14 PM	SEI 10.5.x	HDE	2/8/2013	1:17 PM	6						C	FALSE
SEI-44	WP-03	082.70	Groundwater	WP-03-82.7	Normal Sample	2	WJW	2/8/2013	2:11 PM	SEI 10.5.x	HDE	2/8/2013	2:34 PM	6						C	FALSE
SEI-45	WP-03	087.50	Groundwater	WP-03-87.5	Normal Sample	2	WJW	2/8/2013	3:01 PM	SEI 10.5.x	HDE	2/8/2013	3:40 PM	6						C	FALSE
SEI-50	WP-03	092.50	Groundwater	WP-03-92.5	Normal Sample	2	WJW	2/8/2013	3:44 PM	SEI 10.5.x	HDE	2/8/2013	5:15 PM	6						C	FALSE
SEI-51	WP-03	093.70	Groundwater	WP-03-93.7	Normal Sample	2	WJW	2/8/2013	4:40 PM	SEI 10.5.x	HDE	2/8/2013	5:15 PM	6						C	FALSE
SEI-80	WP-03	107.80	Groundwater	WP-03-107.8	Normal Sample	2	WAN	2/11/2013	1:11 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6		SEI-80				C	FALSE
SEI-80-FD	WP-03	107.80	Groundwater	WP-03-107.8-FD	Field Duplicate	2	WAN	2/11/2013	1:11 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6		SEI-80				C	FALSE
SEI-86	WP-03	112.80	Groundwater	WP-03-112.8	Normal Sample	2	WAN	2/11/2013	2:55 PM	SEI 10.5.x	HDE	2/11/2013	3:18 PM	6						C	FALSE
SEI-87	WP-03	117.80	Groundwater	WP-03-117.8	Normal Sample	2	WAN	2/11/2013	4:01 PM	SEI 10.5.x	HDE	2/11/2013	4:20 PM	6		SEI-87				C	FALSE
SEI-87-FD	WP-03	117.80	Groundwater	WP-03-117.8-D	Field Duplicate	2	WAN	2/11/2013	4:01 PM	SEI 10.5.x	HDE	2/11/2013	4:20 PM	6		SEI-87				C	FALSE
SEI-89	WP-03	122.80	Groundwater	WP-03-122.8	Normal Sample	2	WAN	2/11/2013	5:22 PM	SEI 10.5.x	HDE	2/11/2013	5:24 PM	6						C	FALSE
SEI-91	WP-03	127.30	Groundwater	WP-03-127.3	Normal Sample	2	WAN	2/12/2013	9:35 AM	SEI 10.5.x	HDE	2/12/2013	10:05 AM	6						C	FALSE
SEI-92	WP-03	132.40	Groundwater	WP-03-132.4	Normal Sample	2	WAN	2/12/2013	11:00 AM	SEI 10.5.x	HDE	2/12/2013	12:45 PM	6						C	FALSE
SEI-93	WP-03	137.50	Groundwater	WP-03-137.5	Normal Sample	2	WAN	2/12/2013	12:08 PM	SEI 10.5.x	HDE	2/12/2013	12:45 PM	6						C	FALSE
SEI-96	WP-03	142.60	Groundwater	WP-03-142.6	Normal Sample	2	WAN	2/12/2013	1:37 PM	SEI 10.5.x	HDE	2/12/2013	2:05 PM	6						C	FALSE
SEI-98	WP-03	145.60	Groundwater	WP-03-145.6	Normal Sample	2	WAN	2/12/2013	2:51 PM	SEI 10.5.x	HDE	2/12/2013	3:25 PM	6						C	FALSE
SEI-106	WP-03	159.00	Groundwater	WP-03-159.0	Normal Sample	2	WAN	2/19/2013	11:42 AM	SEI 10.5.x	HDE	2/19/2013	12:03 PM	6		SEI-106				C	FALSE
SEI-106-FD	WP-03	159.00	Groundwater	WP-03-159.0-D	Field Duplicate	2	WAN	2/19/2013	11:42 AM	SEI 10.5.x	HDE	2/19/2013	12:03 PM	6		SEI-106				C	FALSE
SEI-106-MS	WP-03	159.00	Groundwater	WP-03-159.0-MS	Matrix Spike	2	WAN	2/19/2013	11:42 AM	SEI 10.5.x	HDE	2/19/2013	12:03 PM	6		SEI-106				C	FALSE

102305-C Scotia Naval Depot
Sample Login Summary
SDG-1

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Comments	Lab ID Parent	Custody ID	pH	Preservative	Temperature Units	Composite Sample
SEI-106-MSD	WP-03	159.00	Groundwater	WP-03-159.0-MSD	Matrix Spike Duplicate	2	WAN	2/19/2013	11:42 AM	SEI 10.5.x	HDE	2/19/2013	12:03 PM	6		SEI-106				C	FALSE
SEI-110	WP-03	163.90	Groundwater	WP-03-163.9	Normal Sample	2	WAN	2/19/2013	12:55 PM	SEI 10.5.x	HDE	2/19/2013	1:10 PM	6						C	FALSE
SEI-111	WP-03	164.80	Groundwater	WP-03-164.8	Normal Sample	2	WAN	2/19/2013	2:29 PM	SEI 10.5.x	HDE	2/19/2013	2:45 PM	6						C	FALSE
SEI-40	WP-04	000.01	Groundwater	WP-04-EB	Equipment Blank	2	WAN	2/8/2013	11:09 AM	SEI 10.5.x	HDE	2/8/2013	11:50 AM	6						C	FALSE
SEI-57	WP-04	000.02	Groundwater	WP-04-EB-2	Equipment Blank	2	DJL	2/9/2013	4:30 PM	SEI 10.5.x	HDE	2/9/2013	5:12 PM	6						C	FALSE
SEI-42	WP-04	072.70	Groundwater	WP-04-72.7	Normal Sample	2	WAN	2/8/2013	12:44 PM	SEI 10.5.x	HDE	2/8/2013	1:17 PM	6						C	FALSE
SEI-43	WP-04	077.50	Groundwater	WP-04-77.5	Normal Sample	2	WAN	2/8/2013	1:46 PM	SEI 10.5.x	HDE	2/8/2013	2:34 PM	6						C	FALSE
SEI-46	WP-04	082.50	Groundwater	WP-04-82.5	Normal Sample	2	WAN	2/8/2013	2:26 PM	SEI 10.5.x	HDE	2/8/2013	3:40 PM	6						C	FALSE
SEI-47	WP-04	087.70	Groundwater	WP-04-87.7	Normal Sample	2	WAN	2/8/2013	3:09 PM	SEI 10.5.x	HDE	2/8/2013	3:40 PM	6						C	FALSE
SEI-48	WP-04	092.70	Groundwater	WP-04-92.7	Normal Sample	2	WAN	2/8/2013	3:41 PM	SEI 10.5.x	HDE	2/8/2013	5:15 PM	6						C	FALSE
SEI-49	WP-04	097.70	Groundwater	WP-04-97.7	Normal Sample	2	WAN	2/8/2013	4:53 PM	SEI 10.5.x	HDE	2/8/2013	5:15 PM	6						C	FALSE
SEI-53	WP-04	102.70	Groundwater	WP-04-102.7	Normal Sample	2	WAN	2/9/2013	12:52 PM	SEI 10.5.x	HDE	2/9/2013	1:20 PM	6		SEI-53				C	FALSE
SEI-53-MS	WP-04	102.70	Groundwater	WP-04-102.7-MS	Matrix Spike	2	WAN	2/9/2013	12:52 PM	SEI 10.5.x	HDE	2/9/2013	1:20 PM	6		SEI-53				C	FALSE
SEI-53-MSD	WP-04	102.70	Groundwater	WP-04-102.7-MSD	Matrix Spike Duplicate	2	WAN	2/9/2013	12:52 PM	SEI 10.5.x	HDE	2/9/2013	1:20 PM	6		SEI-53				C	FALSE
SEI-61	WP-04	107.70	Groundwater	WP-04-107.7	Normal Sample	2	WAN	2/10/2013	12:51 PM	SEI 10.5.x	HDE	2/10/2013	1:15 PM	6						C	FALSE
SEI-65	WP-04	112.50	Groundwater	WP-04-112.5	Normal Sample	2	WAN	2/10/2013	2:49 PM	SEI 10.5.x	HDE	2/10/2013	3:20 PM	6						C	FALSE
SEI-70	WP-04	117.60	Groundwater	WP-04-117.6	Normal Sample	2	WAN	2/10/2013	4:22 PM	SEI 10.5.x	HDE	2/10/2013	4:55 PM	6						C	FALSE
SEI-73	WP-04	120.50	Groundwater	WP-04-120.5	Normal Sample	2	WAN	2/11/2013	9:04 AM	SEI 10.5.x	HDE	2/11/2013	10:05 AM	6						C	FALSE
SEI-52	WP-05	000.01	Groundwater	WP-05-EB	Equipment Blank	2	WJW	2/9/2013	12:25 PM	SEI 10.5.x	HDE	2/9/2013	1:20 PM	6						C	FALSE
SEI-54	WP-05	067.70	Groundwater	WP-05-67.7	Normal Sample	2	WJW	2/9/2013	3:23 PM	SEI 10.5.x	HDE	2/9/2013	3:55 PM	6						C	FALSE
SEI-58	WP-05	073.00	Groundwater	WP-05-73.0	Normal Sample	2	WJW	2/9/2013	4:35 PM	SEI 10.5.x	HDE	2/9/2013	5:12 PM	6						C	FALSE
SEI-59	WP-05	078.00	Groundwater	WP-05-78.0	Normal Sample	2	WJW	2/10/2013	9:36 AM	SEI 10.5.x	HDE	2/10/2013	9:58 AM	6						C	FALSE
SEI-60	WP-05	082.80	Groundwater	WP-05-82.8	Normal Sample	2	WJW	2/10/2013	11:06 AM	SEI 10.5.x	HDE	2/10/2013	11:22 AM	6						C	FALSE
SEI-62	WP-05	087.80	Groundwater	WP-05-87.8	Normal Sample	2	WJW	2/10/2013	12:11 PM	SEI 10.5.x	HDE	2/10/2013	1:15 PM	6						C	FALSE
SEI-63	WP-05	092.80	Groundwater	WP-05-92.8	Normal Sample	2	WJW	2/10/2013	1:08 PM	SEI 10.5.x	HDE	2/10/2013	2:15 PM	6						C	FALSE
SEI-64	WP-05	097.70	Groundwater	WP-05-97.7	Normal Sample	2	WJW	2/10/2013	1:56 PM	SEI 10.5.x	HDE	2/10/2013	2:15 PM	6						C	FALSE
SEI-66	WP-05	102.90	Groundwater	WP-05-102.9	Normal Sample	2	WJW	2/10/2013	2:40 PM	SEI 10.5.x	HDE	2/10/2013	3:20 PM	6						C	FALSE
SEI-67	WP-05	107.90	Groundwater	WP-05-107.9	Normal Sample	2	WJW	2/10/2013	3:46 PM	SEI 10.5.x	HDE	2/10/2013	4:05 PM	6		SEI-67				C	FALSE
SEI-67-MS	WP-05	107.90	Groundwater	WP-05-107.9-MS	Matrix Spike	2	WJW	2/10/2013	3:46 PM	SEI 10.5.x	HDE	2/10/2013	4:05 PM	6		SEI-67				C	FALSE
SEI-67-MSD	WP-05	107.90	Groundwater	WP-05-107.9-MSD	Matrix Spike Duplicate	2	WJW	2/10/2013	3:46 PM	SEI 10.5.x	HDE	2/10/2013	4:05 PM	6		SEI-67				C	FALSE
SEI-71	WP-05	112.80	Groundwater	WP-05-112.8	Normal Sample	2	WJW	2/10/2013	4:32 PM	SEI 10.5.x	HDE	2/10/2013	4:55 PM	6						C	FALSE
SEI-72	WP-05	117.30	Groundwater	WP-05-117.3	Normal Sample	2	WJW	2/11/2013	8:53 AM	SEI 10.5.x	HDE	2/11/2013	10:05 AM	6						C	FALSE
SEI-74	WP-05	122.20	Groundwater	WP-05-122.2	Normal Sample	2	WJW	2/11/2013	9:50 AM	SEI 10.5.x	HDE	2/11/2013	10:58 AM	6						C	FALSE
SEI-76	WP-05	127.50	Groundwater	WP-05-127.5	Normal Sample	2	WJW	2/11/2013	11:13 AM	SEI 10.5.x	HDE	2/11/2013	12:06 PM	6						C	FALSE
SEI-77	WP-05	132.40	Groundwater	WP-05-132.4	Normal Sample	2	WJW	2/11/2013	12:01 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6						C	FALSE
SEI-78	WP-05	137.30	Groundwater	WP-05-137.3	Normal Sample	2	WJW	2/11/2013	1:00 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6		SEI-78				C	FALSE
SEI-78-FD	WP-05	137.30	Groundwater	WP-05-137.3-D	Field Duplicate	2	WJW	2/11/2013	1:00 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6		SEI-78				C	FALSE
SEI-82	WP-05	142.40	Groundwater	WP-05-142.4	Normal Sample	2	WJW	2/11/2013	2:12 PM	SEI 10.5.x	HDE	2/11/2013	2:50 PM	6		SEI-82				C	FALSE
SEI-82-FD	WP-05	142.40	Groundwater	WP-05-142.4-D	Field Duplicate	2	WJW	2/11/2013	2:12 PM	SEI 10.5.x	HDE	2/11/2013	2:50 PM	6		SEI-82				C	FALSE
SEI-82-MS	WP-05	142.40	Groundwater	WP-05-142.4-MS	Matrix Spike	2	WJW	2/11/2013	2:12 PM	SEI 10.5.x	HDE	2/11/2013	2:50 PM	6		SEI-82				C	FALSE
SEI-82-MSD	WP-05	142.40	Groundwater	WP-05-142.4-MSD	Matrix Spike Duplicate	2	WJW	2/11/2013	2:12 PM	SEI 10.5.x	HDE	2/11/2013	2:50 PM	6		SEI-82				C	FALSE

TSDG-11

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305 Scotia Naval Depot.

Project Location: Scotia, NY.

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-01-EB	WJW	2/5/13	09:30	HDE	2/5/13	15:45	1	2	2	—		✓		SE1-1	HDE	
WP-01-70.0	"	"	14:06	"	"	"	1	2	2	—		✓		SE1-2	"	
WP-01-75.0	"	"	16:18	"	"	16:39	1	2	2	—		✓		SE1-3	"	
WP-02-70.0	WAN	"	17:29	"	"	17:39	1	2	2	—		✓		SE1-4	"	
WP-01-80.0	WJW	"	17:35	"	"	17:48	1	2	2	—		✓		SE1-5	"	
WP-02-EB	WAN	"		"	"	"	1	2	2	—		✓		SE1-6	"	
WP-02-75.0	"	2/6/13	10:07	"	2/6/13	10:47	1	2	2	—		✓		SE1-7	"	
WP-01-84.5	WJW	"	09:20	"	"	"	1	2	2	—		✓		SE1-8	"	
WP-01-91.5	"	"	10:09	"	"	"	1	2	2	—		✓		SE1-9	"	
WP-01-95.0	WJW	2/6/13	11:16	"	"	13:15	1	2	2	—		✓		SE1-10	"	vials 1+2 used
WP-02-79.5	WAN	"	12:36	"	"	"	1	2	2	—		✓		SE1-13	"	
WP-01-95.0-MS	WJW	"	11:16	"	"	13:15	1	2	2	+		✓		SE1-10-MS	"	vials 1+2 used
WP-01-95.0-MSD	"	"	11:16	"	"	13:15	1	2	2	—		✓		SE1-10-MSD	"	vials 1+2 used
WP-02-87.15	WAN	"	13:44	"	"	16:21	1	2	2	+		✓		SE1-14	"	
WP-02-92.0	"	"	15:03	"	"	"	1	2	2	—		✓		SE1-15	"	
WP-01-100.00	WJW	"	14:15	"	"	"	1	2	2	—		✓		SE1-16	"	
WP-01-105.00	"	"	15:23	"	"	"	1	2	2	+		✓		SE1-17	"	
WP-02-96.4	WAN	"	17:26	"	"	17:45	1	2	2	—		✓		SE1-18	"	
WP-01-110.0	WJW	"	16:22	"	"	"	1	2	2	—		✓		SE1-19	"	
WP-01-115.0	"	"	17:11	"	"	"	1	2	2	—		✓		SE1-20	"	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

NOTE: 4 vials collected for each depth
SE1 only received 2 vials. storing remaining 2 vials in fridge for potential split sample for another lab.

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other _____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-01-120.0	WJW	217/13	09:35	HDE	217/13	10:12	1	2	2	—		✓		SE1-21	HDE	
WP-01-125.0	↓	↓	10:20	↓	↓	11:33	1	2	2	—		✓		SE1-22	↓	
WP-01-130.0	↓	↓	11:14	↓	↓	↓	1	2	2	—		✓		SE1-23	↓	
WP-02-102.14	WAN	↓	09:55	↓	↓	↓	1	2	2	—		✓		SE1-24	↓	GRAB sample
MWGEP1-73.0-GW	LJR	↓	11:50	↓	↓	12:17	1	2	2	—		✓		SE1-25	↓	GRAB sample
MW13-78.0-GW	DJL	↓	12:40	↓	↓	13:51	1	2	3	2		✓		ZE1-26	↓	
WP-02-107.0	WAN	↓	11:20	↓	↓	↓	1	2	2	—		✓		SE1-27	↓	
WP-02-110.2	↓	↓	12:50	↓	↓	↓	1	2	2	—		✓		SE1-28	↓	
WP-01-135.0	WJW	↓	12:27	↓	↓	↓	1	2	2	—		✓		SE1-29	↓	
WP-01-140.0	↓	↓	13:58	↓	↓	16:44	1	2	2	—		✓		SE1-30	↓	
WP-01-141.6	↓	↓	14:56	↓	↓	↓	1	2	2	—		✓		SE1-31	↓	
WP-02-115.0	WAN	↓	14:32	↓	↓	↓	1	2	2	—		✓		SE1-32	↓	
WP-02-120.0	↓	↓	15:41	↓	↓	↓	1	2	2	—		✓		SE1-33	↓	
WP-02-125.0	↓	↓	16:46	↓	↓	17:42	1	2	2	—		✓		SE1-34	↓	
WP-02-129.0	WAN	218/13	09:00	↓	218/13	09:45	1	2	2	—		✓		SE1-35	↓	
WP-03-EB	WJW	↓	07:50	↓	↓	↓	1	2	2	—		✓		SE1-36	↓	
WP-02-129.0-MS	WAN	↓	09:00	↓	↓	09:45	1	2	2	—		✓		SE1-35-MS	↓	
WP-02-129.0-MSD	WAN	↓	09:00	↓	↓	09:45	1	2	2	—		✓		SE1-35-MSD	↓	
WP-03-72.0	WJW	↓	11:19	↓	↓	11:50	1	2	2	—		✓		SE1-39	↓	
WP-04-EB	WAN	↓	11:09	↓	↓	↓	1	2	2	—		✓		SE1-40	↓	

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other ____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-03-77.1	WJW	2/8/13	12:14	MDE	2/8/13	13:17	1	2	2	–		✓		SE1-41	MDE	
WP-04-72.7	WAN	2/8/13	12:44			↓	1	2	2	–		✓		SE1-42		
WP-04-77.5	↓		13:46			14:34	1	2	2	–		✓		SE1-43		
WP-03-82.7	WJW		14:11			↓	1	2	2	–		✓		SE1-44		
WP-03-87.5	↓		15:01			15:40	1	2	2	–		✓		SE1-45		
WP-04-82.5	WAN		14:26			↓	1	2	2	–		✓		SE1-46		
WP-04-87.7	↓		15:09			↓	1	2	2	–		✓		SE1-47		
WP-04-92.7	WAN		15:41			17:15	1	2	2	–		✓		SE1-48		
WP-04-97.7	↓		16:53			↓	1	2	2	–		✓		SE1-49		
WP-03-92.5	WJW		15:44			↓	1	2	2	–		✓		SE1-50		
WP-03-93.7	↓	↓	16:40		↓	↓	1	2	2	–		✓		SE1-51		
WP-05-EB	WJW	2/9/13	12:25		2/9/13	13:20	1	2	2	–		✓		SE1-52		
WP-04-102.7	WAN		12:52			↓	1	2	2	–		✓		SE1-53		
WP-05-67.7	WJW		15:23			15:55	1	2	2	–		✓		SE1-54		
WP-04-102.7-MS	WAN		12:52			13:20	1	2	2	–		✓		SE1-53-MS		vials 1+2 used
WP-04-102.7-MSD	↓		12:52			↓	1	2	2	–		✓		SE1-53-MSD		vials 1+2 used
WP-04-EB-2	DJL		16:30			17:12	1	2	2	–		✓		SE1-57		
WP-05-73.0	WJW	↓	16:35		↓	↓	1	2	2	–		✓		SE1-58		
WP-05-78.0	↓	2/10/13	09:36		2/10/13	09:58	1	2	2	–		✓		SE1-59		
WP-05-82.8	WJW	↓	11:06	↓	↓	11:22								SE1-60	↓	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

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Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot.

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP04-107.7	WAN	2/10/13	12:51	HOE	2/10/13	13:15	1	2	2	—		✓		SE1-61	HOE	
WP-05-87.8	WJW		12:11			1	1	2	2	–		✓		SE1-62		
WP-05-92.8			13:08			14:15	1	2	2	–		✓		SE1-63		
WP-05-97.7			13:56			1	1	2	2	–		✓		SE1-64		
WP-04-112.5	WAN		14:49			15:20	1	2	2	–		✓		SE1-65		
WP-05-102.9	WJW		14:40			1	1	2	2	–		✓		SE1-66		
WP-05-107.9			15:46			16:05	1	2	2	—		✓		SE1-67		
WP-05-107.9-MS			15:46			1	1	2	2	–		✓		SE1-67-MS		
WP-05-107.9-MSD			15:46			1	1	2	2	–		✓		SE1-67-MSD		
WP-04-117.6	WAN		16:22			16:55	1	2	2	–		✓		SE1-70		
WP-05-112.8	WJW	—	16:32		—	1	1	2	2	–		✓		SE1-71		
WP-05-117.3	WJW	2/11/13	08:53		2/11/13	10:05	1	2	2	–		✓		SE1-72		
WP-04-120.5	WAN		09:04			1	1	2	2	–		✓		SE1-73		
WP-05-122.2	WJW		09:50			10:58	1	2	2	–		✓		SE1-74		
WP-03a-EB	WAN		09:43			1	1	2	2	–		✓		SE1-75		
WP-05-127.5	WJW		11:13			12:06	1	2	2	–		✓		SE1-76		
WP-05-132.4	WJW		12:01			13:50	1	2	2	–		✓		SE1-77		
WP-05-137.3			13:00				1	2	2	–		✓		SE1-78		
WP-05-137.3-D			13:00				1	2	2	–		✓		SE1-78-FD		
* WP-~~03a~~ 107.8	WAN	—	13:11		—	—	1	2	2	–		✓		SE1-80	—	

03 * Type of Sample: (1) water (2) soil *** Preservation: (1) ice (2) HCl (3) Other _____

mjs 3/11/13 ** Container: (1) bag (2) bottle (3) other _____

STONE ENVIRONMENTAL INC

Page 4 of 6

* Removed "a" from sample location. Client request. Joe Schmidl would like samples WP-03, WP-03a, and WP-03b to all show up as one location: WP-03 mjs 3/11/13

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot.

Project Location: Scotia, NY

	Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
*	WP-03~~A~~-107.8-D	WAN	2/11/13	13:11	HDE	2/11/13	13:50	1	2	2	–		✓		SE1-80-FD	HDE	
	WP-05-142.4 ~~D~~ 2/11/13	WJW		14:12			14:50	1	2	2	–		✓		SE1-82-*		
	WP-05-142.4-D	⊥		⊥			⊥	1	2	2	–		✓		SE1-82-FD		
	WP-05-142.4-MS	WJW		14:12			14:50	1	2	2	–		✓		SE1-82-MS		
	WP-05-142.4-MSD	⊥		⊥			⊥	1	2	2	–		✓		SE1-82-MSD		
*	WP-03~~A~~-112.8	WAN		14:55			15:18	1	2	2	–		✓		SE1-86		
*	WP-03~~A~~-117.8			16:01			16:20	1	2	2	–		✓		SE1-87		
*	WP-03~~A~~-117.8-D			16:01			⊥	1	2	2	–		✓		SE1-87-FD		
*	WP-03~~A~~-122.8	⊥	⊥	17:22		⊥	17:24	1	2	2	–		✓		SE1-89		
	WP-02a-EB	WJW	2/12/13	09:45		2/12/13	10:05	1	2	2	–		✓		SE1-90		
*	WP-03~~A~~-127.3	WAN		09:35			⊥	1	2	2	–		✓		SE1-91		
*	WP-03~~A~~-132.4			11:00			12:45	1	2	2	–		✓		SE1-92		
*	WP-03~~A~~-137.5	⊥		12:08			⊥	1	2	2	–		✓		SE1-93		
*	WP-02~~A~~-132.8	WJW		12:18			⊥	1	2	2	–		✓		SE1-94		
*	WP-02~~A~~-137.5	⊥		13:12			14:05	1	2	2	–		✓		SE1-95		
*	WP-03~~A~~-142.6	WAN		13:37			⊥	1	2	2	–		✓		SE1-96		
*	WP-02~~A~~-142.0	WJW		14:29			15:25	1	2	2	–		✓		SE1-97		
*	WP-03~~A~~-145.6	WAN		14:51			⊥	1	2	2	–		✓		SE1-98		
*	WP-02~~A~~-147.1	WJW		15:44			17:30	1	2	2	–		✓		SE1-99		
*	WP-02~~A~~-151.0	⊥	⊥	17:13	—	—	⊥	1	2	2	–		✓		SE1-100	—	

mjs 3/14/13

mjs 3/11/13

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

L:\RASC\Analytical\Forms\Moblie Lab 2 – Sample Log Sheet.doc Mobile Lab 1 is VIN# 1UK500G29V1022699 Mobil Lab 2 is VIN# 1UK500F2541047129

C:\Forms\Mobile Lab 2 – Sample Log Sheet.doc Truck 2 is VIN# JW6CEJ1G7SL002457

* Removed "a" from sample location. Client request. Joe Schmidl would like samples WP-03, WP-03a and WP-03b to all show up as one location: WP-03. mjs 3/14/13. Same with WP-02a and WP-02 mjs 3/11/13

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other ____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-036-EB	WAN	2/13/13	08:47	HDE	2/13/13	13:00	1	2	2	—		✓		SEI-101	HDE	
* WP-02~~a~~-153.1	WAN	2/13/13	09:28			⊥	1	2	2	—		✓		SEI-102		
* WP-02~~a~~-153.1-MS	⊥	⊥	⊥			13:00	1	2	2	—		✓		SEI-102-MS		
* WP-02~~a~~-153.1-MSD	⊥	⊥	⊥			⊥	1	2	2	—		✓		SEI-102-MSD	⊥	

mjs 3/11/13

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other ____

*** Preservation: (1) ice (2) HCl (3) Other ____

STONE ENVIRONMENTAL INC

* removed "a" from sample location. Client request. Joe Schmidl would like samples from WP-02 and WP-02a to show up as one location: WP-02 mjs 3/11/13

SDG-2

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-07-EB	TWM	2/18/13	11:36	HDE	2/18/13	12:53	1	2	2	—		✓		SE1-105	HDE	
WP-03~~6~~-159.0	WAN	2/19/13	11:42		2/19/13	12:03	1	2	2	—		✓		SE1-106		
WP-03~~6~~-159.0-D	〃	〃	〃				1	2	2	—		✓		SE1-106-FD		
WP-03~~6~~-159.0-MS	WAN	2/19/13	11:42				1	2	2	—		✓		SE1-106-MS		
WP-03~~6~~-159.0-MSD	〃	〃	〃				1	2	2	—		✓		SE1-106-MSD		
WP-03~~6~~-163.9	WAN		12:55			13~~7~~0	1	2	2	—		✓		SE1-110		
WP-03~~6~~-164.8	〃		14:29			14:45	1	2	2	—		✓		SE1-111		
WP-08-EB	WAN		15:28			15:52	1	2	2	—		✓		SE1-112		
WP-07-67.6	TWM	〃	17:08		〃	17:20	1	2	2	—		✓		SE1-113		
WP-07-72.4	TWM	2/20/13	08:54		2/20/13	09:10	1	2	2	—		✓		SE1-114		
WP-07-77.4	TWM		10:00			10:20	1	2	2	—		✓		SE1-116		
WP-07-77.4-D	〃		10:00			〃	1	2	2	—		✓		SE1-116-FD		
WP-07-82.4	〃		11:04			11:28	1	2	2	—		✓		SE1-118		
WP-08-65.9	WAN		11:09			〃	1	2	2	—		✓		SE1-119		
WP-07-90.2	TWM		12:22			12:48	1	2	2	—		✓		SE1-120		
WP-08-70.4	WAN		11:47			〃	1	2	2	—		✓		SE1-121		
WP-08-75.7	〃		12:24			〃	1	2	2	—		✓		SE1-122		
WP-08-80.8	WAN		12:52			13:37	1	2	2	—		✓		SE1-123		
WP-07-95.2	TWM		13:28			14:00	1	2	2	—		✓		SE1-124		
WP-08-84.9	WAN	〃	13:32	〃	〃	〃	1	2	2	—		✓		SE1-125	〃	

removed "B" from sample location and moved these WP-03 samples to SDG-1 so all WP-03 samples would be together.

MJB 3/4/13

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

102305-C Scotia Naval Depot
Sample Vials Not Used
SDG-1

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Vial(s) not used for analysis
SEI-1	WP-01	000.01	Groundwater	WP-01-EB	Equipment Blank	Vial # 2
SEI-2	WP-01	070.00	Groundwater	WP-01-70.0	Normal Sample	Vial # 2
SEI-3	WP-01	075.00	Groundwater	WP-01-75.0	Normal Sample	Vial # 2
SEI-5	WP-01	080.00	Groundwater	WP-01-80.0	Normal Sample	Vial # 2
SEI-8	WP-01	084.50	Groundwater	WP-01-84.5	Normal Sample	Vial # 2
SEI-9	WP-01	091.50	Groundwater	WP-01-91.5	Normal Sample	Vial # 2
SEI-16	WP-01	100.00	Groundwater	WP-01-100.0	Normal Sample	Vial # 2
SEI-17	WP-01	105.00	Groundwater	WP-01-105.0	Normal Sample	Vial # 2
SEI-19	WP-01	110.00	Groundwater	WP-01-110.0	Normal Sample	Vial # 2
SEI-20	WP-01	115.00	Groundwater	WP-01-115.0	Normal Sample	Vial # 2
SEI-6	WP-02	000.01	Groundwater	WP-02-EB	Equipment Blank	Vial # 2
SEI-90	WP-02	000.01	Groundwater	WP-02a-EB	Equipment Blank	Vial # 2
SEI-4	WP-02	070.00	Groundwater	WP-02-70.0	Normal Sample	Vial # 2
SEI-7	WP-02	075.00	Groundwater	WP-02-75.0	Normal Sample	Vial # 2
SEI-13	WP-02	079.50	Groundwater	WP-02-79.5	Normal Sample	Vial # 2
SEI-14	WP-02	087.15	Groundwater	WP-02-87.15	Normal Sample	Vial # 2
SEI-15	WP-02	092.00	Groundwater	WP-02-92.0	Normal Sample	Vial # 2
SEI-18	WP-02	096.40	Groundwater	WP-02-96.4	Normal Sample	Vial # 2
SEI-94	WP-02	132.80	Groundwater	WP-02-132.8	Normal Sample	Vial # 2
SEI-95	WP-02	137.50	Groundwater	WP-02-137.5	Normal Sample	Vial # 2
SEI-97	WP-02	142.00	Groundwater	WP-02-142.0	Normal Sample	Vial # 2
SEI-99	WP-02	147.10	Groundwater	WP-02-147.1	Normal Sample	Vial # 2
SEI-100	WP-02	151.00	Groundwater	WP-02-151.0	Normal Sample	Vial # 2
SEI-101	WP-03	000.01	Groundwater	WP-03b-EB	Equipment Blank	Vial # 2
SEI-36	WP-03	000.01	Groundwater	WP-03-EB	Equipment Blank	Vial # 2
SEI-75	WP-03	000.01	Groundwater	WP-03a-EB	Equipment Blank	Vial # 2
SEI-39	WP-03	072.00	Groundwater	WP-03-72.0	Normal Sample	Vial # 2
SEI-41	WP-03	077.10	Groundwater	WP-03-77.1	Normal Sample	Vial # 2
SEI-44	WP-03	082.70	Groundwater	WP-03-82.7	Normal Sample	Vial # 2
SEI-45	WP-03	087.50	Groundwater	WP-03-87.5	Normal Sample	Vial # 2
SEI-80	WP-03	107.80	Groundwater	WP-03-107.8	Normal Sample	Vial # 2
SEI-80-FD	WP-03	107.80	Groundwater	WP-03-107.8-FD	Field Duplicate	Vial # 2
SEI-86	WP-03	112.80	Groundwater	WP-03-112.8	Normal Sample	Vial # 2
SEI-87	WP-03	117.80	Groundwater	WP-03-117.8	Normal Sample	Vial # 2
SEI-87-FD	WP-03	117.80	Groundwater	WP-03-117.8-D	Field Duplicate	Vial # 2
SEI-89	WP-03	122.80	Groundwater	WP-03-122.8	Normal Sample	Vial # 2
SEI-91	WP-03	127.30	Groundwater	WP-03-127.3	Normal Sample	Vial # 2
SEI-92	WP-03	132.40	Groundwater	WP-03-132.4	Normal Sample	Vial # 2
SEI-93	WP-03	137.50	Groundwater	WP-03-137.5	Normal Sample	Vial # 2
SEI-96	WP-03	142.60	Groundwater	WP-03-142.6	Normal Sample	Vial # 2
SEI-98	WP-03	145.60	Groundwater	WP-03-145.6	Normal Sample	Vial # 2
SEI-106	WP-03	159.00	Groundwater	WP-03-159.0	Normal Sample	Vial # 2
SEI-110	WP-03	163.90	Groundwater	WP-03-163.9	Normal Sample	Vial # 2
SEI-111	WP-03	164.80	Groundwater	WP-03-164.8	Normal Sample	Vial # 2
SEI-40	WP-04	000.01	Groundwater	WP-04-EB	Equipment Blank	Vial # 2
SEI-57	WP-04	000.02	Groundwater	WP-04-EB-2	Equipment Blank	Vial # 2
SEI-42	WP-04	072.70	Groundwater	WP-04-72.7	Normal Sample	Vial # 2
SEI-43	WP-04	077.50	Groundwater	WP-04-77.5	Normal Sample	Vial # 2
SEI-46	WP-04	082.50	Groundwater	WP-04-82.5	Normal Sample	Vial # 2
SEI-47	WP-04	087.70	Groundwater	WP-04-87.7	Normal Sample	Vial # 2
SEI-48	WP-04	092.70	Groundwater	WP-04-92.7	Normal Sample	Vial # 2
SEI-49	WP-04	097.70	Groundwater	WP-04-97.7	Normal Sample	Vial # 2
SEI-61	WP-04	107.70	Groundwater	WP-04-107.7	Normal Sample	Vial # 2
SEI-65	WP-04	112.50	Groundwater	WP-04-112.5	Normal Sample	Vial # 2
SEI-70	WP-04	117.60	Groundwater	WP-04-117.6	Normal Sample	Vial # 2
SEI-73	WP-04	120.50	Groundwater	WP-04-120.5	Normal Sample	Vial # 2
SEI-52	WP-05	000.01	Groundwater	WP-05-EB	Equipment Blank	Vial # 2
SEI-54	WP-05	067.70	Groundwater	WP-05-67.7	Normal Sample	Vial # 2
SEI-59	WP-05	078.00	Groundwater	WP-05-78.0	Normal Sample	Vial # 2
SEI-60	WP-05	082.80	Groundwater	WP-05-82.8	Normal Sample	Vial # 2
SEI-62	WP-05	087.80	Groundwater	WP-05-87.8	Normal Sample	Vial # 2
SEI-63	WP-05	092.80	Groundwater	WP-05-92.8	Normal Sample	Vial # 2
SEI-64	WP-05	097.70	Groundwater	WP-05-97.7	Normal Sample	Vial # 2
SEI-66	WP-05	102.90	Groundwater	WP-05-102.9	Normal Sample	Vial # 2
SEI-71	WP-05	112.80	Groundwater	WP-05-112.8	Normal Sample	Vial # 2
SEI-72	WP-05	117.30	Groundwater	WP-05-117.3	Normal Sample	Vial # 2
SEI-74	WP-05	122.20	Groundwater	WP-05-122.2	Normal Sample	Vial # 2
SEI-76	WP-05	127.50	Groundwater	WP-05-127.5	Normal Sample	Vial # 2
SEI-77	WP-05	132.40	Groundwater	WP-05-132.4	Normal Sample	Vial # 2
SEI-78	WP-05	137.30	Groundwater	WP-05-137.3	Normal Sample	Vial # 2
SEI-78-FD	WP-05	137.30	Groundwater	WP-05-137.3-D	Field Duplicate	Vial # 2
SEI-82-FD	WP-05	142.40	Groundwater	WP-05-142.4-D	Field Duplicate	Vial # 2

Lab ID	Sample Name	Compound(s) Manually Integrated
SEI-3	WP-01-75.0	Tetrachloroethene
SEI-10-MS	WP-01-95.0-MS	Naphthalene
SEI-10-MSD	WP-01-95.0-MSD	Naphthalene
SEI-15	WP-02-92.0	Benzene
SEI-106-MS	WP-03-159.0-MS	Chlorobenzene-d5, Bromofluorobenzene, Ethylbenzene, 1,3,5-Trimethylbenzene
SEI-106-MSD	WP-03-159.0-MSD	Chlorobenzene-d5, Bromofluorobenzene, Ethylbenzene, 1,3,5-Trimethylbenzene
SEI-42	WP-04-72.7	1,1-Dichloroethene, 1,1-Dichloroethane, Carbon Tetrachloride
SEI-46	WP-04-82.5	Carbon Tetrachloride
SEI-47	WP-04-87.7	Carbon Tetrachloride
VSTD 2 from ical QA30205A	VSTD 2 from ical QA30205A	Vinyl Chloride, trans-1,2-Dichloroethane
VSTD 5 from ical QA30205A	VSTD 5 from ical QA30205A	Vinyl Chloride
VSTD 10 from ical QA30205A	VSTD 10 from ical QA30205A	Vinyl Chloride
VSTD 20 from ical QA30205A	VSTD 20 from ical QA30205A	Vinyl Chloride
VSTD 200 from ical QA30205A	VSTD 200 from ical QA30205A	m+p-xylene
VSTD LM	VSTD LM	Chloroform
VSTD 2 from ical QA30211B	VSTD 2 from ical QA30211B	1,1-Dichloroethene, Naphthalene
VSTD 2 from ical QA30213	VSTD 2 from ical QA30213	Vinyl Chloride
VSTD 20 from ical QA30213	VSTD 20 from ical QA30213	Naphthalene
VSTD 200 from ical QA30213	VSTD 200 from ical QA30213	m+p-xylene, Naphthalene

LABORATORY ANALYTICAL RESULTS

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/05/2013 - 02/06/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/05/2013 - 02/06/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-01	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		070.00		075.00		080.00		084.50		091.50		095.00		100.00	
Sample Name		WP-01-EB		WP-01-70.0		WP-01-75.0		WP-01-80.0		WP-01-84.5		WP-01-91.5		WP-01-95.0		WP-01-100.0	
Analysis Date		02/05/13 16:09	EB	02/05/13 17:22	N	02/05/13 17:37	N	02/05/13 18:15	N	02/06/13 11:30	N	02/06/13 11:45	N	02/06/13 16:29	N	02/06/13 17:44	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.27	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	0.32	J	0.31	J	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	27		22		23		17		17		24		3.1	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	0.42	J	0.26	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.27	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	82	%	79	%	81	%	81	%	82	%	83	%	81	%	81	%
Depth		105.00		110.00		115.00		120.00		125.00		130.00		135.00		140.00	
Sample Name	CAS #	WP-01-105.0		WP-01-110.0		WP-01-115.0		WP-01-120.0		WP-01-125.0		WP-01-130.0		WP-01-135.0		WP-01-140.0	
Analysis Date		02/06/13 17:58	N	02/06/13 18:28	N	02/06/13 18:43	N	02/08/13 12:54	N	02/08/13 13:10	N	02/08/13 13:26	N	02/08/13 13:42	N	02/08/13 13:58	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	0.30	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U	2.0	U	0.81	J	2.0	U	0.28	J	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	81	%	80	%	75	%	87	%	87	%	90	%	87	%	86	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/05/2013 - 02/06/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/05/2013 - 02/06/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-01	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth		141.60	
Sample Name	CAS #	WP-01-141.6	
Analysis Date		02/08/13 14:18	N
Vinyl Chloride	75-01-4	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U
Chloroform	67-66-3	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U
Benzene	71-43-2	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U
Trichloroethene	79-01-6	2.0	U
Toluene	108-88-3	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U
Tetrachloroethene	127-18-4	2.0	U
Ethylbenzene	100-41-4	2.0	U
m,p-Xylenes	136777612	2.0	U
o-Xylene	95-47-6	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U
Naphthalene	91-20-3	2.0	U
Bromofluorobenzene (SS)	460-00-4	87	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/05/2013 - 02/13/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/05/2013 - 02/13/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-02	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.00		000.00		070.00		075.00		079.50		087.15		092.00		096.40	
Sample Name		WP-02-EB		WP-02a-EB		WP-02-70.0		WP-02-75.0		WP-02-79.5		WP-02-87.15		WP-02-92.0		WP-02-96.4	
Analysis Date		02/05/13 18:46	EB	02/13/13 09:37	EB	02/05/13 18:00	N	02/06/13 11:15	N	02/06/13 16:14	N	02/06/13 17:14	N	02/06/13 17:29	N	02/06/13 18:13	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.33	J	0.30	J
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	49		66		60		41		66		93	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	0.29	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.22	J	0.13	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	83	%	94	%	81	%	82	%	78	%	80	%	82	%	84	%
Depth		102.14		107.00		110.20		115.00		120.00		125.00		129.00		132.80	
Sample Name	CAS #	WP-02-102.14		WP-02-107.0		WP-02-110.2		WP-02-115.0		WP-02-120.0		WP-02-125.0		WP-02-129.0		WP-02-132.8	
Analysis Date		02/08/13 15:05	N	02/08/13 15:21	N	02/08/13 15:37	N	02/08/13 15:53	N	02/08/13 16:09	N	02/08/13 16:24	N	02/08/13 10:18	N	02/13/13 09:52	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	110		170		0.76	J	0.21	J	2.0	U	2.0	U	2.0	U	0.39	J
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.18	J	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	88	%	86	%	88	%	86	%	88	%	85	%	88	%	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/05/2013 - 02/13/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/05/2013 - 02/13/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-02	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth		137.50		142.00		147.10		151.00		153.10	
Sample Name	CAS #	WP-02-137.5		WP-02-142.0		WP-02-147.1		WP-02-151.0		WP-02-153.1	
Analysis Date		02/13/13 10:07	N	02/13/13 10:22	N	02/13/13 10:38	N	02/13/13 10:54	N	02/13/13 13:54	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	94	%	95	%	93	%	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/08/2013 - 02/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/08/2013 - 02/19/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-03	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.00		000.00		000.00		072.00		077.10		082.70		087.50		092.50	
Sample Name		WP-03-EB		WP-03a-EB		WP-03b-EB		WP-03-72.0		WP-03-77.1		WP-03-82.7		WP-03-87.5		WP-03-92.5	
Analysis Date		02/08/13 10:02	EB	02/11/13 13:45	EB	02/13/13 13:38	EB	02/08/13 12:07	N	02/08/13 14:49	N	02/08/13 16:56	N	02/08/13 17:11	N	02/08/13 18:30	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U	71		75		90		130		530	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	0.56	J	0.51	J	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	0.19	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	87	%	92	%	94	%	88	%	88	%	88	%	87	%	88	%

Depth	CAS #	093.70		107.80		107.80		112.80		117.80		117.80		122.80		127.30	
Sample Name		WP-03-93.7		WP-03-107.8-FD		WP-03-107.8		WP-03-112.8		WP-03-117.8-D		WP-03-117.8		WP-03-122.8		WP-03-127.3	
Analysis Date		02/08/13 18:46	N	02/11/13 15:05	FD	02/11/13 14:50	N	02/11/13 16:22	N	02/11/13 16:55	FD	02/11/13 16:39	N	02/11/13 17:40	N	02/13/13 11:11	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	1.4	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	0.62	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	730		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	87	%	88	%	90	%	90	%	91	%	91	%	89	%	92	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/08/2013 - 02/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/08/2013 - 02/19/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-03	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth		132.40		137.50		142.60		145.60		159.00		159.00		163.90		164.80	
Sample Name	CAS #	WP-03-132.4		WP-03-137.5		WP-03-142.6		WP-03-145.6		WP-03-159.0-D		WP-03-159.0		WP-03-163.9		WP-03-164.8	
Analysis Date		02/13/13 11:27	N	02/13/13 11:50	N	02/13/13 12:05	N	02/13/13 12:21	N	02/19/13 12:40	FD	02/19/13 12:24	N	02/19/13 13:27	N	02/19/13 15:03	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	93	%	92	%	93	%	93	%	95	%	93	%	93	%	98	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/08/2013 - 02/10/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/08/2013 - 02/10/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-04	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.00		000.00		072.70		077.50		082.50		087.70		092.70		097.70	
Sample Name		WP-04-EB		WP-04-EB-2		WP-04-72.7		WP-04-77.5		WP-04-82.5		WP-04-87.7		WP-04-92.7		WP-04-97.7	
Analysis Date		02/08/13 12:39	EB	02/09/13 17:25	EB	02/08/13 14:33	N	02/08/13 16:40	N	02/08/13 17:27	N	02/08/13 17:43	N	02/08/13 17:59	N	02/08/13 18:15	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	0.43	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	1.4	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	6.3		1.6	J	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	0.57	J	0.20	J	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	100		28		2.3		0.92	J	0.30	J	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	0.72	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	32		14		0.49	J	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.14	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	89	%	87	%	88	%	87	%	88	%	87	%	89	%	89	%

Depth	CAS #	102.70		107.70		112.50		117.60		120.50	
Sample Name		WP-04-102.7		WP-04-107.7		WP-04-112.5		WP-04-117.6		WP-04-120.5	
Analysis Date		02/09/13 13:55	N	02/10/13 14:11	N	02/10/13 15:58	N	02/10/13 17:23	N	02/11/13 12:45	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	4.9		0.92	J	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0		0.41	J	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	89	%	87	%	89	%	85	%	87	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/09/2013 - 02/10/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/09/2013 - 02/10/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-05	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.00		067.70		073.00		078.00		082.80		087.80		092.80		097.70	
Sample Name		WP-05-EB		WP-05-67.7		WP-05-73.0		WP-05-78.0		WP-05-82.8		WP-05-87.8		WP-05-92.8		WP-05-97.7	
Analysis Date		02/09/13 13:40	EB	02/09/13 16:43	N	02/10/13 09:33	N	02/10/13 10:11	N	02/10/13 11:40	N	02/10/13 13:40	N	02/10/13 14:41	N	02/10/13 14:57	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	0.39	J	36		57		68		160		270		330		7.8	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.14	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	89	%	85	%	87	%	88	%	84	%	84	%	87	%	83	%
Depth		102.90		107.90		112.80		117.30		122.20		127.50		132.40		137.30	
Sample Name	CAS #	WP-05-102.9		WP-05-107.9		WP-05-112.8		WP-05-117.3		WP-05-122.2		WP-05-127.5		WP-05-132.4		WP-05-137.3-D	
Analysis Date		02/10/13 16:13	N	02/10/13 16:29	N	02/10/13 17:39	N	02/11/13 13:00	N	02/11/13 13:15	N	02/11/13 13:30	N	02/11/13 14:04	N	02/11/13 14:34	FD
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	0.91	J	0.55	J	0.43	J	0.37	J	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	82	%	87	%	82	%	90	%	90	%	89	%	90	%	88	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/09/2013 - 02/10/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/09/2013 - 02/10/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-05	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth		137.30		142.40		142.40	
Sample Name	CAS #	WP-05-137.3		WP-05-142.4-D		WP-05-142.4	
Analysis Date		02/11/13 14:19	N	02/11/13 16:06	FD	02/11/13 15:20	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	89	%	88	%	86	%

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J = Estimated value.
E = Estimated value, marginally above the calibration levels.
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N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/07/2013 - 02/07/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/08/2013 - 02/08/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	MW13	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	078.00	
Sample Name		MW13-78.0-GW	
Analysis Date		02/08/13 11:52	N
Vinyl Chloride	75-01-4	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U
Chloroform	67-66-3	0.19	J
Carbon Tetrachloride	56-23-5	2.0	U
Benzene	71-43-2	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U
Trichloroethene	79-01-6	110	
Toluene	108-88-3	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U
Tetrachloroethene	127-18-4	0.43	J
Ethylbenzene	100-41-4	2.0	U
m,p-Xylenes	136777612	2.0	U
o-Xylene	95-47-6	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U
Naphthalene	91-20-3	2.0	U
Bromofluorobenzene (SS)	460-00-4	87	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/07/2013 - 02/07/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/08/2013 - 02/08/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	MWGEP1	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	073.00	
Sample Name		MWGEP1-73.0-GW	
Analysis Date		02/08/13 11:36	N
Vinyl Chloride	75-01-4	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U
Chloroform	67-66-3	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U
Benzene	71-43-2	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U
Trichloroethene	79-01-6	130	
Toluene	108-88-3	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U
Tetrachloroethene	127-18-4	0.85	J
Ethylbenzene	100-41-4	2.0	U
m,p-Xylenes	136777612	2.0	U
o-Xylene	95-47-6	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U
Naphthalene	91-20-3	2.0	U
Bromofluorobenzene (SS)	460-00-4	84	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

QUALITY CONTROL SUMMARIES

Continuing Calibration Verification (VSTD)

Laboratory Method Blank Summaries (VBLK)

Laboratory Control Sample Summaries (LCS)

Matrix Spike / Matrix Spike Duplicate Sample Summaries (MS/MSD)

Field Duplicate Sample Summaries (FD)

Stone Environmental Inc. Project Number: 102305-07
Volatile Standard Analyses Summary

QC Batch: LK
Analysis Date: 02/06/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	19.83	.9
1,1-Dichloroethene	18.88	5.6
trans-1,2-Dichloroethene	20.7	-3.5
1,1-Dichloroethane	20.54	-2.7
cis-1,2-Dichloroethene	21.88	-9.4
Chloroform	20.92	-4.6
Carbon Tetrachloride	19.85	.7
Benzene	20.79	-4.0
1,2-Dichloroethane	21.64	-8.2
Trichloroethene	20.37	-1.9
Toluene	20.29	-1.5
1,1,2-Trichloroethane	23.4	-17.0
Tetrachloroethene	20.85	-4.3
Ethylbenzene	20.09	-.4
m,p-Xylenes	37.99	5.0
o-Xylene	18.69	6.5
1,1,2,2-Tetrachloroethane	23.77	-18.9
1,2,4-Trimethylbenzene	18.28	8.6
1,3,5-Trimethylbenzene	18.46	7.7
Naphthalene	19.85	.7
Bromofluorobenzene (SS)	99.35 %	99.35 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-07
Volatile Standard Analyses Summary

QC Batch: LM
Analysis Date: 02/08/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	18.4	8.0
1,1-Dichloroethene	16.64	16.8
trans-1,2-Dichloroethene	18.57	7.2
1,1-Dichloroethane	19.49	2.6
cis-1,2-Dichloroethene	20.64	-3.2
Chloroform	20.19	-1.0
Carbon Tetrachloride	19.49	2.6
Benzene	19.7	1.5
1,2-Dichloroethane	23.62	-18.1
Trichloroethene	19.2	4.0
Toluene	18.95	5.3
1,1,2-Trichloroethane	22.85	-14.3
Tetrachloroethene	18.63	6.9
Ethylbenzene	19.88	.6
m,p-Xylenes	36.37	9.1
o-Xylene	20.43	-2.2
1,1,2,2-Tetrachloroethane	22.86	-14.3
1,2,4-Trimethylbenzene	17.91	10.5
1,3,5-Trimethylbenzene	17.98	10.1
Naphthalene	19.63	1.9
Bromofluorobenzene (SS)	97.45 %	97.45 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-07
Volatile Standard Analyses Summary

QC Batch: LN
Analysis Date: 02/09/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	19.95	.3
1,1-Dichloroethene	17.28	13.6
trans-1,2-Dichloroethene	18.81	6.0
1,1-Dichloroethane	19.73	1.4
cis-1,2-Dichloroethene	19.82	.9
Chloroform	20.52	-2.6
Carbon Tetrachloride	20.35	-1.8
Benzene	19.76	1.2
1,2-Dichloroethane	22.87	-14.4
Trichloroethene	20.02	-.1
Toluene	20.4	-2.0
1,1,2-Trichloroethane	20.07	-.4
Tetrachloroethene	18.87	5.7
Ethylbenzene	21.44	-7.2
m,p-Xylenes	39.73	.7
o-Xylene	21.75	-8.8
1,1,2,2-Tetrachloroethane	19.86	.7
1,2,4-Trimethylbenzene	19.7	1.5
1,3,5-Trimethylbenzene	19.81	1.0
Naphthalene	17.77	11.2
Bromofluorobenzene (SS)	99.35 %	99.35 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-07
Volatile Standard Analyses Summary

QC Batch: LO
Analysis Date: 02/10/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	19.58	2.1
1,1-Dichloroethene	16.14	19.3
trans-1,2-Dichloroethene	18.22	8.9
1,1-Dichloroethane	19.64	1.8
cis-1,2-Dichloroethene	19.26	3.7
Chloroform	19.37	3.2
Carbon Tetrachloride	18.66	6.7
Benzene	20.06	-.3
1,2-Dichloroethane	22.34	-11.7
Trichloroethene	18.99	5.1
Toluene	20.59	-3.0
1,1,2-Trichloroethane	20.08	-.4
Tetrachloroethene	18.44	7.8
Ethylbenzene	21.79	-9.0
m,p-Xylenes	40.1	-.3
o-Xylene	21.68	-8.4
1,1,2,2-Tetrachloroethane	19.32	3.4
1,2,4-Trimethylbenzene	19.67	1.6
1,3,5-Trimethylbenzene	19.77	1.2
Naphthalene	16.98	15.1
Bromofluorobenzene (SS)	98.25 %	98.25 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-07
Volatile Standard Analyses Summary

QC Batch: LR
Analysis Date: 02/13/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	20.43	-2.2
1,1-Dichloroethene	20.47	-2.3
trans-1,2-Dichloroethene	20.46	-2.3
1,1-Dichloroethane	20.71	-3.6
cis-1,2-Dichloroethene	21.6	-8.0
Chloroform	20.86	-4.3
Carbon Tetrachloride	20.27	-1.4
Benzene	20.43	-2.2
1,2-Dichloroethane	22.11	-10.6
Trichloroethene	20.14	-.7
Toluene	19.83	.9
1,1,2-Trichloroethane	22.18	-10.9
Tetrachloroethene	22.26	-11.3
Ethylbenzene	19.73	1.4
m,p-Xylenes	39.75	.6
o-Xylene	17.7	11.5
1,1,2,2-Tetrachloroethane	22.4	-12.0
1,2,4-Trimethylbenzene	19.45	2.8
1,3,5-Trimethylbenzene	19.43	2.9
Naphthalene	19.56	2.2
Bromofluorobenzene (SS)	99.7 %	99.7 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-07
Volatile Standard Analyses Summary

QC Batch: LT
Analysis Date: 02/19/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	20.41	-2.1
1,1-Dichloroethene	19.85	.7
trans-1,2-Dichloroethene	20.15	-.7
1,1-Dichloroethane	20.9	-4.5
cis-1,2-Dichloroethene	20.91	-4.6
Chloroform	20.76	-3.8
Carbon Tetrachloride	19.81	1.0
Benzene	20.91	-4.6
1,2-Dichloroethane	22.21	-11.1
Trichloroethene	19.73	1.4
Toluene	20.03	-.2
1,1,2-Trichloroethane	21.29	-6.5
Tetrachloroethene	18.94	5.3
Ethylbenzene	20.64	-3.2
m,p-Xylenes	40.64	-1.6
o-Xylene	20.45	-2.3
1,1,2,2-Tetrachloroethane	21.03	-5.2
1,2,4-Trimethylbenzene	19.91	.4
1,3,5-Trimethylbenzene	19.52	2.4
Naphthalene	19.4	3.0
Bromofluorobenzene (SS)	101.4 %	101.4 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LJ
Date Analyzed	2/5/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	82	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LK
Date Analyzed	2/6/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	77	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LM
Date Analyzed	2/8/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	81	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LN
Date Analyzed	2/9/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	90	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LO
Date Analyzed	2/10/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	87	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LP
Date Analyzed	2/11/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	84	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LQ
Date Analyzed	2/12/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LR
Date Analyzed	2/13/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	88	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-07
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LT
Date Analyzed	2/19/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	91	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LJ

Analysis Date: 02/05/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	17	85	50-145
1,1-Dichloroethene	2.0 U	20	100	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	60-140
1,1-Dichloroethane	2.0 U	20	100	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	18	90	65-135
Carbon Tetrachloride	2.0 U	18	90	65-140
Benzene	2.0 U	20	100	80-120
1,2-Dichloroethane	2.0 U	20	100	70-130
Trichloroethene	2.0 U	19	95	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	21	105	75-125
Tetrachloroethene	2.0 U	19	95	45-150
Ethylbenzene	2.0 U	20	100	75-125
m,p-Xylenes	2.0 U	36	90	75-130
o-Xylene	2.0 U	20	100	80-120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	65-130
1,2,4-Trimethylbenzene	2.0 U	18	90	75-130
1,3,5-Trimethylbenzene	2.0 U	18	90	75-130
Naphthalene	2.0 U	19	95	55-140
Bromofluorobenzene (SS)	82 %	97 %	97 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LK

Analysis Date: 02/06/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	16	80	50-145
1,1-Dichloroethene	2.0 U	20	100	70-130
trans-1,2-Dichloroethene	2.0 U	20	100	60-140
1,1-Dichloroethane	2.0 U	20	100	70-135
cis-1,2-Dichloroethene	2.0 U	22	110	70-125
Chloroform	2.0 U	21	105	65-135
Carbon Tetrachloride	2.0 U	21	105	65-140
Benzene	2.0 U	20	100	80-120
1,2-Dichloroethane	2.0 U	22	110	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	19	95	75-120
1,1,2-Trichloroethane	2.0 U	24	120	75-125
Tetrachloroethene	2.0 U	21	105	45-150
Ethylbenzene	2.0 U	20	100	75-125
m,p-Xylenes	2.0 U	37	93	75-130
o-Xylene	2.0 U	18	90	80-120
1,1,2,2-Tetrachloroethane	2.0 U	25	125	65-130
1,2,4-Trimethylbenzene	2.0 U	18	90	75-130
1,3,5-Trimethylbenzene	2.0 U	18	90	75-130
Naphthalene	2.0 U	20	100	55-140
Bromofluorobenzene (SS)	77 %	98 %	98 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LM

Analysis Date: 02/08/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	16	80	50-145
1,1-Dichloroethene	2.0 U	18	90	70-130
trans-1,2-Dichloroethene	2.0 U	19	95	60-140
1,1-Dichloroethane	2.0 U	20	100	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	19	95	65-140
Benzene	2.0 U	20	100	80-120
1,2-Dichloroethane	2.0 U	23	115	70-130
Trichloroethene	2.0 U	19	95	70-125
Toluene	2.0 U	19	95	75-120
1,1,2-Trichloroethane	2.0 U	24	120	75-125
Tetrachloroethene	2.0 U	19	95	45-150
Ethylbenzene	2.0 U	20	100	75-125
m,p-Xylenes	2.0 U	36	90	75-130
o-Xylene	2.0 U	20	100	80-120
1,1,2,2-Tetrachloroethane	2.0 U	25	125	65-130
1,2,4-Trimethylbenzene	2.0 U	18	90	75-130
1,3,5-Trimethylbenzene	2.0 U	18	90	75-130
Naphthalene	2.0 U	20	100	55-140
Bromofluorobenzene (SS)	81 %	98 %	98 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LN

Analysis Date: 02/09/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	17	85	50-145
1,1-Dichloroethene	2.0 U	19	95	70-130
trans-1,2-Dichloroethene	2.0 U	20	100	60-140
1,1-Dichloroethane	2.0 U	20	100	70-135
cis-1,2-Dichloroethene	2.0 U	22	110	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	21	105	65-140
Benzene	2.0 U	20	100	80-120
1,2-Dichloroethane	2.0 U	24	120	70-130
Trichloroethene	2.0 U	21	105	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	22	110	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	39	98	75-130
o-Xylene	2.0 U	22	110	80-120
1,1,2,2-Tetrachloroethane	2.0 U	23	115	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	19	95	75-130
Naphthalene	2.0 U	19	95	55-140
Bromofluorobenzene (SS)	90 %	98 %	98 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LO

Analysis Date: 02/10/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	18	90	50-145
1,1-Dichloroethene	2.0 U	17	85	70-130
trans-1,2-Dichloroethene	2.0 U	19	95	60-140
1,1-Dichloroethane	2.0 U	19	95	70-135
cis-1,2-Dichloroethene	2.0 U	20	100	70-125
Chloroform	2.0 U	18	90	65-135
Carbon Tetrachloride	2.0 U	20	100	65-140
Benzene	2.0 U	20	100	80-120
1,2-Dichloroethane	2.0 U	21	105	70-130
Trichloroethene	2.0 U	19	95	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	20	100	75-125
Tetrachloroethene	2.0 U	19	95	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	39	98	75-130
o-Xylene	2.0 U	22	110	80-120
1,1,2,2-Tetrachloroethane	2.0 U	20	100	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	19	95	75-130
Naphthalene	2.0 U	18	90	55-140
Bromofluorobenzene (SS)	87 %	96 %	96 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LP

Analysis Date: 02/11/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	17	85	50-145
1,1-Dichloroethene	2.0 U	21	105	70-130
trans-1,2-Dichloroethene	2.0 U	20	100	60-140
1,1-Dichloroethane	2.0 U	19	95	70-135
cis-1,2-Dichloroethene	2.0 U	20	100	70-125
Chloroform	2.0 U	18	90	65-135
Carbon Tetrachloride	2.0 U	18	90	65-140
Benzene	2.0 U	20	100	80-120
1,2-Dichloroethane	2.0 U	21	105	70-130
Trichloroethene	2.0 U	18	90	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	20	100	75-125
Tetrachloroethene	2.0 U	18	90	45-150
Ethylbenzene	2.0 U	20	100	75-125
m,p-Xylenes	2.0 U	39	98	75-130
o-Xylene	2.0 U	17	85	80-120
1,1,2,2-Tetrachloroethane	2.0 U	20	100	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	20	100	75-130
Naphthalene	2.0 U	21	105	55-140
Bromofluorobenzene (SS)	84 %	96 %	96 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LQ

Analysis Date: 02/12/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	20	100	50-145
1,1-Dichloroethene	2.0 U	24	120	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	60-140
1,1-Dichloroethane	2.0 U	20	100	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	18	90	65-135
Carbon Tetrachloride	2.0 U	19	95	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	18	90	70-130
Trichloroethene	2.0 U	19	95	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	19	95	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	41	103	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	19	95	65-130
1,2,4-Trimethylbenzene	2.0 U	21	105	75-130
1,3,5-Trimethylbenzene	2.0 U	20	100	75-130
Naphthalene	2.0 U	18	90	55-140
Bromofluorobenzene (SS)	96 %	100 %	100 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LR

Analysis Date: 02/13/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	23	115	50-145
1,1-Dichloroethene	2.0 U	24	120	70-130
trans-1,2-Dichloroethene	2.0 U	22	110	60-140
1,1-Dichloroethane	2.0 U	21	105	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	21	105	65-140
Benzene	2.0 U	20	100	80-120
1,2-Dichloroethane	2.0 U	20	100	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	18	90	75-120
1,1,2-Trichloroethane	2.0 U	22	110	75-125
Tetrachloroethene	2.0 U	21	105	45-150
Ethylbenzene	2.0 U	20	100	75-125
m,p-Xylenes	2.0 U	40	100	75-130
o-Xylene	2.0 U	20	100	80-120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	20	100	75-130
Naphthalene	2.0 U	19	95	55-140
Bromofluorobenzene (SS)	88 %	98 %	98 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LT

Analysis Date: 02/19/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	20	100	50-145
1,1-Dichloroethene	2.0 U	22	110	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	60-140
1,1-Dichloroethane	2.0 U	21	105	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	22	110	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	21	105	70-130
Trichloroethene	2.0 U	22	110	70-125
Toluene	2.0 U	21	105	75-120
1,1,2-Trichloroethane	2.0 U	21	105	75-125
Tetrachloroethene	2.0 U	21	105	45-150
Ethylbenzene	2.0 U	22	110	75-125
m,p-Xylenes	2.0 U	43	108	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	65-130
1,2,4-Trimethylbenzene	2.0 U	21	105	75-130
1,3,5-Trimethylbenzene	2.0 U	21	105	75-130
Naphthalene	2.0 U	19	95	55-140
Bromofluorobenzene (SS)	91 %	103 %	103 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-01-95.0
Sample Date: 2/6/2013
Analysis Date: 02/06/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	18	90	19	95	5	50 - 145
1,1-Dichloroethene	2.0 U	17	85	18	90	6	70 - 130
trans-1,2-Dichloroethene	2.0 U	19	95	19	95	0	60 - 140
1,1-Dichloroethane	2.0 U	19	95	20	100	5	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	20	100	0	70 - 125
Chloroform	2.0 U	19	95	19	95	0	65 - 135
Carbon Tetrachloride	2.0 U	19	95	19	95	0	65 - 140
Benzene	2.0 U	20	100	20	100	0	80 - 120
1,2-Dichloroethane	2.0 U	21	105	21	105	0	70 - 130
Trichloroethene	24	42	90	42	90	0	70 - 125
Toluene	2.0 U	20	100	20	100	0	75 - 120
1,1,2-Trichloroethane	2.0 U	20	100	20	100	0	75 - 125
Tetrachloroethene	2.0 U	19	95	19	95	0	45 - 150
Ethylbenzene	2.0 U	21	105	21	105	0	75 - 125
m,p-Xylenes	2.0 U	40	100	39	98	3	75 - 130
o-Xylene	2.0 U	19	95	21	105	10	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	21	105	0	65 - 130
1,2,4-Trimethylbenzene	2.0 U	20	100	19	95	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	20	100	20	100	0	75 - 130
Naphthalene	2.0 U	18	90	18	90	0	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-02-129.0
Sample Date: 2/8/2013
Analysis Date: 02/08/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	21	105	20	100	5	50 - 145
1,1-Dichloroethene	2.0 U	17	85	18	90	6	70 - 130
trans-1,2-Dichloroethene	2.0 U	19	95	19	95	0	60 - 140
1,1-Dichloroethane	2.0 U	20	100	20	100	0	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	21	105	5	70 - 125
Chloroform	2.0 U	20	100	21	105	5	65 - 135
Carbon Tetrachloride	2.0 U	21	105	21	105	0	65 - 140
Benzene	2.0 U	20	100	20	100	0	80 - 120
1,2-Dichloroethane	2.0 U	23	115	22	110	4	70 - 130
Trichloroethene	2.0 U	20	100	21	105	5	70 - 125
Toluene	2.0 U	20	100	21	105	5	75 - 120
1,1,2-Trichloroethane	2.0 U	21	105	21	105	0	75 - 125
Tetrachloroethene	2.0 U	20	100	20	100	0	45 - 150
Ethylbenzene	2.0 U	21	105	22	110	5	75 - 125
m,p-Xylenes	2.0 U	39	98	40	100	3	75 - 130
o-Xylene	0.18 J	21	104	22	109	5	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	21	105	0	65 - 130
1,2,4-Trimethylbenzene	2.0 U	19	95	20	100	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	20	100	20	100	0	75 - 130
Naphthalene	2.0 U	18	90	18	90	0	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-02-153.1
Sample Date: 2/13/2013
Analysis Date: 02/13/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	20	100	21	105	5	50 - 145
1,1-Dichloroethene	2.0 U	21	105	22	110	5	70 - 130
trans-1,2-Dichloroethene	2.0 U	21	105	22	110	5	60 - 140
1,1-Dichloroethane	2.0 U	21	105	21	105	0	70 - 135
cis-1,2-Dichloroethene	2.0 U	21	105	21	105	0	70 - 125
Chloroform	2.0 U	22	110	21	105	5	65 - 135
Carbon Tetrachloride	2.0 U	20	100	22	110	10	65 - 140
Benzene	2.0 U	20	100	21	105	5	80 - 120
1,2-Dichloroethane	2.0 U	24	120	20	100	18	70 - 130
Trichloroethene	2.0 U	20	100	21	105	5	70 - 125
Toluene	2.0 U	19	95	20	100	5	75 - 120
1,1,2-Trichloroethane	2.0 U	24	120	20	100	18	75 - 125
Tetrachloroethene	2.0 U	19	95	21	105	10	45 - 150
Ethylbenzene	2.0 U	19	95	21	105	10	75 - 125
m,p-Xylenes	2.0 U	39	98	41	103	5	75 - 130
o-Xylene	2.0 U	20	100	21	105	5	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	25	125	20	100	22	65 - 130
1,2,4-Trimethylbenzene	2.0 U	19	95	20	100	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	19	95	20	100	5	75 - 130
Naphthalene	2.0 U	22	110	19	95	15	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-03-159.0
Sample Date: 2/19/2013
Analysis Date: 02/19/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	22	110	22	110	0	50 - 145
1,1-Dichloroethene	2.0 U	20	100	21	105	5	70 - 130
trans-1,2-Dichloroethene	2.0 U	21	105	21	105	0	60 - 140
1,1-Dichloroethane	2.0 U	22	110	21	105	5	70 - 135
cis-1,2-Dichloroethene	2.0 U	21	105	21	105	0	70 - 125
Chloroform	2.0 U	22	110	21	105	5	65 - 135
Carbon Tetrachloride	2.0 U	20	100	21	105	5	65 - 140
Benzene	2.0 U	21	105	21	105	0	80 - 120
1,2-Dichloroethane	2.0 U	24	120	21	105	13	70 - 130
Trichloroethene	2.0 U	20	100	22	110	10	70 - 125
Toluene	2.0 U	20	100	21	105	5	75 - 120
1,1,2-Trichloroethane	2.0 U	22	110	19	95	15	75 - 125
Tetrachloroethene	2.0 U	19	95	21	105	10	45 - 150
Ethylbenzene	2.0 U	20	100	21	105	5	75 - 125
m,p-Xylenes	2.0 U	39	98	43	108	10	75 - 130
o-Xylene	2.0 U	17	85	19	95	11	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	20	100	10	65 - 130
1,2,4-Trimethylbenzene	2.0 U	20	100	21	105	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	20	100	21	105	5	75 - 130
Naphthalene	2.0 U	20	100	19	95	5	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-04-102.7
Sample Date: 2/9/2013
Analysis Date: 02/09/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	20	100	20	100	0	50 - 145
1,1-Dichloroethene	2.0 U	16	80	16	80	0	70 - 130
trans-1,2-Dichloroethene	2.0 U	19	95	19	95	0	60 - 140
1,1-Dichloroethane	2.0 U	19	95	20	100	5	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	21	105	5	70 - 125
Chloroform	2.0 U	20	100	22	110	10	65 - 135
Carbon Tetrachloride	2.0 U	20	100	20	100	0	65 - 140
Benzene	2.0 U	20	100	20	100	0	80 - 120
1,2-Dichloroethane	2.0 U	23	115	26	130	12	70 - 130
Trichloroethene	2.0 U	19	95	20	100	5	70 - 125
Toluene	2.0 U	20	100	20	100	0	75 - 120
1,1,2-Trichloroethane	2.0 U	21	105	24	120	13	75 - 125
Tetrachloroethene	2.0 U	19	95	18	90	5	45 - 150
Ethylbenzene	2.0 U	21	105	20	100	5	75 - 125
m,p-Xylenes	2.0 U	38	95	37	93	3	75 - 130
o-Xylene	2.0 U	21	105	22	110	5	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	24	120	13	65 - 130
1,2,4-Trimethylbenzene	2.0 U	19	95	18	90	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	19	95	18	90	5	75 - 130
Naphthalene	2.0 U	18	90	20	100	11	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-05-107.9
Sample Date: 2/10/2013
Analysis Date: 02/10/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	20	100	19	95	5	50 - 145
1,1-Dichloroethene	2.0 U	16	80	18	90	12	70 - 130
trans-1,2-Dichloroethene	2.0 U	19	95	19	95	0	60 - 140
1,1-Dichloroethane	2.0 U	20	100	20	100	0	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	21	105	5	70 - 125
Chloroform	2.0 U	21	105	21	105	0	65 - 135
Carbon Tetrachloride	2.0 U	20	100	21	105	5	65 - 140
Benzene	2.0 U	20	100	20	100	0	80 - 120
1,2-Dichloroethane	2.0 U	25	125	24	120	4	70 - 130
Trichloroethene	0.55 J	20	97	21	102	5	70 - 125
Toluene	2.0 U	20	100	20	100	0	75 - 120
1,1,2-Trichloroethane	2.0 U	23	115	22	110	4	75 - 125
Tetrachloroethene	2.0 U	19	95	20	100	5	45 - 150
Ethylbenzene	2.0 U	20	100	20	100	0	75 - 125
m,p-Xylenes	2.0 U	37	93	38	95	3	75 - 130
o-Xylene	2.0 U	21	105	21	105	0	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	23	115	22	110	4	65 - 130
1,2,4-Trimethylbenzene	2.0 U	18	90	18	90	0	75 - 130
1,3,5-Trimethylbenzene	2.0 U	18	90	19	95	5	75 - 130
Naphthalene	2.0 U	17	85	17	85	0	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-05-142.4
Sample Date: 2/11/2013
Analysis Date: 02/11/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	20	100	20	100	0	50 - 145
1,1-Dichloroethene	2.0 U	21	105	21	105	0	70 - 130
trans-1,2-Dichloroethene	2.0 U	20	100	20	100	0	60 - 140
1,1-Dichloroethane	2.0 U	20	100	21	105	5	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	20	100	0	70 - 125
Chloroform	2.0 U	21	105	20	100	5	65 - 135
Carbon Tetrachloride	2.0 U	20	100	20	100	0	65 - 140
Benzene	2.0 U	20	100	20	100	0	80 - 120
1,2-Dichloroethane	2.0 U	22	110	21	105	5	70 - 130
Trichloroethene	2.0 U	20	100	20	100	0	70 - 125
Toluene	2.0 U	19	95	20	100	5	75 - 120
1,1,2-Trichloroethane	2.0 U	21	105	21	105	0	75 - 125
Tetrachloroethene	2.0 U	19	95	20	100	5	45 - 150
Ethylbenzene	2.0 U	20	100	21	105	5	75 - 125
m,p-Xylenes	2.0 U	38	95	40	100	5	75 - 130
o-Xylene	2.0 U	17	85	18	90	6	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	20	100	19	95	5	65 - 130
1,2,4-Trimethylbenzene	2.0 U	19	95	19	95	0	75 - 130
1,3,5-Trimethylbenzene	2.0 U	19	95	19	95	0	75 - 130
Naphthalene	2.0 U	19	95	19	95	0	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-03-107.8		WP-03-107.8-FD		**RPD**
Lab ID	SEI-80		SEI-80-FD		
Sample Date	2/11/2013		2/11/2013		
Date Analyzed	2/11/2013		2/11/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	2.0	U	2.0	U	NA
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-03-117.8		WP-03-117.8-D		**RPD**
Lab ID	SEI-87		SEI-87-FD		
Sample Date	2/11/2013		2/11/2013		
Date Analyzed	2/11/2013		2/11/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	2.0	U	2.0	U	NA
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-03-159.0		WP-03-159.0-D		**RPD**
Lab ID	SEI-106		SEI-106-FD		
Sample Date	2/19/2013		2/19/2013		
Date Analyzed	2/19/2013		2/19/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	2.0	U	2.0	U	NA
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-05-137.3		WP-05-137.3-D		**RPD**
Lab ID	SEI-78		SEI-78-FD		
Sample Date	2/11/2013		2/11/2013		
Date Analyzed	2/11/2013		2/11/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	2.0	U	2.0	U	NA
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-05-142.4		WP-05-142.4-D		**RPD**
Lab ID	SEI-82		SEI-82-FD		
Sample Date	2/11/2013		2/11/2013		
Date Analyzed	2/11/2013		2/11/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	2.0	U	2.0	U	NA
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Final Data Report for Laboratory Services

PREPARED FOR STONE ENVIRONMENTAL, INC.

SITE ID: SCOTIA NAVY DEPOT, SCOTIA, NY

Stone Project ID: 102305-R-C

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

DATES OF PERFORMANCE: February 18 - 21, 2013 (SDG-2)
REPORT DATE: March 28 , 2013



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STONE ENVIRONMENTAL INC

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MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 28, 2013

This data package presents the analytical results for groundwater samples analyzed by Stone Environmental, Inc. Laboratory (Stone) on-site at the Scotia Navy Depot Site in Scotia, New York. Samples in this sample delivery group (SDG-2) were collected at the Scotia Site between February 18 and 21, 2013. A total of 24 groundwater samples were collected during this period by Stone personnel from two borings: WP-07 and WP-08, including one field duplicate sample and two equipment blanks. Matrix spike and matrix spike duplicate (MS/MSD) sample pairs were analyzed in association with two of the parent groundwater samples. All samples in SDG-2 were received and analyzed at the mobile laboratory between February 18 and 21, 2013.

After sample collection, all samples were hand delivered to the mobile laboratory and kept refrigerated until analysis; therefore, temperatures of samples were not measured at receipt. The sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. As samples were received at the on-site laboratory, they were recorded on Stone's Sample Log Sheet. A copy of the Sample Log Sheet and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with the samples presented in this report were generated under a quality system that adheres to requirements

specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS), laboratory method blanks (VBLK), matrix spike and matrix spike duplicate samples (MS/MSDs) and field duplicate samples (FD)) are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards. Exceptions are noted below:

- VSTD Deficiencies:
    - No deficiencies noted.
- LCS Deficiencies:
    - No deficiencies noted.
- VBLK Deficiencies:
    - No deficiencies noted.
- MS/MSD Deficiencies:
    - Trichloroethene recoveries were below acceptance criteria (70-125%) for the MS (20% recovery) and MSD (10% recovery) samples associated with parent sample WP-08-84.9. No data were qualified on this basis.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

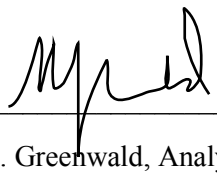
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

SAMPLE LOGIN SUMMARY

Sample Login Summary

Chain of Custody Records

List of Sample Vials Not Used in Analysis

List of Samples with Manual Integrations

102305-C Scotia Naval Depot
Sample Login Summary
SDG-2

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Comments	Lab ID Parent	TemperatureUnits
SEI-105	WP-07	000.01	Groundwater	WP-07-EB	Equipment Blank	2	TWM	2/18/2013	11:36 AM	SEI 10.5.x	HDE	2/18/2013	12:53 PM	6			C
SEI-112	WP-08	000.01	Groundwater	WP-08-EB	Equipment Blank	2	WAN	2/19/2013	3:28 PM	SEI 10.5.x	HDE	2/19/2013	3:52 PM	6			C
SEI-113	WP-07	067.60	Groundwater	WP-07-67.6	Normal Sample	2	TWM	2/19/2013	5:08 PM	SEI 10.5.x	HDE	2/19/2013	5:26 PM	6			C
SEI-114	WP-07	072.40	Groundwater	WP-07-72.4	Normal Sample	2	TWM	2/20/2013	8:54 AM	SEI 10.5.x	HDE	2/20/2013	9:10 AM	6			C
SEI-116	WP-07	077.40	Groundwater	WP-07-77.4	Normal Sample	2	TWM	2/20/2013	10:00 AM	SEI 10.5.x	HDE	2/20/2013	10:20 AM	6		SEI-116	C
SEI-116-FD	WP-07	077.40	Groundwater	WP-07-77.4-D	Field Duplicate	2	TWM	2/20/2013	10:00 AM	SEI 10.5.x	HDE	2/20/2013	10:20 AM	6		SEI-116	C
SEI-118	WP-07	082.40	Groundwater	WP-07-82.4	Normal Sample	2	TWM	2/20/2013	11:04 AM	SEI 10.5.x	HDE	2/20/2013	11:28 AM	6			C
SEI-119	WP-08	065.90	Groundwater	WP-08-65.9	Normal Sample	2	WAN	2/20/2013	11:09 AM	SEI 10.5.x	HDE	2/20/2013	11:28 AM	6			C
SEI-120	WP-07	090.20	Groundwater	WP-07-90.2	Normal Sample	2	TWM	2/20/2013	12:22 PM	SEI 10.5.x	HDE	2/20/2013	12:48 PM	6			C
SEI-121	WP-08	070.40	Groundwater	WP-08-70.4	Normal Sample	2	WAN	2/20/2013	11:47 AM	SEI 10.5.x	HDE	2/20/2013	12:48 PM	6			C
SEI-122	WP-08	075.70	Groundwater	WP-08-75.7	Normal Sample	2	WAN	2/20/2013	12:24 PM	SEI 10.5.x	HDE	2/20/2013	12:48 PM	6			C
SEI-123	WP-08	080.80	Groundwater	WP-08-80.8	Normal Sample	2	WAN	2/20/2013	12:52 PM	SEI 10.5.x	HDE	2/20/2013	1:37 PM	6			C
SEI-124	WP-07	095.20	Groundwater	WP-07-95.2	Normal Sample	2	TWM	2/20/2013	1:28 PM	SEI 10.5.x	HDE	2/20/2013	2:00 PM	6			C
SEI-125	WP-08	084.90	Groundwater	WP-08-84.9	Normal Sample	2	WAN	2/20/2013	1:32 PM	SEI 10.5.x	HDE	2/20/2013	2:00 PM	6		SEI-125	C
SEI-125-MS	WP-08	084.90	Groundwater	WP-08-84.9-MS	Matrix Spike	2	WAN	2/20/2013	1:32 PM	SEI 10.5.x	HDE	2/20/2013	2:00 PM	6		SEI-125	C
SEI-125-MSD	WP-08	084.90	Groundwater	WP-08-84.9-MSD	Matrix Spike Duplicate	2	WAN	2/20/2013	1:32 PM	SEI 10.5.x	HDE	2/20/2013	2:00 PM	6		SEI-125	C
SEI-128	WP-08	090.00	Groundwater	WP-08-90.0	Normal Sample	2	WAN	2/20/2013	2:01 PM	SEI 10.5.x	HDE	2/20/2013	3:10 PM	6			C
SEI-129	WP-08	095.00	Groundwater	WP-08-95.0	Normal Sample	2	WAN	2/20/2013	2:48 PM	SEI 10.5.x	HDE	2/20/2013	3:10 PM	6			C
SEI-130	WP-07	100.30	Groundwater	WP-07-100.3	Normal Sample	2	TWM	2/20/2013	2:27 PM	SEI 10.5.x	HDE	2/20/2013	3:10 PM	6			C
SEI-131	WP-07	105.20	Groundwater	WP-07-105.2	Normal Sample	2	TWM	2/20/2013	3:32 PM	SEI 10.5.x	HDE	2/20/2013	3:50 PM	6			C
SEI-132	WP-08	100.00	Groundwater	WP-08-100.0	Normal Sample	2	WAN	2/20/2013	3:24 PM	SEI 10.5.x	HDE	2/20/2013	3:50 PM	6			C
SEI-133	WP-08	105.00	Groundwater	WP-08-105.0	Normal Sample	2	WAN	2/20/2013	4:27 PM	SEI 10.5.x	HDE	2/20/2013	5:11 PM	6			C
SEI-134	WP-07	110.00	Groundwater	WP-07-110.0	Normal Sample	2	TWM	2/20/2013	4:55 PM	SEI 10.5.x	HDE	2/20/2013	5:11 PM	6			C
SEI-135	WP-08	110.00	Groundwater	WP-08-110.0	Normal Sample	2	WAN	2/20/2013	5:12 PM	SEI 10.5.x	HDE	2/20/2013	5:33 PM	6			C
SEI-136	WP-08	113.40	Groundwater	WP-08-113.4	Normal Sample	2	WAN	2/21/2013	8:52 AM	SEI 10.5.x	HDE	2/21/2013	9:41 AM	6			C
SEI-137	WP-07	115.20	Groundwater	WP-07-115.2	Normal Sample	2	TWM	2/21/2013	9:07 AM	SEI 10.5.x	HDE	2/21/2013	9:41 AM	6		SEI-137	C
SEI-137-MS	WP-07	115.20	Groundwater	WP-07-115.2-MS	Matrix Spike	2	TWM	2/21/2013	9:07 AM	SEI 10.5.x	HDE	2/21/2013	9:41 AM	6		SEI-137	C
SEI-137-MSD	WP-07	115.20	Groundwater	WP-07-115.2-MSD	Matrix Spike Duplicate	2	TWM	2/21/2013	9:07 AM	SEI 10.5.x	HDE	2/21/2013	9:41 AM	6		SEI-137	C

SDG-2

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-07-EB	TWM	2/18/13	11:36	HDE	2/18/13	12:53	1	2	2	–		✓		SEI-105	HDE	
WP-03~~6~~-159.0	WAN	2/19/13	11:42	|	2/19/13	12:03	1	2	2	–		✓		SEI-106	|	
WP-03~~6~~-159.0-D	⊥	⊥	⊥	|	|	|	1	2	2	–		✓		SEI-106-FD	|	
WP-03~~6~~-159.0-MS	WAN	2/19/13	11:42	|	|	|	1	2	2	–		✓		SEI-106-MS	|	
WP-03~~6~~-159.0-MSD	⊥	⊥	⊥	|	|	|	1	2	2	–		✓		SEI-106-MSD	|	
WP-03~~6~~-163.9	WAN		12:55	|	|	13:10	1	2	2	–		✓		SEI-110	|	
WP-03~~6~~-164.8	⊥		14:29	|	|	14:45	1	2	2	–		✓		SEI-111	|	
WP-08-EB	WAN		15:28	|	|	15:52	1	2	2	–		✓		SEI-112	|	
WP-07-67.6	TWM	⊥	17:08	|	⊥	17:26	1	2	2	–		✓		SEI-113	|	
WP-07-72.4	TWM	2/20/13	08:54	|	2/20/13	09:10	1	2	2	–		✓		SEI-114	|	
WP-07-77.4	TWM	|	10:00	|	|	10:20	1	2	2	–		✓		SEI-116	|	
WP-07-77.4-D	|	|	10:00	|	|	⊥	1	2	2	–		✓		SEI-116-FD	|	
WP-07-82.4	⊥	|	11:04	|	|	11:28	1	2	2	–		✓		SEI-118	|	
WP-08-65.9	WAN	|	11:09	|	|	⊥	1	2	2	–		✓		SEI-119	|	
WP-07-90.2	TWM	|	12:22	|	|	12:48	1	2	2	–		✓		SEI-120	|	
WP-08-70.4	WAN	|	11:47	|	|	|	1	2	2	–		✓		SEI-121	|	
WP-08-75.7	⊥	|	12:24	|	|	⊥	1	2	2	–		✓		SEI-122	|	
WP-08-80.8	WAN	|	12:52	|	|	13:37	1	2	2	–		✓		SEI-123	|	
WP-07-95.2	TWM	|	13:28	|	|	14:00	1	2	2	–		✓		SEI-124	|	
WP-08-84.9	WAN	⊥	13:32	⊥	⊥	⊥	1	2	2	–		✓		SEI-125	⊥	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.*n* Groundwater Profiling and KPRO Testing.
☐ _____

removed "b" from sample loc 8-159.0 and moved these WP-03 samples to SDG-1 so all WP-03 samples would be together.

MJS 3/4/13

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: i0-2305-c Scotia Naval Depot

Project Location: Scotia, NY

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

	Collected			Received							Analysis					
Sample ID	By	Date	Time	By	Date	Time	Type*	Container**	Number of Containers	Preservation***	ASTM D6520 & Modified 8021/8015	8260	Other _____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-08-84.9-MS	WAN	2/20/13	13:32	HDE	2/20/13	14:00	1	2	2	–		✓		SEI-125-MS	HDE	
WP-08-84.9-MSD	↓		13:32			↓	1	2	2	–		✓		SEI-125-MSD		
WP-08-90.0			14:07			15:10	1	2	2	–		✓		SEI-128		
WP-08-95.0	↓		14:48			↓	1	2	2	–		✓		SEI-129		
WP-07-100.3	TWM		14:27			↓	1	2	2	–		✓		SEI-130		
WP-07-105.2	↓		15:32			15:50	1	2	2	–		✓		SEI-131		
WP-08-100.0	WAN		15:24			↓	1	2	2	–		✓		SEI-132		
WP-08-105.0	~~TWM~~ WAN	~~ITE~~ 2/20/13	~~16:27~~ 16:55	~~ITE~~ 2/20/13		17:11	1	2	2	–		✓		SEI-133		
WP-07-110.0	TWM		16:55			↓	~~1~~	2	2	–		✓		SEI-134		
WP-08-110.0	WAN	↓	17:12		↓	17:33	1	2	2	–		✓		SEI-135		
WP-08-113.4	↓	2/21/13	08:52		2/21/13	09:41	1	2	2	–		✓		SEI-136		
WP-07-115.2	TWM	↓	09:07		↓	↓	~~1~~	2	2	–		✓		SEI-137		
WP-07-115.2-MS	↓		09:07			09:41	1	2	2	–		✓		SEI-137-MS		
WP-07-115.2-MSD	↓		09:07		↓	↓	1	2	2	–		✓		SEI-137-MSD	↓	

* Type of Sample: (1) water (2) soil
** Container: (1) bag (2) bottle (3) other _____
*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

102305-C Scotia Naval Depot
Sample Vials Not Used: SDG-2

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Vial(s) Not Used for Analysis
SEI-105	WP-07	000.01	Groundwater	WP-07-EB	Equipment Blank	2
SEI-112	WP-08	000.01	Groundwater	WP-08-EB	Equipment Blank	2
SEI-113	WP-07	067.60	Groundwater	WP-07-67.6	Normal Sample	2
SEI-114	WP-07	072.40	Groundwater	WP-07-72.4	Normal Sample	2
SEI-116	WP-07	077.40	Groundwater	WP-07-77.4	Normal Sample	2
SEI-116-FD	WP-07	077.40	Groundwater	WP-07-77.4-D	Field Duplicate	2
SEI-118	WP-07	082.40	Groundwater	WP-07-82.4	Normal Sample	2
SEI-119	WP-08	065.90	Groundwater	WP-08-65.9	Normal Sample	2
SEI-120	WP-07	090.20	Groundwater	WP-07-90.2	Normal Sample	2
SEI-121	WP-08	070.40	Groundwater	WP-08-70.4	Normal Sample	2
SEI-122	WP-08	075.70	Groundwater	WP-08-75.7	Normal Sample	2
SEI-123	WP-08	080.80	Groundwater	WP-08-80.8	Normal Sample	2
SEI-124	WP-07	095.20	Groundwater	WP-07-95.2	Normal Sample	2
SEI-128	WP-08	090.00	Groundwater	WP-08-90.0	Normal Sample	2
SEI-129	WP-08	095.00	Groundwater	WP-08-95.0	Normal Sample	2
SEI-130	WP-07	100.30	Groundwater	WP-07-100.3	Normal Sample	2
SEI-131	WP-07	105.20	Groundwater	WP-07-105.2	Normal Sample	2
SEI-132	WP-08	100.00	Groundwater	WP-08-100.0	Normal Sample	2
SEI-134	WP-07	110.00	Groundwater	WP-07-110.0	Normal Sample	2
SEI-135	WP-08	110.00	Groundwater	WP-08-110.0	Normal Sample	2
SEI-136	WP-08	113.40	Groundwater	WP-08-113.4	Normal Sample	2
SEI-137	WP-07	115.20	Groundwater	WP-07-115.2	Normal Sample	2
SEI-137-MS	WP-07	115.20	Groundwater	WP-07-115.2-MS	Matrix Spike	2
SEI-137-MSD	WP-07	115.20	Groundwater	WP-07-115.2-MSD	Matrix Spike Duplicate	2

Lab ID	Sample Name	Compound(s) Manually Integrated
SEI-116	WP-07-77.4	Chloroform
SEI-130	WP-07-100.3	1,1-Dichloroethene
SEI-132	WP-08-100.0	1,1-Dichloroethene
VSTD 2 from ical QA30218	VSTD 2 from ical QA30218	Vinyl Chloride, 1,1-Dichloroethene
VSTD LU	VSTD LU	Chlorobenzene-d5, Bromofluorobenzene, Ethylbenzene, 1,3,5-Trimethylbenzene

LABORATORY ANALYTICAL RESULTS

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/18/2013 - 02/21/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/18/2013 - 02/21/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-07	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		067.60		072.40		077.40		077.40		082.40		090.20		095.20	
Sample Name		WP-07-EB		WP-07-67.6		WP-07-72.4		WP-07-77.4-D		WP-07-77.4		WP-07-82.4		WP-07-90.2		WP-07-95.2	
Analysis Date		02/18/13 15:13	EB	02/19/13 17:40	N	02/20/13 09:25	N	02/20/13 10:54	FD	02/20/13 10:39	N	02/20/13 12:02	N	02/20/13 13:06	N	02/20/13 14:40	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	0.17	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	0.23	J	0.30	J	0.29	J	0.31	J	0.33	J	0.29	J	0.30	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	83		92		97		100		140		140		170	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	95	%	97	%	97	%	96	%	95	%	99	%	97	%

Depth	CAS #	100.30		105.20		110.00		115.20	
Sample Name		WP-07-100.3		WP-07-105.2		WP-07-110.0		WP-07-115.2	
Analysis Date		02/20/13 17:04	N	02/20/13 17:19	N	02/20/13 18:38	N	02/21/13 10:09	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	1.1	J	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	1.6	J	0.35	J	0.27	J	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	94	%	96	%	91	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/28/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/19/2013 - 02/21/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/19/2013 - 02/21/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-08	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		065.90		070.40		075.70		080.80		084.90		090.00		095.00	
Sample Name		WP-08-EB		WP-08-65.9		WP-08-70.4		WP-08-75.7		WP-08-80.8		WP-08-84.9		WP-08-90.0		WP-08-95.0	
Analysis Date		02/19/13 16:09	EB	02/20/13 11:47	N	02/20/13 13:38	N	02/20/13 13:54	N	02/20/13 14:09	N	02/20/13 14:55	N	02/20/13 16:01	N	02/20/13 16:16	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	0.37	J	0.26	J	0.32	J	0.36	J	0.31	J	0.40	J	0.24	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	27		68		79		84		90		120		140	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	97	%	98	%	98	%	97	%	98	%	97	%	94	%	96	%

Depth	CAS #	100.00		105.00		110.00		113.40	
Sample Name		WP-08-100.0		WP-08-105.0		WP-08-110.0		WP-08-113.4	
Analysis Date		02/20/13 17:35	N	02/20/13 18:22	N	02/20/13 18:53	N	02/21/13 09:54	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	0.42	J	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	0.40	J	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	180		0.78	J	0.19	J	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	97	%	92	%	95	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

QUALITY CONTROL SUMMARIES

Continuing Calibration Verification (VSTD)

Laboratory Method Blank Summaries (VBLK)

Laboratory Control Sample Summaries (LCS)

Matrix Spike / Matrix Spike Duplicate Sample Summaries (MS/MSD)

Field Duplicate Sample Summaries (FD)

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: LT
Analysis Date: 02/19/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	20.41	-2.1
1,1-Dichloroethene	19.85	.7
trans-1,2-Dichloroethene	20.15	-.7
1,1-Dichloroethane	20.9	-4.5
cis-1,2-Dichloroethene	20.91	-4.6
Chloroform	20.76	-3.8
Carbon Tetrachloride	19.81	1.0
Benzene	20.91	-4.6
1,2-Dichloroethane	22.21	-11.1
Trichloroethene	19.73	1.4
Toluene	20.03	-.2
1,1,2-Trichloroethane	21.29	-6.5
Tetrachloroethene	18.94	5.3
Ethylbenzene	20.64	-3.2
m,p-Xylenes	40.64	-1.6
o-Xylene	20.45	-2.3
1,1,2,2-Tetrachloroethane	21.03	-5.2
1,2,4-Trimethylbenzene	19.91	.4
1,3,5-Trimethylbenzene	19.52	2.4
Naphthalene	19.4	3.0
Bromofluorobenzene (SS)	101.4 %	101.4 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: LU
Analysis Date: 02/20/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	21.32	-6.6
1,1-Dichloroethene	20.61	-3.1
trans-1,2-Dichloroethene	20.9	-4.5
1,1-Dichloroethane	21.09	-5.5
cis-1,2-Dichloroethene	21.2	-6.0
Chloroform	21.21	-6.1
Carbon Tetrachloride	20.3	-1.5
Benzene	20.49	-2.4
1,2-Dichloroethane	21.48	-7.4
Trichloroethene	20.1	-.5
Toluene	19.35	3.2
1,1,2-Trichloroethane	21.84	-9.2
Tetrachloroethene	19.51	2.4
Ethylbenzene	20.23	-1.2
m,p-Xylenes	40.11	-.3
o-Xylene	20.18	-.9
1,1,2,2-Tetrachloroethane	21.37	-6.9
1,2,4-Trimethylbenzene	19.2	4.0
1,3,5-Trimethylbenzene	18.9	5.5
Naphthalene	19.37	3.2
Bromofluorobenzene (SS)	101.25 %	101.25 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: LV
Analysis Date: 02/21/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	19.86	.7
1,1-Dichloroethene	20.1	-.5
trans-1,2-Dichloroethene	20.72	-3.6
1,1-Dichloroethane	21.41	-7.1
cis-1,2-Dichloroethene	21.7	-8.5
Chloroform	21.28	-6.4
Carbon Tetrachloride	19.68	1.6
Benzene	21.32	-6.6
1,2-Dichloroethane	23.34	-16.7
Trichloroethene	20.2	-1.0
Toluene	20.44	-2.2
1,1,2-Trichloroethane	22.17	-10.9
Tetrachloroethene	19.18	4.1
Ethylbenzene	21.19	-6.0
m,p-Xylenes	41.97	-4.9
o-Xylene	21.54	-7.7
1,1,2,2-Tetrachloroethane	21.74	-8.7
1,2,4-Trimethylbenzene	20.8	-4.0
1,3,5-Trimethylbenzene	20.76	-3.8
Naphthalene	19.45	2.8
Bromofluorobenzene (SS)	102.5 %	102.5 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LS
Date Analyzed	2/18/2013

Analyte	**Result (ug/L)**	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	86	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-RC
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LT
Date Analyzed	2/19/2013

Analyte	**Result (ug/L)**	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	91	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-RC
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LU
Date Analyzed	2/20/2013

Analyte	**Result (ug/L)**	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	89	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-RC
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LV
Date Analyzed	2/21/2013

Analyte	**Result (ug/L)**	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	93	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-RC
Laboratory Control Sample Summary

QC Batch: LS

Analysis Date: 02/18/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	21	105	50-145
1,1-Dichloroethene	2.0 U	23	115	70-130
trans-1,2-Dichloroethene	2.0 U	22	110	60-140
1,1-Dichloroethane	2.0 U	21	105	70-135
cis-1,2-Dichloroethene	2.0 U	22	110	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	20	100	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	20	100	70-130
Trichloroethene	2.0 U	21	105	70-125
Toluene	2.0 U	21	105	75-120
1,1,2-Trichloroethane	2.0 U	19	95	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	42	105	75-130
o-Xylene	2.0 U	22	110	80-120
1,1,2,2-Tetrachloroethane	2.0 U	19	95	65-130
1,2,4-Trimethylbenzene	2.0 U	22	110	75-130
1,3,5-Trimethylbenzene	2.0 U	21	105	75-130
Naphthalene	2.0 U	19	95	55-140
Bromofluorobenzene (SS)	86 %	107 %	107 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-RC
Laboratory Control Sample Summary

QC Batch: LT

Analysis Date: 02/19/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	20	100	50-145
1,1-Dichloroethene	2.0 U	22	110	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	60-140
1,1-Dichloroethane	2.0 U	21	105	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	22	110	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	21	105	70-130
Trichloroethene	2.0 U	22	110	70-125
Toluene	2.0 U	21	105	75-120
1,1,2-Trichloroethane	2.0 U	21	105	75-125
Tetrachloroethene	2.0 U	21	105	45-150
Ethylbenzene	2.0 U	22	110	75-125
m,p-Xylenes	2.0 U	43	108	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	65-130
1,2,4-Trimethylbenzene	2.0 U	21	105	75-130
1,3,5-Trimethylbenzene	2.0 U	21	105	75-130
Naphthalene	2.0 U	19	95	55-140
Bromofluorobenzene (SS)	91 %	103 %	103 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-RC
Laboratory Control Sample Summary

QC Batch: LU

Analysis Date: 02/20/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	22	110	50-145
1,1-Dichloroethene	2.0 U	25	125	70-130
trans-1,2-Dichloroethene	2.0 U	22	110	60-140
1,1-Dichloroethane	2.0 U	22	110	70-135
cis-1,2-Dichloroethene	2.0 U	23	115	70-125
Chloroform	2.0 U	21	105	65-135
Carbon Tetrachloride	2.0 U	22	110	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	23	115	70-130
Trichloroethene	2.0 U	21	105	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	23	115	75-125
Tetrachloroethene	2.0 U	21	105	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	41	103	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	23	115	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	20	100	75-130
Naphthalene	2.0 U	20	100	55-140
Bromofluorobenzene (SS)	89 %	104 %	104 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-RC
Laboratory Control Sample Summary

QC Batch: LV

Analysis Date: 02/21/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	20	100	50-145
1,1-Dichloroethene	2.0 U	23	115	70-130
trans-1,2-Dichloroethene	2.0 U	22	110	60-140
1,1-Dichloroethane	2.0 U	21	105	70-135
cis-1,2-Dichloroethene	2.0 U	22	110	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	20	100	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	23	115	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	22	110	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	41	103	75-130
o-Xylene	2.0 U	22	110	80-120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	65-130
1,2,4-Trimethylbenzene	2.0 U	21	105	75-130
1,3,5-Trimethylbenzene	2.0 U	20	100	75-130
Naphthalene	2.0 U	20	100	55-140
Bromofluorobenzene (SS)	93 %	106 %	106 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-07-115.2
Sample Date: 2/21/2013
Analysis Date: 02/21/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	21	105	19	95	10	50 - 145
1,1-Dichloroethene	2.0 U	21	105	20	100	5	70 - 130
trans-1,2-Dichloroethene	2.0 U	21	105	20	100	5	60 - 140
1,1-Dichloroethane	2.0 U	21	105	21	105	0	70 - 135
cis-1,2-Dichloroethene	2.0 U	21	105	21	105	0	70 - 125
Chloroform	2.0 U	20	100	20	100	0	65 - 135
Carbon Tetrachloride	2.0 U	20	100	20	100	0	65 - 140
Benzene	2.0 U	21	105	21	105	0	80 - 120
1,2-Dichloroethane	2.0 U	21	105	22	110	5	70 - 130
Trichloroethene	2.0 U	20	100	20	100	0	70 - 125
Toluene	2.0 U	21	105	21	105	0	75 - 120
1,1,2-Trichloroethane	2.0 U	20	100	21	105	5	75 - 125
Tetrachloroethene	2.0 U	20	100	19	95	5	45 - 150
Ethylbenzene	2.0 U	21	105	20	100	5	75 - 125
m,p-Xylenes	2.0 U	42	105	40	100	5	75 - 130
o-Xylene	2.0 U	21	105	22	110	5	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	20	100	21	105	5	65 - 130
1,2,4-Trimethylbenzene	2.0 U	19	95	18	90	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	19	95	18	90	5	75 - 130
Naphthalene	2.0 U	15	75	15	75	0	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-08-84.9
Sample Date: 2/20/2013
Analysis Date: 02/20/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	20	100	21	105	5	50 - 145
1,1-Dichloroethene	2.0 U	18	90	20	100	11	70 - 130
trans-1,2-Dichloroethene	2.0 U	20	100	20	100	0	60 - 140
1,1-Dichloroethane	2.0 U	20	100	21	105	5	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	21	105	5	70 - 125
Chloroform	0.31 J	21	103	22	108	5	65 - 135
Carbon Tetrachloride	2.0 U	20	100	20	100	0	65 - 140
Benzene	2.0 U	21	105	21	105	0	80 - 120
1,2-Dichloroethane	2.0 U	22	110	23	115	4	70 - 130
Trichloroethene	90	94	20 *	92	10 *	2	70 - 125
Toluene	2.0 U	22	110	21	105	5	75 - 120
1,1,2-Trichloroethane	2.0 U	20	100	21	105	5	75 - 125
Tetrachloroethene	2.0 U	19	95	19	95	0	45 - 150
Ethylbenzene	2.0 U	22	110	21	105	5	75 - 125
m,p-Xylenes	2.0 U	44	110	42	105	5	75 - 130
o-Xylene	2.0 U	22	110	22	110	0	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	20	100	21	105	5	65 - 130
1,2,4-Trimethylbenzene	2.0 U	22	110	21	105	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	22	110	21	105	5	75 - 130
Naphthalene	2.0 U	19	95	19	95	0	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-07-77.4		WP-07-77.4-D		**RPD**
Lab ID	SEI-116		SEI-116-FD		
Sample Date	2/20/2013		2/20/2013		
Date Analyzed	2/20/2013		2/20/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	0.31	J	0.29	J	7
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	100		97		3
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Final Data Report for Laboratory Services

PREPARED FOR STONE ENVIRONMENTAL, INC.

SITE ID: SCOTIA NAVY DEPOT, SCOTIA, NY

Stone Project ID: 102305-R-C

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

DATES OF PERFORMANCE: February 22 – March 4, 2013 (SDG-3)
REPORT DATE: March 29 , 2013



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STONE ENVIRONMENTAL INC

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MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 29, 2013

This data package presents the analytical results for groundwater samples analyzed by Stone Environmental, Inc. Laboratory (Stone) on-site at the Scotia Navy Depot Site in Scotia, New York. Samples in this sample delivery group (SDG-3) were collected at the Scotia Site between February 21 and March 1, 2013. A total of 63 groundwater samples were collected during this period by Stone personnel from six borings: WP-06 and WP-09 through WP-13, including three field duplicate samples and seven equipment blanks. Matrix spike and matrix spike duplicate (MS/MSD) sample pairs were analyzed in association with four of the parent groundwater samples. All samples in SDG-3 were received and analyzed at the mobile laboratory between February 21 and March 1, 2013.

After sample collection, all samples were hand delivered to the mobile laboratory and kept refrigerated until analysis; therefore, temperatures of samples were not measured at receipt. The sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. As samples were received at the on-site laboratory, they were recorded on Stone's Sample Log Sheet. A copy of the Sample Log Sheet and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with the samples presented in this report were generated under a quality system that adheres to requirements

specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS), laboratory method blanks (VBLK), matrix spike and matrix spike duplicate samples (MS/MSDs) and field duplicate samples (FD)) are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards. Exceptions are noted below:

- VSTD Deficiencies:
    - No deficiencies noted.
- LCS Deficiencies:
    - No deficiencies noted.
- VBLK Deficiencies:
    - No deficiencies noted.
- MS/MSD Deficiencies:
    - Trichloroethene recoveries were below acceptance criteria (70-125%) for the MS (45% recovery) and MSD (35% recovery) samples associated with parent sample WP-09-116.2. No data were qualified on this basis.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

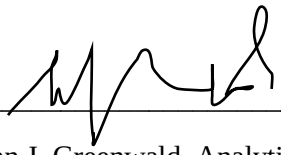
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

SAMPLE LOGIN SUMMARY

Sample Login Summary

Chain of Custody Records

List of Sample Vials Not Used in Analysis

List of Samples with Manual Integrations

102305-C Scotia Naval Depot
Sample Login Summary
SDG-3

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Temp. Units	Comments
SEI-140	WP-06	000.01	Groundwater	WP-06-EB	Equipment Blank	2	WAN	2/21/2013	10:40 AM	SEI 10.5.x	HDE	2/22/2013	9:00 AM	6	C	
SEI-141	WP-06	072.00	Groundwater	WP-06-72.0	Normal Sample	2	WAN	2/22/2013	1:19 PM	SEI 10.5.x	HDE	2/22/2013	1:42 PM	6	C	
SEI-141-MS	WP-06	072.00	Groundwater	WP-06-72.0-MS	Matrix Spike	2	WAN	2/22/2013	1:19 PM	SEI 10.5.x	HDE	2/22/2013	1:42 PM	6	C	
SEI-141-MSD	WP-06	072.00	Groundwater	WP-06-72.0-MSD	Matrix Spike Duplicate	2	WAN	2/22/2013	1:19 PM	SEI 10.5.x	HDE	2/22/2013	1:42 PM	6	C	
SEI-144	WP-06	077.00	Groundwater	WP-06-77.0	Normal Sample	2	WAN	2/22/2013	2:01 PM	SEI 10.5.x	HDE	2/22/2013	2:40 PM	6	C	
SEI-145	WP-06	082.00	Groundwater	WP-06-82.0	Normal Sample	2	WAN	2/22/2013	3:10 PM	SEI 10.5.x	HDE	2/22/2013	3:30 PM	6	C	
SEI-145-FD	WP-06	082.00	Groundwater	WP-06-82.0-D	Field Duplicate	2	WAN	2/22/2013	3:10 PM	SEI 10.5.x	HDE	2/22/2013	3:30 PM	6	C	
SEI-147	WP-06	087.00	Groundwater	WP-06-87.0	Normal Sample	2	WAN	2/22/2013	3:59 PM	SEI 10.5.x	HDE	2/22/2013	4:11 PM	6	C	
SEI-148	WP-06	092.00	Groundwater	WP-06-92.0	Normal Sample	2	TWM	2/25/2013	11:51 AM	SEI 10.5.x	HDE	2/25/2013	12:08 PM	6	C	
SEI-150	WP-06	097.00	Groundwater	WP-06-97.0	Normal Sample	2	TWM	2/25/2013	12:53 PM	SEI 10.5.x	HDE	2/25/2013	1:08 PM	6	C	
SEI-149	WP-09	000.01	Groundwater	WP-09-EB	Equipment Blank	2	WJW	2/25/2013	11:50 AM	SEI 10.5.x	HDE	2/25/2013	12:08 PM	6	C	
SEI-152	WP-09	072.00	Groundwater	WP-09-72.0	Normal Sample	2	WJW	2/25/2013	4:50 PM	SEI 10.5.x	HDE	2/25/2013	5:10 PM	6	C	
SEI-153	WP-09	077.00	Groundwater	WP-09-77.0	Normal Sample	2	WJW	2/26/2013	8:41 AM	SEI 10.5.x	HDE	2/26/2013	9:31 AM	6	C	
SEI-154	WP-09	082.10	Groundwater	WP-09-82.1	Normal Sample	2	WJW	2/26/2013	9:54 AM	SEI 10.5.x	HDE	2/26/2013	10:34 AM	6	C	
SEI-155	WP-09	087.20	Groundwater	WP-09-87.2	Normal Sample	2	WJW	2/26/2013	10:43 AM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-156	WP-09	092.00	Groundwater	WP-09-92.0	Normal Sample	2	WJW	2/26/2013	11:22 AM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-157	WP-09	097.10	Groundwater	WP-09-97.1	Normal Sample	2	WJW	2/26/2013	12:11 PM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-160	WP-09	101.80	Groundwater	WP-09-101.8	Normal Sample	2	WJW	2/26/2013	1:05 PM	SEI 10.5.x	HDE	2/26/2013	1:34 PM	6	C	
SEI-162	WP-09	106.80	Groundwater	WP-09-106.8	Normal Sample	2	WJW	2/26/2013	2:02 PM	SEI 10.5.x	HDE	2/26/2013	2:56 PM	6	C	
SEI-162-FD	WP-09	106.80	Groundwater	WP-09-106.8-D	Field Duplicate	2	WJW	2/26/2013	2:02 PM	SEI 10.5.x	HDE	2/26/2013	2:56 PM	6	C	
SEI-167	WP-09	112.00	Groundwater	WP-09-112.0	Normal Sample	2	WJW	2/26/2013	2:44 PM	SEI 10.5.x	HDE	2/26/2013	3:31 PM	6	C	
SEI-168	WP-09	116.20	Groundwater	WP-09-116.2	Normal Sample	2	WJW	2/26/2013	3:34 PM	SEI 10.5.x	HDE	2/26/2013	3:59 PM	6	C	
SEI-168-MS	WP-09	116.20	Groundwater	WP-09-116.2-MS	Matrix Spike	2	WJW	2/26/2013	3:34 PM	SEI 10.5.x	HDE	2/26/2013	3:59 PM	6	C	
SEI-168-MSD	WP-09	116.20	Groundwater	WP-09-116.2-MSD	Matrix Spike Duplicate	2	WJW	2/26/2013	3:34 PM	SEI 10.5.x	HDE	2/26/2013	3:59 PM	6	C	
SEI-151	WP-10	000.01	Groundwater	WP-10-EB	Equipment Blank	2	TWM	2/25/2013	4:23 PM	SEI 10.5.x	HDE	2/25/2013	5:10 PM	6	C	
SEI-203	WP-10	000.02	Groundwater	WP-10-EB-A	Equipment Blank	2	TWM	3/1/2013	10:40 AM	SEI 10.5.x	HDE	3/1/2013	1:35 PM	6	C	
SEI-158	WP-10	068.00	Groundwater	WP-10-68.0	Normal Sample	2	TWM	2/26/2013	11:04 AM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-159	WP-10	073.00	Groundwater	WP-10-73.0	Normal Sample	2	TWM	2/26/2013	11:58 AM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-161	WP-10	078.00	Groundwater	WP-10-78.0	Normal Sample	2	TWM	2/26/2013	12:47 PM	SEI 10.5.x	HDE	2/26/2013	1:34 PM	6	C	
SEI-164	WP-10	083.00	Groundwater	WP-10-83.0	Normal Sample	2	TWM	2/26/2013	1:30 PM	SEI 10.5.x	HDE	2/26/2013	2:56 PM	6	C	
SEI-165	WP-10	088.00	Groundwater	WP-10-88.0	Normal Sample	2	TWM	2/26/2013	2:16 PM	SEI 10.5.x	HDE	2/26/2013	2:56 PM	6	C	
SEI-166	WP-10	093.00	Groundwater	WP-10-93.0	Normal Sample	2	TWM	2/26/2013	3:05 PM	SEI 10.5.x	HDE	2/26/2013	3:31 PM	6	C	
SEI-171	WP-10	098.00	Groundwater	WP-10-98.0	Normal Sample	2	TWM	2/26/2013	4:04 PM	SEI 10.5.x	HDE	2/26/2013	4:15 PM	6	C	
SEI-172	WP-10	103.00	Groundwater	WP-10-103.0	Normal Sample	2	TWM	2/27/2013	8:59 AM	SEI 10.5.x	HDE	2/27/2013	9:30 AM	6	C	
SEI-174	WP-10	108.00	Groundwater	WP-10-108.0	Normal Sample	2	TWM	2/27/2013	10:22 AM	SEI 10.5.x	HDE	2/27/2013	10:57 AM	6	C	
SEI-175	WP-10	112.80	Groundwater	WP-10-112.8	Normal Sample	2	TWM	2/27/2013	11:23 AM	SEI 10.5.x	HDE	2/27/2013	12:17 PM	6	C	
SEI-204	WP-10	118.00	Groundwater	WP-10-118.0	Normal Sample	2	TWM	3/1/2013	2:54 PM	SEI 10.5.x	HDE	3/1/2013	3:08 PM	6	C	
SEI-205	WP-10	123.00	Groundwater	WP-10-123.0	Normal Sample	2	TWM	3/1/2013	3:41 PM	SEI 10.5.x	HDE	3/1/2013	4:21 PM	6	C	
SEI-206	WP-10	128.00	Groundwater	WP-10-128.0	Normal Sample	2	TWM	3/1/2013	4:28 PM	SEI 10.5.x	HDE	3/1/2013	4:40 PM	6	C	
SEI-207	WP-10	133.00	Groundwater	WP-10-133.0	Normal Sample	2	TWM	3/4/2013	12:31 PM	SEI 10.5.x	HDE	3/4/2013	1:15 PM	6	C	
SEI-207-MS	WP-10	133.00	Groundwater	WP-10-133.0-MS	Matrix Spike	2	TWM	3/4/2013	12:31 PM	SEI 10.5.x	HDE	3/4/2013	1:15 PM	6	C	
SEI-207-MSD	WP-10	133.00	Groundwater	WP-10-133.0-MSD	Matrix Spike Duplicate	2	TWM	3/4/2013	12:31 PM	SEI 10.5.x	HDE	3/4/2013	1:15 PM	6	C	
SEI-210	WP-10	136.30	Groundwater	WP-10-136.3	Normal Sample	2	TWM	3/4/2013	1:41 PM	SEI 10.5.x	HDE	3/4/2013	3:06 PM	6	C	
SEI-173	WP-11	000.01	Groundwater	WP-11-EB	Equipment Blank	2	WJW	2/27/2013	7:45 AM	SEI 10.5.x	HDE	2/27/2013	9:30 AM	6	C	
SEI-176	WP-11	071.90	Groundwater	WP-11-71.9	Normal Sample	2	WJW	2/27/2013	10:52 AM	SEI 10.5.x	HDE	2/27/2013	12:17 PM	6	C	
SEI-177	WP-11	076.90	Groundwater	WP-11-76.9	Normal Sample	2	WJW	2/27/2013	11:42 AM	SEI 10.5.x	HDE	2/27/2013	12:17 PM	6	C	
SEI-178	WP-11	081.90	Groundwater	WP-11-81.9	Normal Sample	2	WJW	2/27/2013	12:48 PM	SEI 10.5.x	HDE	2/27/2013	1:14 PM	6	C	
SEI-179	WP-11	087.00	Groundwater	WP-11-87.0	Normal Sample	2	WJW	2/27/2013	1:50 PM	SEI 10.5.x	HDE	2/27/2013	2:40 PM	6	C	
SEI-180	WP-11	091.60	Groundwater	WP-11-91.6	Normal Sample	2	WJW	2/27/2013	2:56 PM	SEI 10.5.x	HDE	2/27/2013	3:32 PM	6	C	
SEI-182	WP-11	094.20	Groundwater	WP-11-94.2	Normal Sample	2	WJW	2/27/2013	4:00 PM	SEI 10.5.x	HDE	2/27/2013	4:14 PM	6	C	
SEI-181	WP-12	000.01	Groundwater	WP-12-EB	Equipment Blank	2	TWM	2/27/2013	1:27 PM	SEI 10.5.x	HDE	2/27/2013	4:14 PM	6	C	
SEI-183	WP-12	073.00	Groundwater	WP-12-73.0	Normal Sample	2	TWM	2/27/2013	4:53 PM	SEI 10.5.x	HDE	2/27/2013	5:05 PM	6	C	
SEI-184	WP-12	078.00	Groundwater	WP-12-78.0	Normal Sample	2	TWM	2/28/2013	9:05 AM	SEI 10.5.x	HDE	2/28/2013	10:20 AM	6	C	
SEI-185	WP-12	083.00	Groundwater	WP-12-83.0	Normal Sample	2	TWM	2/28/2013	9:55 AM	SEI 10.5.x	HDE	2/28/2013	10:20 AM	6	C	

102305-C Scotia Naval Depot
Sample Login Summary
SDG-3

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Temp. Units	Comments
SEI-187	WP-12	088.00	Groundwater	WP-12-88.0	Normal Sample	2	TWM	2/28/2013	11:02 AM	SEI 10.5.x	HDE	2/28/2013	1:24 PM	6	C	
SEI-188	WP-12	093.00	Groundwater	WP-12-93.0	Normal Sample	2	TWM	2/28/2013	11:53 AM	SEI 10.5.x	HDE	2/28/2013	1:24 PM	6	C	
SEI-189	WP-12	098.00	Groundwater	WP-12-98.0	Normal Sample	2	TWM	2/28/2013	12:52 PM	SEI 10.5.x	HDE	2/28/2013	1:24 PM	6	C	
SEI-190	WP-12	103.00	Groundwater	WP-12-103.0	Normal Sample	2	TWM	2/28/2013	1:56 PM	SEI 10.5.x	HDE	2/28/2013	2:34 PM	6	C	
SEI-191	WP-12	108.00	Groundwater	WP-12-108.0	Normal Sample	2	TWM	2/28/2013	3:05 PM	SEI 10.5.x	HDE	2/28/2013	3:20 PM	6	C	
SEI-195	WP-12	113.00	Groundwater	WP-12-113.0	Normal Sample	2	TWM	2/28/2013	4:12 PM	SEI 10.5.x	HDE	2/28/2013	4:35 PM	6	C	
SEI-199	WP-12	118.00	Groundwater	WP-12-118.0	Normal Sample	2	TWM	3/1/2013	8:32 AM	SEI 10.5.x	HDE	3/1/2013	8:54 AM	6	C	
SEI-200	WP-12	123.00	Groundwater	WP-12-123.0	Normal Sample	2	TWM	3/1/2013	9:37 AM	SEI 10.5.x	HDE	3/1/2013	10:40 AM	6	C	
SEI-186	WP-13	000.01	Groundwater	WP-13-EB	Equipment Blank	2	WJW	2/28/2013	9:25 AM	SEI 10.5.x	HDE	2/28/2013	10:20 AM	6	C	
SEI-192	WP-13	068.00	Groundwater	WP-13-68.0	Normal Sample	2	WJW	2/28/2013	2:54 PM	SEI 10.5.x	HDE	2/28/2013	3:20 PM	6	C	
SEI-192-MS	WP-13	068.00	Groundwater	WP-13-68.0-MS	Matrix Spike	2	WJW	2/28/2013	2:54 PM	SEI 10.5.x	HDE	2/28/2013	3:20 PM	6	C	
SEI-192-MSD	WP-13	068.00	Groundwater	WP-13-68.0-MSD	Matrix Spike Duplicate	2	WJW	2/28/2013	2:54 PM	SEI 10.5.x	HDE	2/28/2013	3:20 PM	6	C	
SEI-196	WP-13	072.90	Groundwater	WP-13-72.9	Normal Sample	2	WJW	2/28/2013	3:43 PM	SEI 10.5.x	HDE	2/28/2013	4:35 PM	6	C	
SEI-196-FD	WP-13	072.90	Groundwater	WP-13-72.9-D	Field Duplicate	2	WJW	2/28/2013	3:43 PM	SEI 10.5.x	HDE	2/28/2013	4:35 PM	6	C	
SEI-198	WP-13	077.80	Groundwater	WP-13-77.8	Normal Sample	2	WJW	3/1/2013	8:18 AM	SEI 10.5.x	HDE	3/1/2013	8:54 AM	6	C	
SEI-201	WP-13	082.80	Groundwater	WP-13-82.8	Normal Sample	2	WJW	3/1/2013	9:48 AM	SEI 10.5.x	HDE	3/1/2013	10:40 AM	6	C	
SEI-202	WP-13	087.90	Groundwater	WP-13-87.9	Normal Sample	2	WJW	3/1/2013	10:47 AM	SEI 10.5.x	HDE	3/1/2013	11:42 AM	6	C	

SDG-3

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scoha Naval Depot

Project Location: Scoha, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-06-EB	WAN	2121/13	10:40	HDE	2122/13	09:00	1	2	2	–		✓		SE1-140	HDE	
WP-06-72.0	WAN	2122/13	13:19			13:42	1	2	2	–		✓		SE1-141		
WP-06-72.0-MS			13:19			13:42	1	2	2	–		✓		SE1-141-MS		
WP-06-72.0-MSD			13:19			13:42	1	2	2	–		✓		SE1-141-MSD		
WP-06-77.0			14:07			14:40	1	2	2	–		✓		SE1-144		
WP-06-82.0			15:10			15:30	1	2	2	–		✓		SE1-145		
WP-06-82.0-D			15:10			1	1	2	2	–		✓		SE1-145-FD		
WP-06-87.0			~~15:59~~ 15:55 ~~SSE~~ 2122/13			16:11	1	2	2	–		✓		SE1-147		
WP-06-92.0	TWM	2125/13	11:51		2125/13	12:08	1	2	2	–		✓		SE1-148		
WP-09-EB	WJW		11:50			1	1	2	2	–		✓		SE1-149		
WP-06-97.0	TWM		12:53			13:08	1	2	2	–		✓		SE1-150		
WP-18-EB	1		16:23			17:10	1	2	2	–		✓		SE1-151		
WP-09-72.0	WJW		16:50			1	1	2	2	–		✓		SE1-152		
WP-09-77.0		2126/13	08:41		2126/13	09:31	1	2	2	–		✓		SE1-153		
WP-09-82.1			09:54			10:34	1	2	2	–		✓		SE1-154		
WP-09-87.2			10:43			12:55	1	2	2	–		✓		SE1-155		
WP-09-92.0			11:22				1	2	2	–		✓		SE1-156		
WP-09-97.1			12:11				1	2	2	–		✓		SE1-157		
WP-10-68.0	TWM		11:04				1	2	2	–		✓		SE1-158		
WP-10-73.0	1		11:58				1	2	2	–		✓		SE1-159		

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.*n* Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-09-101.8	WJK	2126/13	13:05	HOE	2126/13	13:34	1	2	2	–		✓		SE1-160	HOE	
WP-10-78.0	TWM		12:47			⊥	1	2	2	–		✓		SE1-161		
WP-09-106.8	WJW		14:02			1456	1	2	2	–		✓		SE1-162		
WP-09-106.8-D	⊥		⊥				1	2	2	–		✓		SE1-162-FD		
WP-10-83.0	TWM		13:30				1	2	2	–		✓		SE1-164		
WP-10-88.0	⊥		14:16			⊥	1	2	2	–		✓		SE1-165		
WP-10-93.0	TWM		15:05			15:31	1	2	2	–		✓		SE1-166		
WP-09-112.0	WJW		14:44			⊥	1	2	2	–		✓		SE1-167		
WP-09-116.2			15:34			15:59	1	2	2	–		✓		SE1-168		
WP-09-116.2-MS			⊥			⊥	1	2	2	–		✓		SE1-168-MS		
WP-09-116.2-MSD	⊥						1	2	2	–		✓		SE1-168-MSD		
WP-10-95.0	TWM	—	16:04		—	16:15	1	2	2	–		✓		SE1-171		
WP-10-103.0	⊥	2127/13	08:59		2127/13	09:30	1	2	2	–		✓		SE1-172		
WP-11-E3	WJW		07:45			⊥	1	2	2	–		✓		SE1-173		
WP-10-108.0	TWM		10:22			10:57	1	2	2	–		✓		SE1-174		
WP-10-112.8	⊥		11:23			12:17	1	2	2	–		✓		SE1-175		
WP-11-71.9	WJW		10:52			⊥	1	2	2	–		✓		SE1-176		
WP-11-76.9			11:42				1	2	2	–		✓		SE1-177		
WP-11-81.9			12:48			13:14	1	2	2	–		✓		SE1-178		
WP-11-87.0	⊥	⊥	13:50	⊥	⊥	14:40	1	2	2	–		✓		SE1-179	⊥	

Sampling in accordance with Method / SEI SOP:
- ☐ SEI 10.5.*n* Groundwater Profiling and KPRO Testing.
- ☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-c Scotia Naval Depot.

Project Location: Scotia, NY

	Collected			Received							Analysis					
Sample ID	By	Date (Sampling in accordance with Method / SEI SOP: ☑ SEI 10.5.n Groundwater Profiling and KPRO Testing. ☐ ____)	Time	By	Date	Time	Type*	Container**	Number of Containers	Preservation***	ASTM D6520 & Modified 8021/8015	8260	Other ____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-11-91.6	WJW	2/27/13	14:56	MDE	2/27/13	15:32	1	2	2	–		✓		SEI-180	MDE	
WP-12-EB	TWM	"	13:27	"	"	16:14	1	2	2	–		✓		SEI-181	"	
WP-11-94.2	WJW	"	16:00	"	"	"	1	2	2	–		✓		SEI-182	"	
WP-12-73.0	TWM	"	16:53	"	"	17:05	1	2	2	–		✓		SEI-183	"	
WP-12-78.0	"	2/28/13	09:05	"	2/28/13	10:20	1	2	2	–		✓		SEI-184	"	
WP-12-83.0	"	"	09:55	"	"	"	1	2	2	–		✓		SEI-185	"	
WP-13-EB	WJW	"	09:25	"	"	"	1	2	2	–		✓		SEI-186	"	
WP-12-88.0	TWM	"	11:02	"	"	13:24	1	2	2	–		✓		SEI-187	"	
WP-12-93.0	"	"	11:53	"	"	"	1	2	2	–		✓		SEI-188	"	
WP-12-98.0	"	"	12:52	"	"	"	1	2	2	–		✓		SEI-189	"	
WP-12-103.0	TWM	"	13:56	"	"	14:34	1	2	2	–		✓		SEI-190	"	
WP-12-108.0	"	"	15:05	"	"	15:20	1	2	2	–		✓		SEI-191	"	
WP-13-68.0	WJW	"	14:54	"	"	"	1	2	2	–		✓		SEI-192	"	
WP-13-68.0-MS	"	"	"	"	"	15:20	1	2	2	–		✓		SEI-192-MS	"	
WP-13-68.0-MSD	"	"	"	"	"	"	1	2	2	–		✓		SEI-192-MSD	"	
WP-12-113.0	~~WJW~~ TWM	2/28/13	16:12	"	"	16:35	1	2	2	–		✓		SEI-195	"	
WP-13-72.9	WJW	"	15:43	"	"	"	1	2	2	–		✓		SEI-196	"	
WP-13-72.9-D	"	"	"	"	"	"	1	2	2	–		✓		SEI-196-FD	"	
WP-13-77.8	WJW	3/1/13	08:18	"	3/1/13	08:54	1	2	2	–		✓		SEI-198	"	
WP-12-118.0	TWM	"	08:32	"	"	"	1	2	2	–		✓		SEI-199	–	

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other ____

*** Preservation: (1) ice (2) HCl (3) Other ____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-12-123.0	TWM	3/1/13	09:37	HOE	3/1/13	10:40	1	2	2	–		✓		SEI-200	HOE	
WP-13-82.8	WJW	"	09:48	"	"	"	1	2	2	–		✓		SEI-201	"	
WP-13-87.9	"	"	10:47	"	"	11:42	1	2	2	–		✓		SEI-202	"	
WP-10-EB-A	TWM	"	10:40	"	"	13:35	1	2	2	–		✓		SEI-203	"	
WP-10-118.0	"	"	14:54	"	"	15:08	1	2	2	–		✓		SEI-204	"	
WP-10-123.0	"	"	15:41	"	"	16:21	1	2	2	–		✓		SEI-205	"	
WP-10-125.0	"	"	16:28	"	"	16:40	1	2	2	–		✓		SEI-206	"	
WP-10-133.0	"	3/4/13	12:31	"	3/4/13	13:15	1	2	2	–		✓		SEI-207	"	
WP-10-133.0-MS	"	"	"	"	"	"	1	2	2	–		✓		SEI-207-MS	"	
WP-10-133.0-MSD	"	"	"	"	"	"	1	2	2	–		✓		SEI-207-MSD	"	
WP-10-136.3	"	"	13:41	"	"	15:06	1	2	2	–		✓		SEI-210	"	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil
** Container: (1) bag (2) bottle (3) other _____
*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

102305-C Scotia Naval Depot
Sample Vials Not Used: SDG-3

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Vial(s) not used for analysis
SEI-140	WP-06	000.01	Groundwater	WP-06-EB	Equipment Blank	Vial #2
SEI-145	WP-06	082.00	Groundwater	WP-06-82.0	Normal Sample	Vial #2
SEI-145-FD	WP-06	082.00	Groundwater	WP-06-82.0-D	Field Duplicate	Vial #2
SEI-147	WP-06	087.00	Groundwater	WP-06-87.0	Normal Sample	Vial #2
SEI-148	WP-06	092.00	Groundwater	WP-06-92.0	Normal Sample	Vial #2
SEI-150	WP-06	097.00	Groundwater	WP-06-97.0	Normal Sample	Vial #2
SEI-149	WP-09	000.01	Groundwater	WP-09-EB	Equipment Blank	Vial #2
SEI-152	WP-09	072.00	Groundwater	WP-09-72.0	Normal Sample	Vial #2
SEI-153	WP-09	077.00	Groundwater	WP-09-77.0	Normal Sample	Vial #2
SEI-154	WP-09	082.10	Groundwater	WP-09-82.1	Normal Sample	Vial #2
SEI-155	WP-09	087.20	Groundwater	WP-09-87.2	Normal Sample	Vial #2
SEI-156	WP-09	092.00	Groundwater	WP-09-92.0	Normal Sample	Vial #2
SEI-157	WP-09	097.10	Groundwater	WP-09-97.1	Normal Sample	Vial #2
SEI-160	WP-09	101.80	Groundwater	WP-09-101.8	Normal Sample	Vial #2
SEI-162	WP-09	106.80	Groundwater	WP-09-106.8	Normal Sample	Vial #2
SEI-162-FD	WP-09	106.80	Groundwater	WP-09-106.8-D	Field Duplicate	Vial #2
SEI-167	WP-09	112.00	Groundwater	WP-09-112.0	Normal Sample	Vial #2
SEI-151	WP-10	000.01	Groundwater	WP-10-EB	Equipment Blank	Vial #2
SEI-203	WP-10	000.02	Groundwater	WP-10-EB-A	Equipment Blank	Vial #2
SEI-158	WP-10	068.00	Groundwater	WP-10-68.0	Normal Sample	Vial #2
SEI-159	WP-10	073.00	Groundwater	WP-10-73.0	Normal Sample	Vial #2
SEI-161	WP-10	078.00	Groundwater	WP-10-78.0	Normal Sample	Vial #2
SEI-164	WP-10	083.00	Groundwater	WP-10-83.0	Normal Sample	Vial #2
SEI-165	WP-10	088.00	Groundwater	WP-10-88.0	Normal Sample	Vial #2
SEI-166	WP-10	093.00	Groundwater	WP-10-93.0	Normal Sample	Vial #2
SEI-171	WP-10	098.00	Groundwater	WP-10-98.0	Normal Sample	Vial #2
SEI-172	WP-10	103.00	Groundwater	WP-10-103.0	Normal Sample	Vial #2
SEI-174	WP-10	108.00	Groundwater	WP-10-108.0	Normal Sample	Vial #2
SEI-175	WP-10	112.80	Groundwater	WP-10-112.8	Normal Sample	Vial #2
SEI-204	WP-10	118.00	Groundwater	WP-10-118.0	Normal Sample	Vial #2
SEI-205	WP-10	123.00	Groundwater	WP-10-123.0	Normal Sample	Vial #2
SEI-206	WP-10	128.00	Groundwater	WP-10-128.0	Normal Sample	Vial #2
SEI-210	WP-10	136.30	Groundwater	WP-10-136.3	Normal Sample	Vial #2
SEI-173	WP-11	000.01	Groundwater	WP-11-EB	Equipment Blank	Vial #2
SEI-176	WP-11	071.90	Groundwater	WP-11-71.9	Normal Sample	Vial #2
SEI-177	WP-11	076.90	Groundwater	WP-11-76.9	Normal Sample	Vial #2
SEI-178	WP-11	081.90	Groundwater	WP-11-81.9	Normal Sample	Vial #2
SEI-179	WP-11	087.00	Groundwater	WP-11-87.0	Normal Sample	Vial #2
SEI-180	WP-11	091.60	Groundwater	WP-11-91.6	Normal Sample	Vial #2
SEI-182	WP-11	094.20	Groundwater	WP-11-94.2	Normal Sample	Vial #2
SEI-181	WP-12	000.01	Groundwater	WP-12-EB	Equipment Blank	Vial #2
SEI-183	WP-12	073.00	Groundwater	WP-12-73.0	Normal Sample	Vial #2
SEI-184	WP-12	078.00	Groundwater	WP-12-78.0	Normal Sample	Vial #2
SEI-185	WP-12	083.00	Groundwater	WP-12-83.0	Normal Sample	Vial #2

102305-C Scotia Naval Depot
Sample Vials Not Used: SDG-3

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Vial(s) not used for analysis
SEI-187	WP-12	088.00	Groundwater	WP-12-88.0	Normal Sample	Vial #2
SEI-188	WP-12	093.00	Groundwater	WP-12-93.0	Normal Sample	Vial #2
SEI-189	WP-12	098.00	Groundwater	WP-12-98.0	Normal Sample	Vial #2
SEI-190	WP-12	103.00	Groundwater	WP-12-103.0	Normal Sample	Vial #2
SEI-191	WP-12	108.00	Groundwater	WP-12-108.0	Normal Sample	Vial #2
SEI-195	WP-12	113.00	Groundwater	WP-12-113.0	Normal Sample	Vial #2
SEI-199	WP-12	118.00	Groundwater	WP-12-118.0	Normal Sample	Vial #2
SEI-200	WP-12	123.00	Groundwater	WP-12-123.0	Normal Sample	Vial #2
SEI-186	WP-13	000.01	Groundwater	WP-13-EB	Equipment Blank	Vial #2
SEI-196	WP-13	072.90	Groundwater	WP-13-72.9	Normal Sample	Vial #2
SEI-196-FD	WP-13	072.90	Groundwater	WP-13-72.9-D	Field Duplicate	Vial #2
SEI-198	WP-13	077.80	Groundwater	WP-13-77.8	Normal Sample	Vial #2
SEI-201	WP-13	082.80	Groundwater	WP-13-82.8	Normal Sample	Vial #2
SEI-202	WP-13	087.90	Groundwater	WP-13-87.9	Normal Sample	Vial #2

102305-C Scotia Naval Depot
Samples With Manual Integrations: SDG-3

Lab ID	Sample Name	Compound(s) Manually Integrated
SEI-141	WP-06-72.0	Carbon Tetrachloride
SEI-141-MSD	WP-06-72.0-MSD	Chlorobenzene-d5, Bromofluorobenzene, Ethylbenzene, 1,3,5-Trimethylbenzene
SEI-168-MS	WP-09-116.2-MS	Chlorobenzene-d5, Bromofluorobenzene, Ethylbenzene, 1,3,5-Trimethylbenzene, Vinyl Chloride
SEI-168-MSD	WP-09-116.2-MSD	Chlorobenzene-d5, Bromofluorobenzene, Ethylbenzene, 1,3,5-Trimethylbenzene
SEI-158	WP-10-68.0	Chloroform
SEI-159	WP-10-73.0	Chloroform
SEI-161	WP-10-78.0	Chloroform
SEI-165	WP-10-88.0	1,1-Dichloroethene
SEI-166	WP-10-93.0	1,1-Dichloroethene, 1,1,2-Trichloroethane
SEI-172	WP-10-103.0	1,1-Dichloroethene, 1,1,2-Trichloroethane
SEI-175	WP-10-112.8	1,1,2-Trichloroethane
SEI-204	WP-10-118.0	1,1-Dichloroethene
SEI-205	WP-10-123.0	1,1-Dichloroethene
SEI-178	WP-11-81.9	1,1-Dichloroethene, Carbon Tetrachloride, 1,1,2-Trichloroethane
SEI-179	WP-11-87.0	Carbon Tetrachloride
SEI-180	WP-11-91.6	1,1-Dichloroethene, Chloroform
SEI-184	WP-12-78.0	1,1,2-Trichloroethane
SEI-185	WP-12-83.0	1,1,2-Trichloroethane
SEI-187	WP-12-88.0	1,1,2-Trichloroethane
SEI-190	WP-12-103.0	1,1-Dichloroethene
VSTD LW	VSTD LW	Chlorobenzene-d5, 1,1,2-Trichloroethane, Ethylbenzene, m+p-xylenes, 1,1,2,2-Tetrachloroethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, Naphthalene
VSTD LX	VSTD LX	Carbon Tetrachloride
LCD LX	LCD LX	Naphthalene
VSTD LY	VSTD LY	Naphthalene
VSTD LZ	VSTD LZ	Chlorobenzene-d5, Bromofluorobenzene, Ethylbenzene, 1,3,5-Trimethylbenzene

LABORATORY ANALYTICAL RESULTS

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/21/2013 - 02/25/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/22/2013 - 02/25/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-06	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		072.00		077.00		082.00		082.00		087.00		092.00		097.00	
Sample Name		WP-06-EB		WP-06-72.0		WP-06-77.0		WP-06-82.0-D		WP-06-82.0		WP-06-87.0		WP-06-92.0		WP-06-97.0	
Analysis Date		02/22/13 09:16	EB	02/22/13 13:55	N	02/22/13 17:02	N	02/22/13 16:47	FD	02/22/13 17:18	N	02/22/13 16:33	N	02/25/13 12:33	N	02/25/13 13:34	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	0.71	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	0.96	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	0.31	J	0.78	J	0.39	J	0.38	J	0.33	J	0.20	J	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.6		1.2	J	1.7	J	1.4	J	0.79	J	0.80	J	0.64	J
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	12		4.0		1.3	J	1.1	J	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	16		6.6		3.0		2.4		2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.15	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	92	%	93	%	94	%	93	%	91	%	95	%	91	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/25/2013 - 02/26/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/25/2013 - 02/26/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-09	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		072.00		077.00		082.10		087.20		092.00		097.10		101.80	
Sample Name		WP-09-EB		WP-09-72.0		WP-09-77.0		WP-09-82.1		WP-09-87.2		WP-09-92.0		WP-09-97.1		WP-09-101.8	
Analysis Date		02/25/13 12:49	EB	02/25/13 17:40	N	02/26/13 09:48	N	02/26/13 10:51	N	02/26/13 13:34	N	02/26/13 13:19	N	02/26/13 13:04	N	02/26/13 14:19	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	52		13		31		50		45		50		79	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	95	%	94	%	94	%	93	%	94	%	94	%	96	%

Depth	CAS #	106.80		106.80		112.00		116.20	
Sample Name		WP-09-106.8-D		WP-09-106.8		WP-09-112.0		WP-09-116.2	
Analysis Date		02/26/13 15:34	FD	02/26/13 15:19	N	02/26/13 16:19	N	02/26/13 16:49	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	69		76		77		73	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	96	%	95	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/25/2013 - 03/01/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/25/2013 - 03/01/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-10	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		000.02		068.00		073.00		078.00		083.00		088.00		093.00	
Sample Name		WP-10-EB		WP-10-EB-A		WP-10-68.0		WP-10-73.0		WP-10-78.0		WP-10-83.0		WP-10-88.0		WP-10-93.0	
Analysis Date		02/25/13 17:25	EB	03/01/13 13:51	EB	02/26/13 13:49	N	02/26/13 14:04	N	02/26/13 14:34	N	02/26/13 15:49	N	02/26/13 16:04	N	02/26/13 16:34	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.28	J	0.36	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	0.19	J	0.21	J	0.20	J	0.19	J	2.0	U	0.20	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	100		110		110		120		92		120	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	98	%	98	%	96	%	96	%	94	%	95	%	94	%	95	%
Depth		098.00		103.00		108.00		112.80		118.00		123.00		128.00		133.00	
Sample Name	CAS #	WP-10-98.0		WP-10-103.0		WP-10-108.0		WP-10-112.8		WP-10-118.0		WP-10-123.0		WP-10-128.0		WP-10-133.0	
Analysis Date		02/27/13 03:12	N	02/27/13 09:58	N	02/27/13 11:14	N	02/27/13 12:39	N	03/01/13 15:23	N	03/01/13 16:34	N	03/01/13 17:35	N	03/04/13 13:28	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	0.52	J	2.0	U	2.0	U	0.54	J	0.73	J	1.0	J	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.21	J	2.0	U
Chloroform	67-66-3	0.22	J	0.22	J	0.28	J	0.27	J	0.30	J	0.31	J	0.42	J	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	130		160		190		200		260		350		530		1.5	J
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	0.22	J	0.28	J	0.23	J	0.25	J	0.26	J	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	91	%	91	%	96	%	97	%	96	%	97	%	95	%	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/25/2013 - 03/01/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/25/2013 - 03/01/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-10	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth		136.30	
Sample Name	CAS #	WP-10-136.3	
Analysis Date		03/04/13 15:24	N
Vinyl Chloride	75-01-4	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U
Chloroform	67-66-3	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U
Benzene	71-43-2	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U
Trichloroethene	79-01-6	1.0	J
Toluene	108-88-3	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U
Tetrachloroethene	127-18-4	2.0	U
Ethylbenzene	100-41-4	2.0	U
m,p-Xylenes	136777612	2.0	U
o-Xylene	95-47-6	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U
Naphthalene	91-20-3	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/27/2013 - 02/27/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/27/2013 - 02/27/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-11	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		071.90		076.90		081.90		087.00		091.60		094.20	
Sample Name		WP-11-EB		WP-11-71.9		WP-11-76.9		WP-11-81.9		WP-11-87.0		WP-11-91.6		WP-11-94.2	
Analysis Date		02/27/13 10:14	EB	02/27/13 13:09	N	02/27/13 13:24	N	02/27/13 13:39	N	02/27/13 14:53	N	02/27/13 15:52	N	02/27/13 16:35	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	0.29	J	2.0	U	0.35	J	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	0.20	J	2.0	U	0.23	J	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	76		79		140		130		120		87	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	96	%	95	%	98	%	97	%	91	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/27/2013 - 03/01/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/27/2013 - 03/01/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-12	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth		000.01		073.00		078.00		083.00		088.00		093.00		098.00		103.00	
Sample Name	**CAS #**	WP-12-EB		WP-12-73.0		WP-12-78.0		WP-12-83.0		WP-12-88.0		WP-12-93.0		WP-12-98.0		WP-12-103.0	
Analysis Date		02/27/13 16:50	EB	02/27/13 17:23	N	02/28/13 10:54	N	02/28/13 11:09	N	02/28/13 13:45	N	02/28/13 14:00	N	02/28/13 14:15	N	02/28/13 15:01	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.49	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.22	J	0.23	J	0.26	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	38		37		38		34		33		40		40	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	0.20	J	0.26	J	0.34	J	0.36	J	0.46	J	0.47	J
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	97	%	97	%	98	%	96	%	96	%	98	%	93	%

Depth		108.00		113.00		118.00		123.00	
Sample Name	CAS #	WP-12-108.0		WP-12-113.0		WP-12-118.0		WP-12-123.0	
Analysis Date		02/28/13 15:56	N	02/28/13 17:12	N	03/01/13 09:32	N	03/01/13 10:57	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	1.9	J	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	0.47	J	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	0.23	J	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	88	%	96	%	95	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	02/28/2013 - 03/01/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	02/28/2013 - 03/01/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C,8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-13	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		068.00		072.90		072.90		077.80		082.80		087.90	
Sample Name		WP-13-EB		WP-13-68.0		WP-13-72.9-D		WP-13-72.9		WP-13-77.8		WP-13-82.8		WP-13-87.9	
Analysis Date		02/28/13 10:39	EB	02/28/13 16:11	N	02/28/13 17:45	FD	02/28/13 17:29	N	03/01/13 09:47	N	03/01/13 11:12	N	03/01/13 11:58	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U	0.19	J	0.20	J	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	98	%	99	%	97	%	95	%	97	%	96	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

QUALITY CONTROL SUMMARIES

Continuing Calibration Verification (VSTD)

Laboratory Method Blank Summaries (VBLK)

Laboratory Control Sample Summaries (LCS)

Matrix Spike / Matrix Spike Duplicate Sample Summaries (MS/MSD)

Field Duplicate Sample Summaries (FD)

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: LW
Analysis Date: 02/22/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	20.57	-2.9
1,1-Dichloroethene	19.82	.9
trans-1,2-Dichloroethene	20.49	-2.4
1,1-Dichloroethane	21.5	-7.5
cis-1,2-Dichloroethene	21.38	-6.9
Chloroform	21.22	-6.1
Carbon Tetrachloride	19.15	4.3
Benzene	21.29	-6.5
1,2-Dichloroethane	23.17	-15.9
Trichloroethene	19.25	3.8
Toluene	19.85	.7
1,1,2-Trichloroethane	23.55	-17.8
Tetrachloroethene	18.85	5.7
Ethylbenzene	20.46	-2.3
m,p-Xylenes	40.17	-.4
o-Xylene	17.71	11.5
1,1,2,2-Tetrachloroethane	23.02	-15.1
1,2,4-Trimethylbenzene	19.38	3.1
1,3,5-Trimethylbenzene	19.15	4.3
Naphthalene	20.3	-1.5
Bromofluorobenzene (SS)	100.7 %	100.7 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: LX
Analysis Date: 02/25/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	18.65	6.8
1,1-Dichloroethene	20.24	-1.2
trans-1,2-Dichloroethene	19.8	1.0
1,1-Dichloroethane	21.32	-6.6
cis-1,2-Dichloroethene	20.57	-2.9
Chloroform	20.94	-4.7
Carbon Tetrachloride	20.16	-.8
Benzene	21.12	-5.6
1,2-Dichloroethane	21.6	-8.0
Trichloroethene	20.2	-1.0
Toluene	20.84	-4.2
1,1,2-Trichloroethane	21.11	-5.6
Tetrachloroethene	19.6	2.0
Ethylbenzene	20.94	-4.7
m,p-Xylenes	42.2	-5.5
o-Xylene	21.73	-8.7
1,1,2,2-Tetrachloroethane	21.21	-6.1
1,2,4-Trimethylbenzene	20.39	-2.0
1,3,5-Trimethylbenzene	20.43	-2.2
Naphthalene	18.09	9.6
Bromofluorobenzene (SS)	102.55 %	102.55 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: LY
Analysis Date: 02/26/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	17.89	10.6
1,1-Dichloroethene	20.17	-.9
trans-1,2-Dichloroethene	19.95	.3
1,1-Dichloroethane	21.43	-7.2
cis-1,2-Dichloroethene	21.05	-5.3
Chloroform	21.25	-6.3
Carbon Tetrachloride	20.02	-.1
Benzene	20.69	-3.5
1,2-Dichloroethane	21.56	-7.8
Trichloroethene	19.77	1.2
Toluene	19.62	1.9
1,1,2-Trichloroethane	22.6	-13.0
Tetrachloroethene	19.47	2.7
Ethylbenzene	19.75	1.3
m,p-Xylenes	39.7	.7
o-Xylene	20.59	-3.0
1,1,2,2-Tetrachloroethane	22.62	-13.1
1,2,4-Trimethylbenzene	18.6	7.0
1,3,5-Trimethylbenzene	18.55	7.3
Naphthalene	18.82	5.9
Bromofluorobenzene (SS)	101.2 %	101.2 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: LZ
Analysis Date: 02/27/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	20.57	-2.9
1,1-Dichloroethene	20.96	-4.8
trans-1,2-Dichloroethene	19.88	.6
1,1-Dichloroethane	21.2	-6.0
cis-1,2-Dichloroethene	19.31	3.5
Chloroform	19.5	2.5
Carbon Tetrachloride	20.49	-2.4
Benzene	19.92	.4
1,2-Dichloroethane	18.05	9.8
Trichloroethene	19.46	2.7
Toluene	19.01	4.9
1,1,2-Trichloroethane	19.76	1.2
Tetrachloroethene	19.91	.4
Ethylbenzene	20.38	-1.9
m,p-Xylenes	40.74	-1.9
o-Xylene	20.6	-3.0
1,1,2,2-Tetrachloroethane	19.33	3.4
1,2,4-Trimethylbenzene	18.41	8.0
1,3,5-Trimethylbenzene	18.62	6.9
Naphthalene	16.36	18.2
Bromofluorobenzene (SS)	95.95 %	95.95 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: MA
Analysis Date: 02/28/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	21.36	-6.8
1,1-Dichloroethene	21.29	-6.5
trans-1,2-Dichloroethene	20.27	-1.4
1,1-Dichloroethane	22.45	-12.3
cis-1,2-Dichloroethene	20.77	-3.9
Chloroform	21.16	-5.8
Carbon Tetrachloride	20.43	-2.2
Benzene	20.78	-3.9
1,2-Dichloroethane	20.93	-4.7
Trichloroethene	19.73	1.4
Toluene	19.07	4.7
1,1,2-Trichloroethane	22.5	-12.5
Tetrachloroethene	19.64	1.8
Ethylbenzene	20.3	-1.5
m,p-Xylenes	39.8	.5
o-Xylene	21.08	-5.4
1,1,2,2-Tetrachloroethane	22.53	-12.7
1,2,4-Trimethylbenzene	18.54	7.3
1,3,5-Trimethylbenzene	18.63	6.9
Naphthalene	18.28	8.6
Bromofluorobenzene (SS)	100.55 %	100.55 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: MB
Analysis Date: 03/01/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	20.57	-2.9
1,1-Dichloroethene	20.88	-4.4
trans-1,2-Dichloroethene	20.09	-.4
1,1-Dichloroethane	22.2	-11.0
cis-1,2-Dichloroethene	20.97	-4.8
Chloroform	21.5	-7.5
Carbon Tetrachloride	19.7	1.5
Benzene	20.9	-4.5
1,2-Dichloroethane	22	-10.0
Trichloroethene	19.49	2.6
Toluene	19.27	3.7
1,1,2-Trichloroethane	23.48	-17.4
Tetrachloroethene	18.86	5.7
Ethylbenzene	20.15	-.7
m,p-Xylenes	39.97	.1
o-Xylene	17.99	10.1
1,1,2,2-Tetrachloroethane	23.28	-16.4
1,2,4-Trimethylbenzene	18.41	8.0
1,3,5-Trimethylbenzene	18.28	8.6
Naphthalene	18.42	7.9
Bromofluorobenzene (SS)	100.5 %	100.5 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: MC
Analysis Date: 03/04/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	18.48	7.6
1,1-Dichloroethene	19.08	4.6
trans-1,2-Dichloroethene	19.57	2.2
1,1-Dichloroethane	21.13	-5.7
cis-1,2-Dichloroethene	21.14	-5.7
Chloroform	21.13	-5.7
Carbon Tetrachloride	18.93	5.4
Benzene	20.68	-3.4
1,2-Dichloroethane	22.61	-13.1
Trichloroethene	19.96	.2
Toluene	20.55	-2.8
1,1,2-Trichloroethane	22.08	-10.4
Tetrachloroethene	18.54	7.3
Ethylbenzene	19.59	2.1
m,p-Xylenes	39.97	.1
o-Xylene	18.1	9.5
1,1,2,2-Tetrachloroethane	22.94	-14.7
1,2,4-Trimethylbenzene	19.56	2.2
1,3,5-Trimethylbenzene	19.33	3.4
Naphthalene	18.73	6.4
Bromofluorobenzene (SS)	105.3 %	105.3 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LW
Date Analyzed	2/22/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	91	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LX
Date Analyzed	2/25/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	87	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LY
Date Analyzed	2/26/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	89	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK LZ
Date Analyzed	2/27/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	91	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK MA
Date Analyzed	2/28/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	88	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK MB
Date Analyzed	3/1/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK MC
Date Analyzed	3/4/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	95	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LW

Analysis Date: 02/22/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	21	105	50-145
1,1-Dichloroethene	2.0 U	24	120	70-130
trans-1,2-Dichloroethene	2.0 U	22	110	60-140
1,1-Dichloroethane	2.0 U	22	110	70-135
cis-1,2-Dichloroethene	2.0 U	23	115	70-125
Chloroform	2.0 U	21	105	65-135
Carbon Tetrachloride	2.0 U	21	105	65-140
Benzene	2.0 U	22	110	80-120
1,2-Dichloroethane	2.0 U	22	110	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	23	115	75-125
Tetrachloroethene	2.0 U	23	115	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	41	103	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	20	100	75-130
Naphthalene	2.0 U	20	100	55-140
Bromofluorobenzene (SS)	91 %	106 %	106 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample and Laboratory Control Duplicate Analyses Summary

QC Batch: LX

Analysis Date: 02/25/2013

Spike Amount: 20

Analyte	Lab Blank Conc.	LCS Conc. (ug/L)	LCS % Recovery	LCD Conc. (ug/L)	LCD % Recovery	RPD < 30	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	21	105	19	95	10	50-145
1,1-Dichloroethene	2.0 U	23	115	22	110	4	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	20	100	5	60-140
1,1-Dichloroethane	2.0 U	22	110	21	105	5	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	21	105	0	70-125
Chloroform	2.0 U	20	100	20	100	0	65-135
Carbon Tetrachloride	2.0 U	21	105	20	100	5	65-140
Benzene	2.0 U	21	105	21	105	0	80-120
1,2-Dichloroethane	2.0 U	21	105	21	105	0	70-130
Trichloroethene	2.0 U	20	100	20	100	0	70-125
Toluene	2.0 U	19	95	20	100	5	75-120
1,1,2-Trichloroethane	2.0 U	22	110	20	100	10	75-125
Tetrachloroethene	2.0 U	20	100	19	95	5	45-150
Ethylbenzene	2.0 U	20	100	20	100	0	75-125
m,p-Xylenes	2.0 U	40	100	41	103	3	75-130
o-Xylene	2.0 U	21	105	20	100	5	80-120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	20	100	10	65-130
1,2,4-Trimethylbenzene	2.0 U	19	95	20	100	5	75-130
1,3,5-Trimethylbenzene	2.0 U	19	95	20	100	5	75-130
Naphthalene	2.0 U	17	85	17	85	0	55-140
Bromofluorobenzene (SS)	87 %	100 %	100 %	104 %	104 %	4	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: LY

Analysis Date: 02/26/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	22	110	50-145
1,1-Dichloroethene	2.0 U	23	115	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	60-140
1,1-Dichloroethane	2.0 U	22	110	70-135
cis-1,2-Dichloroethene	2.0 U	22	110	70-125
Chloroform	2.0 U	21	105	65-135
Carbon Tetrachloride	2.0 U	20	100	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	22	110	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	19	95	75-120
1,1,2-Trichloroethane	2.0 U	23	115	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	20	100	75-125
m,p-Xylenes	2.0 U	39	98	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	23	115	65-130
1,2,4-Trimethylbenzene	2.0 U	18	90	75-130
1,3,5-Trimethylbenzene	2.0 U	18	90	75-130
Naphthalene	2.0 U	18	90	55-140
Bromofluorobenzene (SS)	89 %	101 %	101 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample and Laboratory Control Duplicate Analyses Summary

QC Batch: LZ

Analysis Date: 02/27/2013

Spike Amount: 20

Analyte	Lab Blank Conc.	LCS Conc. (ug/L)	LCS % Recovery	LCD Conc. (ug/L)	LCD % Recovery	RPD < 30	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	19	95	21	105	10	50-145
1,1-Dichloroethene	2.0 U	21	105	22	110	5	70-130
trans-1,2-Dichloroethene	2.0 U	20	100	21	105	5	60-140
1,1-Dichloroethane	2.0 U	20	100	21	105	5	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	22	110	5	70-125
Chloroform	2.0 U	19	95	20	100	5	65-135
Carbon Tetrachloride	2.0 U	18	90	19	95	5	65-140
Benzene	2.0 U	20	100	21	105	5	80-120
1,2-Dichloroethane	2.0 U	22	110	23	115	4	70-130
Trichloroethene	2.0 U	18	90	19	95	5	70-125
Toluene	2.0 U	19	95	20	100	5	75-120
1,1,2-Trichloroethane	2.0 U	21	105	22	110	5	75-125
Tetrachloroethene	2.0 U	18	90	18	90	0	45-150
Ethylbenzene	2.0 U	19	95	20	100	5	75-125
m,p-Xylenes	2.0 U	39	98	41	103	5	75-130
o-Xylene	2.0 U	20	100	18	90	11	80-120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	22	110	0	65-130
1,2,4-Trimethylbenzene	2.0 U	19	95	20	100	5	75-130
1,3,5-Trimethylbenzene	2.0 U	19	95	19	95	0	75-130
Naphthalene	2.0 U	17	85	18	90	6	55-140
Bromofluorobenzene (SS)	91 %	96 %	96 %	104 %	104 %	8	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: MA

Analysis Date: 02/28/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	22	110	50-145
1,1-Dichloroethene	2.0 U	24	120	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	60-140
1,1-Dichloroethane	2.0 U	22	110	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	21	105	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	20	100	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	19	95	75-120
1,1,2-Trichloroethane	2.0 U	21	105	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	41	103	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	65-130
1,2,4-Trimethylbenzene	2.0 U	19	95	75-130
1,3,5-Trimethylbenzene	2.0 U	19	95	75-130
Naphthalene	2.0 U	17	85	55-140
Bromofluorobenzene (SS)	88 %	98 %	98 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample and Laboratory Control Duplicate Analyses Summary

QC Batch: MB
Analysis Date: 03/01/2013
Spike Amount: 20

Analyte	Lab Blank Conc.	LCS Conc. (ug/L)	LCS % Recovery	LCD Conc. (ug/L)	LCD % Recovery	RPD < 30	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	23	115	20	100	14	50-145
1,1-Dichloroethene	2.0 U	24	120	22	110	9	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	20	100	5	60-140
1,1-Dichloroethane	2.0 U	21	105	21	105	0	70-135
cis-1,2-Dichloroethene	2.0 U	20	100	21	105	5	70-125
Chloroform	2.0 U	19	95	19	95	0	65-135
Carbon Tetrachloride	2.0 U	22	110	19	95	15	65-140
Benzene	2.0 U	20	100	20	100	0	80-120
1,2-Dichloroethane	2.0 U	17	85	21	105	21	70-130
Trichloroethene	2.0 U	20	100	19	95	5	70-125
Toluene	2.0 U	19	95	19	95	0	75-120
1,1,2-Trichloroethane	2.0 U	19	95	21	105	10	75-125
Tetrachloroethene	2.0 U	21	105	18	90	15	45-150
Ethylbenzene	2.0 U	21	105	20	100	5	75-125
m,p-Xylenes	2.0 U	42	105	39	98	7	75-130
o-Xylene	2.0 U	18	90	18	90	0	80-120
1,1,2,2-Tetrachloroethane	2.0 U	18	90	21	105	15	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	19	95	5	75-130
1,3,5-Trimethylbenzene	2.0 U	20	100	19	95	5	75-130
Naphthalene	2.0 U	15	75	18	90	18	55-140
Bromofluorobenzene (SS)	94 %	96 %	96 %	100 %	100 %	4	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: MC

Analysis Date: 03/04/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	19	95	50-145
1,1-Dichloroethene	2.0 U	22	110	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	60-140
1,1-Dichloroethane	2.0 U	21	105	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	20	100	65-140
Benzene	2.0 U	20	100	80-120
1,2-Dichloroethane	2.0 U	22	110	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	21	105	75-125
Tetrachloroethene	2.0 U	19	95	45-150
Ethylbenzene	2.0 U	19	95	75-125
m,p-Xylenes	2.0 U	40	100	75-130
o-Xylene	2.0 U	18	90	80-120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	19	95	75-130
Naphthalene	2.0 U	18	90	55-140
Bromofluorobenzene (SS)	95 %	99 %	99 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-06-72.0
Sample Date: 2/22/2013
Analysis Date: 02/22/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	19	95	20	100	5	50 - 145
1,1-Dichloroethene	2.0 U	18	90	20	100	11	70 - 130
trans-1,2-Dichloroethene	2.0 U	20	100	20	100	0	60 - 140
1,1-Dichloroethane	0.71 J	21	101	22	106	5	70 - 135
cis-1,2-Dichloroethene	0.96 J	22	105	22	105	0	70 - 125
Chloroform	0.78 J	21	101	21	101	0	65 - 135
Carbon Tetrachloride	2.6	20	87	22	97	11	65 - 140
Benzene	2.0 U	21	105	21	105	0	80 - 120
1,2-Dichloroethane	2.0 U	23	115	22	110	4	70 - 130
Trichloroethene	12	28	80	30	90	12	70 - 125
Toluene	2.0 U	20	100	21	105	5	75 - 120
1,1,2-Trichloroethane	2.0 U	22	110	21	105	5	75 - 125
Tetrachloroethene	16	36	100	35	95	5	45 - 150
Ethylbenzene	2.0 U	20	100	21	105	5	75 - 125
m,p-Xylenes	2.0 U	39	98	43	108	10	75 - 130
o-Xylene	2.0 U	20	100	22	110	10	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	20	100	10	65 - 130
1,2,4-Trimethylbenzene	2.0 U	19	95	20	100	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	19	95	20	100	5	75 - 130
Naphthalene	2.0 U	18	90	17	85	6	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-09-116.2
Sample Date: 2/26/2013
Analysis Date: 02/26/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	18	90	19	95	5	50 - 145
1,1-Dichloroethene	2.0 U	20	100	21	105	5	70 - 130
trans-1,2-Dichloroethene	2.0 U	19	95	20	100	5	60 - 140
1,1-Dichloroethane	2.0 U	21	105	21	105	0	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	20	100	0	70 - 125
Chloroform	2.0 U	21	105	20	100	5	65 - 135
Carbon Tetrachloride	2.0 U	20	100	21	105	5	65 - 140
Benzene	2.0 U	20	100	21	105	5	80 - 120
1,2-Dichloroethane	2.0 U	21	105	19	95	10	70 - 130
Trichloroethene	73	82	45 *	80	35 *	25	70 - 125
Toluene	2.0 U	21	105	21	105	0	75 - 120
1,1,2-Trichloroethane	2.0 U	20	100	19	95	5	75 - 125
Tetrachloroethene	2.0 U	19	95	20	100	5	45 - 150
Ethylbenzene	2.0 U	20	100	21	105	5	75 - 125
m,p-Xylenes	2.0 U	41	103	43	108	5	75 - 130
o-Xylene	2.0 U	21	105	22	110	5	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	19	95	10	65 - 130
1,2,4-Trimethylbenzene	2.0 U	20	100	20	100	0	75 - 130
1,3,5-Trimethylbenzene	2.0 U	20	100	20	100	0	75 - 130
Naphthalene	2.0 U	18	90	17	85	6	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-10-133.0
Sample Date: 3/4/2013
Analysis Date: 03/04/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	20	100	19	95	5	50 - 145
1,1-Dichloroethene	2.0 U	20	100	20	100	0	70 - 130
trans-1,2-Dichloroethene	2.0 U	20	100	19	95	5	60 - 140
1,1-Dichloroethane	2.0 U	21	105	22	110	5	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	21	105	5	70 - 125
Chloroform	2.0 U	20	100	21	105	5	65 - 135
Carbon Tetrachloride	2.0 U	19	95	20	100	5	65 - 140
Benzene	2.0 U	21	105	21	105	0	80 - 120
1,2-Dichloroethane	2.0 U	22	110	22	110	0	70 - 130
Trichloroethene	1.5 J	21	98	22	103	5	70 - 125
Toluene	2.0 U	20	100	22	110	10	75 - 120
1,1,2-Trichloroethane	2.0 U	22	110	21	105	5	75 - 125
Tetrachloroethene	2.0 U	18	90	19	95	5	45 - 150
Ethylbenzene	2.0 U	20	100	21	105	5	75 - 125
m,p-Xylenes	2.0 U	40	100	43	108	8	75 - 130
o-Xylene	2.0 U	20	100	22	110	10	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	22	110	21	105	5	65 - 130
1,2,4-Trimethylbenzene	2.0 U	19	95	20	100	5	75 - 130
1,3,5-Trimethylbenzene	2.0 U	19	95	21	105	10	75 - 130
Naphthalene	2.0 U	17	85	18	90	6	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-13-68.0
Sample Date: 2/28/2013
Analysis Date: 02/28/2013
Method: 8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	19	95	19	95	0	50 - 145
1,1-Dichloroethene	2.0 U	19	95	20	100	5	70 - 130
trans-1,2-Dichloroethene	2.0 U	19	95	19	95	0	60 - 140
1,1-Dichloroethane	2.0 U	21	105	21	105	0	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	20	100	0	70 - 125
Chloroform	2.0 U	21	105	21	105	0	65 - 135
Carbon Tetrachloride	2.0 U	19	95	19	95	0	65 - 140
Benzene	2.0 U	21	105	21	105	0	80 - 120
1,2-Dichloroethane	2.0 U	22	110	22	110	0	70 - 130
Trichloroethene	2.0 U	20	100	20	100	0	70 - 125
Toluene	2.0 U	20	100	21	105	5	75 - 120
1,1,2-Trichloroethane	2.0 U	21	105	21	105	0	75 - 125
Tetrachloroethene	2.0 U	19	95	19	95	0	45 - 150
Ethylbenzene	2.0 U	21	105	21	105	0	75 - 125
m,p-Xylenes	2.0 U	41	103	42	105	2	75 - 130
o-Xylene	2.0 U	21	105	21	105	0	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	21	105	21	105	0	65 - 130
1,2,4-Trimethylbenzene	2.0 U	20	100	20	100	0	75 - 130
1,3,5-Trimethylbenzene	2.0 U	20	100	20	100	0	75 - 130
Naphthalene	2.0 U	18	90	18	90	0	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-06-82.0		WP-06-82.0-D		**RPD**
Lab ID	SEI-145		SEI-145-FD		
Sample Date	2/22/2013		2/22/2013		
Date Analyzed	2/22/2013		2/22/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	0.33	J	0.38	J	14
Carbon Tetrachloride	1.4	J	1.7	J	19
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	1.1	J	1.3	J	17
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.4		3.0		22
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-09-106.8		WP-09-106.8-D		**RPD**
Lab ID	SEI-162		SEI-162-FD		
Sample Date	2/26/2013		2/26/2013		
Date Analyzed	2/26/2013		2/26/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	76		69		10
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-13-72.9		WP-13-72.9-D		**RPD**
Lab ID	SEI-196		SEI-196-FD		
Sample Date	2/28/2013		2/28/2013		
Date Analyzed	2/28/2013		2/28/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	0.20	J	0.19	J	5
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	2.0	U	2.0	U	NA
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Final Data Report for Laboratory Services

PREPARED FOR STONE ENVIRONMENTAL, INC.

SITE ID: SCOTIA NAVY DEPOT, SCOTIA, NY

Stone Project ID: 102305-R-C

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

DATES OF PERFORMANCE: March 4 - 7, 2013 (SDG-4)
REPORT DATE: March 29, 2013



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STONE ENVIRONMENTAL INC

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MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 29, 2013

This data package presents the analytical results for groundwater samples analyzed by Stone Environmental, Inc. Laboratory (Stone) on-site at the Scotia Navy Depot Site in Scotia, New York. Samples in this sample delivery group (SDG-4) were collected at the Scotia Site between March 4 and 7, 2013. A total of 31 groundwater samples were collected during this period by Stone personnel from three borings: WP-14, WP-15 and WP-16, including three field duplicate samples and three equipment blanks. A matrix spike and matrix spike duplicate (MS/MSD) sample pair was analyzed in association with one of the parent groundwater samples. SDG-4 also included two investigation-derived waste (IDW) samples. All samples in SDG-4 were received and analyzed at the mobile laboratory between March 4 and 7, 2013.

After sample collection, all samples were hand delivered to the mobile laboratory and kept refrigerated until analysis; therefore, temperatures of samples were not measured at receipt. The sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. As samples were received at the on-site laboratory, they were recorded on Stone's Sample Log Sheet. A copy of the Sample Log Sheet and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with

the samples presented in this report were generated under a quality system that adheres to requirements specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS), laboratory method blanks (VBLK), matrix spike and matrix spike duplicate samples (MS/MSDs) and field duplicate samples (FD)) are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards. Exceptions are noted below:

- VSTD Deficiencies:
    - No deficiencies noted.
- LCS Deficiencies:
    - No deficiencies noted.
- VBLK Deficiencies:
    - No deficiencies noted.
- MS/MSD Deficiencies:
    - 1,3,5-Trimethylbenzene recovery was below acceptance criteria (75-130%) for the MSD (70% recovery) sample associated with parent sample WP-14-68.0. No data were qualified on this basis.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

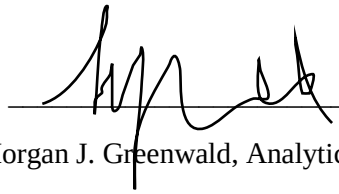
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

SAMPLE LOGIN SUMMARY

Sample Login Summary

Chain of Custody Records

List of Sample Vials Not Used in Analysis

List of Samples with Manual Integrations

102305-C Scotia Naval Depot
Sample Login Summary
SDG-4

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Comments	Lab ID Parent	Received Temp	Temperature Units
SEI-220	IDW	000.02	Groundwater	Collective Purge-IDW	Normal Sample	2	DJL	3/5/2013	2:14 PM	SEI 10.5.x	HDE	3/5/2013	2:35 PM			6	C
SEI-217	IDW	000.01	Groundwater	MW-24-IDW	Normal Sample	2	DJL	3/5/2013	10:51 AM	SEI 10.5.x	HDE	3/5/2013	11:10 AM			6	C
SEI-226	WP-14	103.00	Groundwater	WP-14-103.0	Normal Sample	2	TWM	3/6/2013	9:21 AM	SEI 10.5.x	HDE	3/6/2013	9:40 AM			6	C
SEI-229	WP-14	108.00	Groundwater	WP-14-108.0	Normal Sample	2	TWM	3/6/2013	10:32 AM	SEI 10.5.x	HDE	3/6/2013	11:01 AM			6	C
SEI-231	WP-14	113.00	Groundwater	WP-14-113	Normal Sample	2	twm	3/6/2013	11:50 AM	SEI 10.5.x	mdr	3/6/2013	12:45 PM			6	C
SEI-234	WP-14	114.80	Groundwater	WP-14-114.8	Normal Sample	2	TWM	3/6/2013	12:47 PM	SEI 10.5.x	mdr	3/6/2013	3:20 PM			6	C
SEI-213	WP-14	068.00	Groundwater	WP-14-68.0	Normal Sample	2	TWM	3/5/2013	12:06 PM	SEI 10.5.x	HDE	3/5/2013	12:27 PM		SEI-213	6	C
SEI-213-MS	WP-14	068.00	Groundwater	WP-14-68.0-MS	Matrix Spike	2	TWM	3/5/2013	12:06 PM	SEI 10.5.x	HDE	3/5/2013	12:27 PM		SEI-213	6	C
SEI-213-MSD	WP-14	068.00	Groundwater	WP-14-68.0-MSD	Matrix Spike Duplicate	2	TWM	3/5/2013	12:06 PM	SEI 10.5.x	HDE	3/5/2013	12:27 PM		SEI-213	6	C
SEI-216	WP-14	073.00	Groundwater	WP-14-73.0	Normal Sample	2	TWM	3/5/2013	1:02 PM	SEI 10.5.x	HDE	3/5/2013	1:20 PM			6	C
SEI-218	WP-14	078.00	Groundwater	WP-14-78.0	Normal Sample	2	TWM	3/5/2013	1:59 PM	SEI 10.5.x	HDE	3/5/2013	2:35 PM		SEI-218	6	C
SEI-218-FD	WP-14	078.00	Groundwater	WP-14-78.0-D	Field Duplicate	2	TWM	3/5/2013	1:59 PM	SEI 10.5.x	HDE	3/5/2013	2:35 PM		SEI-218	6	C
SEI-221	WP-14	083.00	Groundwater	WP-14-83.0	Normal Sample	2	TWM	3/5/2013	3:27 PM	SEI 10.5.x	HDE	3/5/2013	3:45 PM		SEI-221	6	C
SEI-221-FD	WP-14	083.00	Groundwater	WP-14-83.0-D	Field Duplicate	2	TWM	3/5/2013	3:27 PM	SEI 10.5.x	HDE	3/5/2013	3:45 PM		SEI-221	6	C
SEI-223	WP-14	088.00	Groundwater	WP-14-88.0	Normal Sample	2	TWM	3/5/2013	4:22 PM	SEI 10.5.x	HDE	3/5/2013	4:35 PM			6	C
SEI-224	WP-14	093.00	Groundwater	WP-14-93.0	Normal Sample	2	TWM	3/5/2013	5:03 PM	SEI 10.5.x	HDE	3/5/2013	5:15 PM			6	C
SEI-225	WP-14	098.00	Groundwater	WP-14-98.0	Normal Sample	2	TWM	3/6/2013	8:27 AM	SEI 10.5.x	HDE	3/6/2013	8:40 AM			6	C
SEI-212	WP-14	000.01	Groundwater	WP-14-EB	Equipment Blank	2	WJW	3/4/2013	3:58 PM	SEI 10.5.x	HDE	3/5/2013	7:40 AM			6	C
SEI-227	WP-15	070.00	Groundwater	WP-15-70.0	Normal Sample	2	WJW	3/6/2013	9:25 AM	SEI 10.5.x	HDE	3/6/2013	9:40 AM			6	C
SEI-228	WP-15	075.40	Groundwater	WP-15-75.4	Normal Sample	2	WJW	3/6/2013	10:40 AM	SEI 10.5.x	HDE	3/6/2013	11:01 AM			6	C
SEI-230	WP-15	080.80	Groundwater	WP-15-80.8	Normal Sample	2	wjw	3/6/2013	11:52 AM	SEI 10.5.x	mdr	3/6/2013	12:45 PM			6	C
SEI-235	WP-15	085.60	Groundwater	WP-15-85.6	Normal Sample	2	wjw	3/6/2013	12:54 PM	SEI 10.5.x	mdr	3/6/2013	3:20 PM			6	C
SEI-232	WP-15	091.60	Groundwater	WP-15-91.6	Normal Sample	2	wjw	3/6/2013	2:57 PM	SEI 10.5.x	mdr	3/6/2013	3:10 PM			6	C
SEI-236	WP-15	095.70	Groundwater	WP-15-95.7	Normal Sample	2	wjw	3/6/2013	4:16 PM	SEI 10.5.x	mdr	3/6/2013	4:45 PM			6	C
SEI-211	WP-15	000.01	Groundwater	WP-15-EB	Equipment Blank	2	TWM	3/4/2013	3:45 PM	SEI 10.5.x	HDE	3/5/2013	7:40 AM			6	C
SEI-244	WP-16	101.60	Groundwater	WP-16-101.6	Normal Sample	2	twm	3/7/2013	3:32 PM	SEI 10.5.x	mdr	3/7/2013	3:40 PM			6	C
SEI-244-FD	WP-16	101.60	Groundwater	WP-16-101.6-D	Field Duplicate	2	twm	3/7/2013	3:32 PM	SEI 10.5.x	mdr	3/7/2013	3:40 PM			6	C
SEI-237	WP-16	068.00	Groundwater	WP-16-68.0	Normal Sample	2	twm	3/7/2013	9:20 AM	SEI 10.5.x	mdr	3/7/2013	10:15 AM			6	C
SEI-238	WP-16	073.00	Groundwater	WP-16-73.0	Normal Sample	2	twm	3/7/2013	9:52 AM	SEI 10.5.x	mdr	3/7/2013	10:15 AM			6	C
SEI-239	WP-16	078.00	Groundwater	WP-16-78.0	Normal Sample	2	twm	3/7/2013	10:46 AM	SEI 10.5.x	mdr	3/7/2013	10:55 AM			6	C
SEI-240	WP-16	083.00	Groundwater	WP-16-83.0	Normal Sample	2	twm	3/7/2013	11:36 AM	SEI 10.5.x	mdr	3/7/2013	11:50 AM			6	C
SEI-241	WP-16	088.00	Groundwater	WP-16-88.0	Normal Sample	2	twm	3/7/2013	12:27 PM	SEI 10.5.x	mdr	3/7/2013	12:35 PM			6	C
SEI-242	WP-16	093.00	Groundwater	WP-16-93.0	Normal Sample	2	twm	3/7/2013	1:39 PM	SEI 10.5.x	mdr	3/7/2013	1:45 PM			6	C
SEI-243	WP-16	097.80	Groundwater	WP-16-97.8	Normal Sample	2	twm	3/7/2013	2:34 PM	SEI 10.5.x	mdr	3/7/2013	2:45 PM			6	C
SEI-233	WP-16	000.01	Groundwater	WP-16-EB	Equipment Blank	2	TWM	3/6/2013	1:47 PM	SEI 10.5.x	mdr	3/6/2013	3:15 PM			6	C

SDG-4

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-15-EB	TWM	3/4/13	15:45	HDE	3/5/203	07:40	1	2	2	–		✓		SE1-211	HDE	
WP-14-EB	WJW	〃	15:58			〃	1	2	2	–		✓		SE1-212		
WP-14-68.0	TWM	3/5/13	12:06			12:27	1	2	2	–		✓		SE1-213		
WP-14-68.0-MS	〃	〃	〃			〃	1	2	2	–		✓		SE1-213-MS		
WP-14-68.0-MSD	〃	〃	〃			〃	1	2	2	–		✓		SE1-213-MSD		
WP-14-73.0	〃	〃	13:02			13:20	1	2	2	–		✓		SE1-216		
MW-24-IDW	DJL	〃	10:51			11:10	1	2	2	–		✓		SE1-217		
WP-14-78.0	TWM	〃	13:59			14:35	1	2	2	–		✓		SE1-218		
WP-14-78.0D	〃	〃	〃			〃	1	2	2	–		✓		SE1-218-FD 3/5/13		
Collective Purge-IDW	DJL	〃	14:14			〃	1	2	2	–		✓		SE1-220		
WP-14-83.0	TWM	〃	15:27			15:45	1	2	2	–		✓		SE1-221		
WP-14-83.0-D	〃	〃	〃			〃	1	2	2	–		✓		SE1-221-FD		
WP-14-88.0	TWM	〃	16:22			16:35	1	2	2	–		✓		SE1-223		
WP-14-93.0	〃	〃	17:03			17:15	1	2	2	–		✓		SE1-224		
WP-14-98.0	〃	3/6/13	08:27		3/6/13	08:40	1	2	2	–		✓		SE1-225		
WP-14-103.0	〃	〃	09:21		〃	09:40	1	2	2	–		✓		SE1-226		
WP-15-70.0	WJW	〃	09:25		〃	〃	1	2	2	–		✓		SE1-227		
WP-15-75.4	〃	〃	10:40		〃	11:01	1	2	2	–		✓		SE1-228		
WP-14-108.0	TWM	〃	10:32	〃	〃	〃	1	2	2	–		✓		SE1-229	〃	
WP-15-80.6	WJW	〃	11:52	MDF	3/6/13	12:45	1	2	2	–		✓		SE1-230	MDF	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.*n* Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

SDG-4

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305. Scotia Naval Dept

Project Location: Scotia NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP14.113.0	TWM	3/6/13	1150	MDR	3/6/13	1245	1	2	2	-		✓		SEZ-231	MDR	
WP-15-91.6	WJW		1457			1510	1	2	2	-		✓		SEZ232	MDR	
WP-16-E13	TWM		1347			1515	1	2	2	-		✓		SEZ233	MDR	
WP-14-114.8	TWM		1247			1520	1	2	2	-		✓		SEZ-234		
WP-15-85.6	WJW		1254			1520	1	2	2	-		✓		SEZ-235		
WP-15-95.7	WJW		1616			1645	1	2	2	-		✓		SEZ-236		
WP-16-68.0	TWM	3/7/13	0920			1015	1	2	2	-		✓		SEZ-237		
WP-16-73.0			0952			1015	1	2	2	-		✓		SEZ-238		
WP-16-78.0			1046			1055	1	2	2	-		✓		SEZ-239		
WP-16-83.0			1136			1150	1	2	2	-		✓		SEZ-240		
WP-16-88.0			1227			1235	1	2	2	-		✓		SEZ-241		
WP-16-93			1339			1345	1	2	2	-		✓		SEZ-242		
WP-16-97.8			1434			1445	1	2	2	-		✓		SEZ-243		
WP16-101.6			1532		1540	~~1530~~	1	2	2	-		✓		SEZ-244		
WP16-101.6D	↓	↓	1532	↓	1540	~~1530~~	1	2	2	-		✓		~~SEZ-245~~ ↓	mjs 3/26/13	
					mjs 3/26/13									SE1-244-FD		

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

102305-C Scotia Naval Depot
Sample Vials Not Used: SDG-4

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Vial(s) not used in analysis
SEI-220	IDW	000.02	Groundwater	Collective Purge-IDW	Normal Sample	Vial #2
SEI-217	IDW	000.01	Groundwater	MW-24-IDW	Normal Sample	Vial #2
SEI-226	WP-14	103.00	Groundwater	WP-14-103.0	Normal Sample	Vial #2
SEI-229	WP-14	108.00	Groundwater	WP-14-108.0	Normal Sample	Vial #2
SEI-231	WP-14	113.00	Groundwater	WP-14-113	Normal Sample	Vial #2
SEI-234	WP-14	114.80	Groundwater	WP-14-114.8	Normal Sample	Vial #2
SEI-216	WP-14	073.00	Groundwater	WP-14-73.0	Normal Sample	Vial #2
SEI-218	WP-14	078.00	Groundwater	WP-14-78.0	Normal Sample	Vial #2
SEI-218-FD	WP-14	078.00	Groundwater	WP-14-78.0-D	Field Duplicate	Vial #2
SEI-221	WP-14	083.00	Groundwater	WP-14-83.0	Normal Sample	Vial #2
SEI-221-FD	WP-14	083.00	Groundwater	WP-14-83.0-D	Field Duplicate	Vial #2
SEI-223	WP-14	088.00	Groundwater	WP-14-88.0	Normal Sample	Vial #2
SEI-224	WP-14	093.00	Groundwater	WP-14-93.0	Normal Sample	Vial #2
SEI-225	WP-14	098.00	Groundwater	WP-14-98.0	Normal Sample	Vial #2
SEI-212	WP-14	000.01	Groundwater	WP-14-EB	Equipment Blank	Vial #2
SEI-227	WP-15	070.00	Groundwater	WP-15-70.0	Normal Sample	Vial #2
SEI-228	WP-15	075.40	Groundwater	WP-15-75.4	Normal Sample	Vial #2
SEI-230	WP-15	080.80	Groundwater	WP-15-80.8	Normal Sample	Vial #2
SEI-235	WP-15	085.60	Groundwater	WP-15-85.6	Normal Sample	Vial #2
SEI-232	WP-15	091.60	Groundwater	WP-15-91.6	Normal Sample	Vial #2
SEI-236	WP-15	095.70	Groundwater	WP-15-95.7	Normal Sample	Vial #2
SEI-211	WP-15	000.01	Groundwater	WP-15-EB	Equipment Blank	Vial #2
SEI-244	WP-16	101.60	Groundwater	WP-16-101.6	Normal Sample	Vial #2
SEI-244-FD	WP-16	101.60	Groundwater	WP-16-101.6-D	Field Duplicate	Vial #2
SEI-237	WP-16	068.00	Groundwater	WP-16-68.0	Normal Sample	Vial #2
SEI-238	WP-16	073.00	Groundwater	WP-16-73.0	Normal Sample	Vial #2
SEI-240	WP-16	083.00	Groundwater	WP-16-83.0	Normal Sample	Vial #2
SEI-241	WP-16	088.00	Groundwater	WP-16-88.0	Normal Sample	Vial #2
SEI-242	WP-16	093.00	Groundwater	WP-16-93.0	Normal Sample	Vial #2
SEI-243	WP-16	097.80	Groundwater	WP-16-97.8	Normal Sample	Vial #2
SEI-233	WP-16	000.01	Groundwater	WP-16-EB	Equipment Blank	Vial #2

102305-C Scotia Naval Depot
Samples With Manual Integrations: SDG-4

Lab ID	Sample Name	Compound(s) Manually Integrated
SEI-226	WP-14-103.0	1,1-Dichloroethene
SEI-229	WP-14-108.0	Chloroform, 1,1,2-Trichloroethane
SEI-213	WP-14-68.0	Benzene
SEI-225	WP-14-98.0	Chloroform
SEI-228	WP-15-75.4	1,1-Dichloroethene, Chloroform
SEI-235	WP-15-85.6	1,1-Dichloroethene

LABORATORY ANALYTICAL RESULTS

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	03/05/2013 - 03/05/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/05/2013 - 03/05/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	IDW	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Sample Name Analysis Date	CAS #	MW-24-IDW 03/05/13 11:28		Collective Purge-IDW 03/05/13 15:27	
			N		N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	0.52	J	4.4	
Toluene	108-88-3	2.0	U	1.1	J
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	0.36	J
Ethylbenzene	100-41-4	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	95	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	03/04/2013 - 03/06/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/05/2013 - 03/06/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-14	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		068.00		073.00		078.00		078.00		083.00		083.00		088.00	
Sample Name		WP-14-EB		WP-14-68.0		WP-14-73.0		WP-14-78.0-D		WP-14-78.0		WP-14-83.0-D		WP-14-83.0		WP-14-88.0	
Analysis Date		03/05/13 10:50	EB	03/05/13 12:49	N	03/05/13 13:59	N	03/05/13 15:12	FD	03/05/13 14:56	N	03/05/13 16:16	FD	03/05/13 16:00	N	03/05/13 16:54	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	0.24	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	3.9		27		49		50		53		54		59	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	0.23	J	0.34	J	0.24	J	0.27	J	0.28	J	0.29	J
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	0.16	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	0.35	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	94	%	91	%	95	%	94	%	96	%	96	%	97	%

Depth	CAS #	093.00		098.00		103.00		108.00		113.00		114.80	
Sample Name		WP-14-93.0		WP-14-98.0		WP-14-103.0		WP-14-108.0		WP-14-113		WP-14-114.8	
Analysis Date		03/05/13 17:32	N	03/06/13 09:17	N	03/06/13 10:02	N	03/06/13 11:30	N	03/06/13 13:21	N	03/06/13 13:43	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	0.32	J	0.35	J	0.26	J	0.43	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	0.20	J	0.20	J	0.20	J	0.20	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	60		56		67		93		110		110	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	0.26	J	0.29	J	0.31	J	0.39	J	0.44	J	0.33	J
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	96	%	96	%	96	%	97	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	03/04/2013 - 03/06/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/05/2013 - 03/06/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-15	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		070.00		075.40		080.80		085.60		091.60		095.70	
Sample Name		WP-15-EB		WP-15-70.0		WP-15-75.4		WP-15-80.8		WP-15-85.6		WP-15-91.6		WP-15-95.7	
Analysis Date		03/05/13 10:35	EB	03/06/13 10:17	N	03/06/13 11:15	N	03/06/13 13:06	N	03/06/13 13:58	N	03/06/13 15:33	N	03/06/13 17:21	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	0.25	J	0.26	J	0.28	J	0.19	J	0.29	J
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	0.21	J
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	41		79		90		76		73		120	
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	0.40	J	0.75	J	0.61	J	0.47	J	0.38	J	0.69	J
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	96	%	96	%	96	%	95	%	96	%	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/29/2013
Location:	Scotia, NY	**Date(s) Sampled:**	03/06/2013 - 03/07/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/07/2013 - 03/07/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	WP-16	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	000.01		068.00		073.00		078.00		083.00		088.00		093.00		097.80	
Sample Name		WP-16-EB		WP-16-68.0		WP-16-73.0		WP-16-78.0		WP-16-83.0		WP-16-88.0		WP-16-93.0		WP-16-97.8	
Analysis Date		03/07/13 09:41	EB	03/07/13 10:54	N	03/07/13 11:09	N	03/07/13 11:49	N	03/07/13 12:09	N	03/07/13 13:44	N	03/07/13 14:29	N	03/07/13 15:32	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	53		34		0.22	J	2.0	U	2.0	U	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	0.19	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	97	%	91	%	96	%	96	%	96	%	95	%	95	%	94	%

Depth	CAS #	101.60		101.60	
Sample Name		WP-16-101.6-D		WP-16-101.6	
Analysis Date		03/07/13 16:01	FD	03/07/13 16:18	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	2.0	U	2.0	U
Toluene	108-88-3	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	96	%	96	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

QUALITY CONTROL SUMMARIES

Continuing Calibration Verification (VSTD)

Laboratory Method Blank Summaries (VBLK)

Laboratory Control Sample Summaries (LCS)

Matrix Spike / Matrix Spike Duplicate Sample Summaries (MS/MSD)

Field Duplicate Sample Summaries (FD)

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: MD
Analysis Date: 03/05/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	19.21	4.0
1,1-Dichloroethene	19.93	.4
trans-1,2-Dichloroethene	19.47	2.7
1,1-Dichloroethane	21.11	-5.6
cis-1,2-Dichloroethene	20.25	-1.3
Chloroform	20.37	-1.9
Carbon Tetrachloride	19.43	2.9
Benzene	20.38	-1.9
1,2-Dichloroethane	20.48	-2.4
Trichloroethene	19.6	2.0
Toluene	19.68	1.6
1,1,2-Trichloroethane	21.55	-7.8
Tetrachloroethene	19.47	2.7
Ethylbenzene	19.7	1.5
m,p-Xylenes	39.58	1.1
o-Xylene	20.69	-3.5
1,1,2,2-Tetrachloroethane	21.81	-9.0
1,2,4-Trimethylbenzene	18.31	8.5
1,3,5-Trimethylbenzene	18.52	7.4
Naphthalene	17.37	13.2
Bromofluorobenzene (SS)	100.8 %	100.8 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: ME
Analysis Date: 03/06/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	21.65	-8.2
1,1-Dichloroethene	21.67	-8.4
trans-1,2-Dichloroethene	20.61	-3.1
1,1-Dichloroethane	22.21	-11.1
cis-1,2-Dichloroethene	21.46	-7.3
Chloroform	21.6	-8.0
Carbon Tetrachloride	20.01	-.1
Benzene	20.92	-4.6
1,2-Dichloroethane	20.73	-3.7
Trichloroethene	19.71	1.5
Toluene	19.27	3.7
1,1,2-Trichloroethane	23.01	-15.1
Tetrachloroethene	19.75	1.3
Ethylbenzene	19.72	1.4
m,p-Xylenes	39.71	.7
o-Xylene	20.12	-.6
1,1,2,2-Tetrachloroethane	22.66	-13.3
1,2,4-Trimethylbenzene	18.15	9.3
1,3,5-Trimethylbenzene	18.25	8.8
Naphthalene	17.99	10.1
Bromofluorobenzene (SS)	99.55 %	99.55 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: MF
Analysis Date: 03/07/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)
Vinyl Chloride	20.97	-4.8
1,1-Dichloroethene	20.73	-3.7
trans-1,2-Dichloroethene	20.39	-2.0
1,1-Dichloroethane	21.92	-9.6
cis-1,2-Dichloroethene	20.86	-4.3
Chloroform	20.62	-3.1
Carbon Tetrachloride	19.51	2.4
Benzene	21.92	-9.6
1,2-Dichloroethane	21.21	-6.1
Trichloroethene	19.91	.4
Toluene	21.26	-6.3
1,1,2-Trichloroethane	21.58	-7.9
Tetrachloroethene	21.93	-9.7
Ethylbenzene	21.97	-9.8
m,p-Xylenes	43.74	-9.4
o-Xylene	21.94	-9.7
1,1,2,2-Tetrachloroethane	21.45	-7.3
1,2,4-Trimethylbenzene	20.9	-4.5
1,3,5-Trimethylbenzene	21.02	-5.1
Naphthalene	18.31	8.5
Bromofluorobenzene (SS)	103.4 %	103.4 %

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK MD
Date Analyzed	3/5/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	94	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK ME
Date Analyzed	3/6/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	95	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK MF
Date Analyzed	3/7/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	92	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: MD

Analysis Date: 03/05/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	21	105	50-145
1,1-Dichloroethene	2.0 U	23	115	70-130
trans-1,2-Dichloroethene	2.0 U	21	105	60-140
1,1-Dichloroethane	2.0 U	21	105	70-135
cis-1,2-Dichloroethene	2.0 U	21	105	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	21	105	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	19	95	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	20	100	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	42	105	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	20	100	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	20	100	75-130
Naphthalene	2.0 U	17	85	55-140
Bromofluorobenzene (SS)	94 %	98 %	98 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-07
Laboratory Control Sample and Laboratory Control Duplicate Analyses Summary

QC Batch: ME
Analysis Date: 03/06/2013
Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc. (ug/L)	LCS % Recovery	LCD Conc. (ug/L)	LCD % Recovery	RPD < 30	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	22	110	22	110	0	50 - 145
1,1-Dichloroethene	2.0 U	24	120	25	125	4	70 - 130
trans-1,2-Dichloroethene	2.0 U	21	105	22	110	5	60 - 140
1,1-Dichloroethane	2.0 U	22	110	22	110	0	70 - 135
cis-1,2-Dichloroethene	2.0 U	22	110	22	110	0	70 - 125
Chloroform	2.0 U	20	100	20	100	0	65 - 135
Carbon Tetrachloride	2.0 U	21	105	21	105	0	65 - 140
Benzene	2.0 U	21	105	22	110	5	80 - 120
1,2-Dichloroethane	2.0 U	21	105	20	100	5	70 - 130
Trichloroethene	2.0 U	20	100	20	100	0	70 - 125
Toluene	2.0 U	19	95	20	100	5	75 - 120
1,1,2-Trichloroethane	2.0 U	23	115	22	110	4	75 - 125
Tetrachloroethene	2.0 U	20	100	21	105	5	45 - 150
Ethylbenzene	2.0 U	20	100	21	105	5	75 - 125
m,p-Xylenes	2.0 U	40	100	43	108	8	75 - 130
o-Xylene	2.0 U	21	105	22	110	5	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	23	115	22	110	4	65 - 130
1,2,4-Trimethylbenzene	2.0 U	18	90	20	100	11	75 - 130
1,3,5-Trimethylbenzene	2.0 U	18	90	20	100	11	75 - 130
Naphthalene	2.0 U	17	85	18	90	6	55 - 140
Bromofluorobenzene (SS)	95 %	95 %	95 %	103 %	103 %	8	75 - 120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: MF

Analysis Date: 03/07/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	24	120	50-145
1,1-Dichloroethene	2.0 U	26	130	70-130
trans-1,2-Dichloroethene	2.0 U	22	110	60-140
1,1-Dichloroethane	2.0 U	24	120	70-135
cis-1,2-Dichloroethene	2.0 U	22	110	70-125
Chloroform	2.0 U	21	105	65-135
Carbon Tetrachloride	2.0 U	21	105	65-140
Benzene	2.0 U	22	110	80-120
1,2-Dichloroethane	2.0 U	22	110	70-130
Trichloroethene	2.0 U	20	100	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	25	125	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	41	103	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	25	125	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	19	95	75-130
Naphthalene	2.0 U	20	100	55-140
Bromofluorobenzene (SS)	92 %	99 %	99 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Matrix Spike/Matrix Spike Duplicate Analyses Summary Sheet

Sample ID: WP-14-68.0
Sample Date: 3/5/2013
Analysis Date: 03/05/2013
Method: SW8260C

Analyte	Original Conc. (ug/L)	MS Conc. (ug/L)	MS % Recovery	MSD Conc. (ug/L)	MSD % Recovery	RPD < 30	QC Limits (% Recovery)
Spike Amount (ug/L):		20		20			
Vinyl Chloride	2.0 U	19	95	19	95	0	50 - 145
1,1-Dichloroethene	2.0 U	20	100	20	100	0	70 - 130
trans-1,2-Dichloroethene	2.0 U	20	100	20	100	0	60 - 140
1,1-Dichloroethane	2.0 U	20	100	21	105	5	70 - 135
cis-1,2-Dichloroethene	2.0 U	20	100	20	100	0	70 - 125
Chloroform	2.0 U	20	100	21	105	5	65 - 135
Carbon Tetrachloride	2.0 U	18	90	18	90	0	65 - 140
Benzene	0.24 J	20	99	21	104	5	80 - 120
1,2-Dichloroethane	2.0 U	20	100	20	100	0	70 - 130
Trichloroethene	3.9	22	91	23	96	5	70 - 125
Toluene	2.0 U	20	100	20	100	0	75 - 120
1,1,2-Trichloroethane	2.0 U	20	100	21	105	5	75 - 125
Tetrachloroethene	2.0 U	18	90	17	85	6	45 - 150
Ethylbenzene	0.16 J	19	94	19	94	0	75 - 125
m,p-Xylenes	2.0 U	38	95	37	93	2	75 - 130
o-Xylene	0.35 J	19	93	20	98	5	80 - 120
1,1,2,2-Tetrachloroethane	2.0 U	20	100	22	110	10	65 - 130
1,2,4-Trimethylbenzene	2.0 U	16	80	15	75	6	75 - 130
1,3,5-Trimethylbenzene	2.0 U	16	80	14	70 *	13	75 - 130
Naphthalene	2.0 U	14	70	15	75	7	55 - 140

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-14-78.0		WP-14-78.0-D		**RPD**
Lab ID	SEI-218		SEI-218-FD		
Sample Date	3/5/2013		3/5/2013		
Date Analyzed	3/5/2013		3/5/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	50		49		2
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	0.24	J	0.34	J	34
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-14-83.0		WP-14-83.0-D		**RPD**
Lab ID	SEI-221		SEI-221-FD		
Sample Date	3/5/2013		3/5/2013		
Date Analyzed	3/5/2013		3/5/2013		
Vinyl Chloride	2.0	U	2.0	U	NA
1,1-Dichloroethene	2.0	U	2.0	U	NA
trans-1,2-Dichloroethene	2.0	U	2.0	U	NA
1,1-Dichloroethane	2.0	U	2.0	U	NA
cis-1,2-Dichloroethene	2.0	U	2.0	U	NA
Chloroform	2.0	U	2.0	U	NA
Carbon Tetrachloride	2.0	U	2.0	U	NA
Benzene	2.0	U	2.0	U	NA
1,2-Dichloroethane	2.0	U	2.0	U	NA
Trichloroethene	54		53		2
Toluene	2.0	U	2.0	U	NA
1,1,2-Trichloroethane	0.28	J	0.27	J	4
Tetrachloroethene	2.0	U	2.0	U	NA
Ethylbenzene	2.0	U	2.0	U	NA
m,p-Xylenes	2.0	U	2.0	U	NA
o-Xylene	2.0	U	2.0	U	NA
1,1,2,2-Tetrachloroethane	2.0	U	2.0	U	NA
1,2,4-Trimethylbenzene	2.0	U	2.0	U	NA
1,3,5-Trimethylbenzene	2.0	U	2.0	U	NA
Naphthalene	2.0	U	2.0	U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Field Duplicate Analyses Report

Stone Environmental Project Number: 102305-R-C

Test Method: **8260C**
Results Given as: **ug/L**

Sample ID	WP-16-101.6	WP-16-101.6-D	**RPD**
Lab ID	SEI-244	SEI-244-FD	
Sample Date	3/7/2013	3/7/2013	
Date Analyzed	3/7/2013	3/7/2013	
Vinyl Chloride	2.0 U	2.0 U	NA
1,1-Dichloroethene	2.0 U	2.0 U	NA
trans-1,2-Dichloroethene	2.0 U	2.0 U	NA
1,1-Dichloroethane	2.0 U	2.0 U	NA
cis-1,2-Dichloroethene	2.0 U	2.0 U	NA
Chloroform	2.0 U	2.0 U	NA
Carbon Tetrachloride	2.0 U	2.0 U	NA
Benzene	2.0 U	2.0 U	NA
1,2-Dichloroethane	2.0 U	2.0 U	NA
Trichloroethene	2.0 U	2.0 U	NA
Toluene	2.0 U	2.0 U	NA
1,1,2-Trichloroethane	2.0 U	2.0 U	NA
Tetrachloroethene	2.0 U	2.0 U	NA
Ethylbenzene	2.0 U	2.0 U	NA
m,p-Xylenes	2.0 U	2.0 U	NA
o-Xylene	2.0 U	2.0 U	NA
1,1,2,2-Tetrachloroethane	2.0 U	2.0 U	NA
1,2,4-Trimethylbenzene	2.0 U	2.0 U	NA
1,3,5-Trimethylbenzene	2.0 U	2.0 U	NA
Naphthalene	2.0 U	2.0 U	NA

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
* = Percent Recovery outside QC Limits

Final Data Report for Laboratory Services

PREPARED FOR STONE ENVIRONMENTAL, INC.

SITE ID: SCOTIA NAVY DEPOT, SCOTIA, NY

Stone Project ID: 102305-R-C

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

DATES OF PERFORMANCE: March 22, 2013 (SDG-5)
REPORT DATE: March 28, 2013



Prepared for:
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STONE ENVIRONMENTAL INC

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MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 28, 2013

This data package presents the analytical results for investigation-derived waste (IDW) samples analyzed by Stone Environmental, Inc. Laboratory (Stone) at Stone's fixed laboratory facility in Barre, Vermont. Samples in this sample delivery group (SDG-5) were collected at the Scotia Navy Depot Site in Scotia, New York between March 18 and 20, 2013. A total of 12 IDW samples were collected during this period by Stone personnel and samples were delivered on ice to the Barre, Vermont facility for analysis. One trip blank sample accompanied and was analyzed with the IDW samples. All samples in SDG-5 were received and analyzed at the mobile laboratory on March 22, 2013.

Samples were placed in the laboratory refrigerator for storage upon their arrival on March 20, 2013. Laboratory personnel removed the cooler from the refrigerator and unpacked the sample cooler on March 22, 2013. Therefore, the sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. A copy of the chain of custody and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with the samples presented in this report were generated under a quality system that adheres to requirements specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS) and laboratory method blanks (VBLK))

are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards. Exceptions are noted below:

- VSTD Deficiencies:
    - VSTD % difference values were above acceptance criteria (<20%) for 1,2-Dichloroethane (31.5%) and Naphthalene (43.3%) for VSTD ET analyzed on March 22, 2013. Positive detections of these compounds in samples analyzed in this analytical batch may be biased high and, therefore, any positive detections were appropriately flagged with a J qualifier, as estimated.
- LCS Deficiencies:
    - 1,2-Dichloroethane recovery (135%) was above acceptance criteria (70-130%) for LCS ET analyzed on March 22, 2013.sample associated with initial calibration QA30311 on March 11, 2013. Positive detections of this compound in samples analyzed in this analytical batch may be biased high and, therefore, any positive detections were appropriately flagged with a J qualifier, as estimated.
- VBLK Deficiencies:
    - No deficiencies noted.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

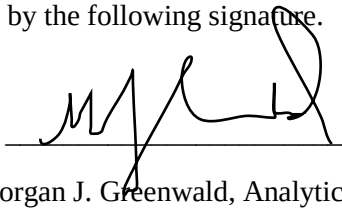
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

SAMPLE LOGIN SUMMARY

Sample Login Summary

Chain of Custody Records

List of Sample Vials Not Used in Analysis

List of Samples with Manual Integrations

102305-C Scotia Naval Depot
Sample Login Summary
SDG-5

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Temperature Units	Comments	Preservative
SEI-250	Drums-IDW	000.03	Groundwater	Drums 13-18-IDW	Normal Sample	2	LJR	3/19/2013	11:30 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-247	Drums-IDW	000.01	Groundwater	Drums 1-6-IDW	Normal Sample	2	LJR	3/19/2013	10:00 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-251	Drums-IDW	000.04	Groundwater	Drums 19-24-IDW	Normal Sample	2	LJR	3/19/2013	12:00 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-252	Drums-IDW	000.05	Groundwater	Drums 25-27-IDW	Normal Sample	2	LJR	3/19/2013	12:35 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-253	Drums-IDW	000.06	Groundwater	Drums 28-30-IDW	Normal Sample	2	LJR	3/19/2013	12:50 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-249	Drums-IDW	000.02	Groundwater	Drums 7-12-IDW	Normal Sample	2	LJR	3/19/2013	11:00 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-248	MW-25-IDW	050.00	Groundwater	MW-25-50.0-IDW	Normal Sample	2	LJR	3/19/2013	10:20 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-256	MW-25-IDW	075.00	Groundwater	MW-25-75.0-IDW	Normal Sample	2	LJR	3/18/2013	11:50 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-255	MW-26-IDW	110.00	Groundwater	MW-26-110.0-IDW	Normal Sample	2	LJR	3/18/2013	4:45 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-246	MW-26-IDW	050.00	Groundwater	MW-26-50.0-IDW	Normal Sample	2	LJR	3/19/2013	9:00 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-257	MW-27-IDW	025.00	Groundwater	MW-27-25.0-IDW	Normal Sample	2	LJR	3/20/2013	10:10 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-254	MW-27-IDW	050.00	Groundwater	MW-27-50.0-IDW	Normal Sample	2	LJR	3/20/2013	7:45 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-258	TB-IDW	000.01	Groundwater	TB-01-IDW	Trip Blank	2	LJR	3/20/2013	12:00 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl

STONE ENVIRONMENTAL INC

Project Number: 102305-R/C

Client Name and Address: Joseph Schmidl

Client Contact: Joe. Schmidl

Site Name/Location: Scotia Naval Depot / Scotia, NY

Samplers (Signature(s)): See Rosberg

Results and Invoice to:
Stone Environmental, Inc.
535 Stone Cutters Way
Montpelier, VT 05602

Telephone #: 802-229-4541
Fax: 802-229-5417
Project Manager: Joe Schmidl
PM Direct Phone # 603-455-0946

ANALYSES REQUESTED
Container type[2]

Sample Identification	DATE/TIME Sampled		Matrix[1]	No. of Containers: Composite	No. of Containers: Grab	8260								Remarks	Perservative added and final pH, if known[3]	Internal Billing Subproject Phase
														SET II		SET II
MW-26-50.0-IDW	3/19/13	09:00	L	2X40ml		X								246	HCl	230
Drums 1-6-IDW		10:00												247		231
MW-25-50.0-IDW		10:20												248		232
Drums 7-12-IDW		11:00												249		233
Drums 13-18-IDW		11:30												250		234
Drums 19-24-IDW		12:00												251		235
Drums 25-27-IDW		12:35												252		236
Drums 28-30-IDW	↓	12:50												253		237
MW-27-50.0-IDW	3/20/13	07:45												254		HE 3/22/13
MW-26-110.0-IDW	3/18/13	16:45	↓	↓		↓								255	↓	

Sampling Bottles/ Preservative Requirements

[1]**Matrix:** SL-Soil, SG-Soil Gas, GW-Groundwater, SD-Sediment, SW-Surface Water, WW-wastewater, L-liquid, Wipe, Solid, Other-specify_____(i.e., oil, concrete)

[2]**Container(s):** V-VOA 40mL vials, T-Tedlar Airbag
A - Amber 1L, G-Glass, 1L
M-250 mL-Glass Wide Mouth P-poly/plastic, O-other, specify_____

Metals, check one: ___8RCRA, ___13 PP, ___23 TAL, ___ 14MCP. Method: ___6010, ___ 6020, ___200.7 Other:_____
Dissolved Metals Field Filtered? ___Yes ___No
[3]Preservative: HCL, MeOH, HNO3, H2SO4, NaOH, O-Other, Specify_____

Samples shipped: _____ice, _____dry ice, _____ambient

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Shipped Via:	Number:
See Rosberg	3/20/13 16:00		3/22/13 12:05		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	**Turnaround Time Requirements:** <14days must have Pre-Authorization.	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time		

Notes/Comments:

Custody Seal Intact?: Y N N/A Sample Temp at Lab.

EDD Required: Specify Type? Excel, (i.e., Equis EZLoad, Excel spreadsheet, Other)

Report Package level needed: ✓ Level II (results, SS recoveries), ___ Level III (results, all QC), ✓ Level IV (FULL, CLP-like)

HE: 3/22/13

STONE ENVIRONMENTAL INC
CHAIN-OF-CUSTODY RECORD

Page 1 of 2

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STONE ENVIRONMENTAL INC

Project Number: 102305.R1C **Client Name and Address:** Joseph Schmidl **Client Contact:** Joe S,	**Site Name/Location:** Scotia Naval Depot Scotia, NY	**Samplers (Signature(s)):** Lee Rosberg	**Results and Invoice to:** Stone Environmental, Inc. 535 Stone Cutters Way Montpelier, VT 05602 **Telephone #:** 802-229-4541 Fax: 802-229-5417 **Project Manager:** Joe Schmidl **PM Direct Phone #** 603-485-0946

Sample Identification	DATE/TIME Sampled		Matrix[1]	No. of Containers: Composite	No. of Containers: Grab	ANALYSES REQUESTED Container type[2]: 8260									Remarks: SET #	Perservative added and final pH, if known[3]	Internal Billing Subproject Phase
MW-25-75.0-IDW	3/18/13	11:50	L	2X40ml		X									256	HCl	
MW-27-25.0-IDW	3/20/13	10:10	↓	↓		↓									257	↓	
TB-01-IDW	3/20/13	12:00	↓	↓		—									258	—	

Sampling Bottles/ Preservative Requirements

[1]**Matrix:** SL-Soil, SG-Soil Gas, GW-Groundwater, SD-Sediment, SW-Surface Water, WW-wastewater, L-liquid, Wipe, Solid, Other-specify_____(i.e., oil, concrete)

[2]**Container(s):** V-VOA 40mL vials, T-Tedlar Airbag, A - Amber 1L, G-Glass, 1L, M-250 mL-Glass Wide Mouth, P-poly/plastic, O-other, specify_____

Metals, check one: ___8RCRA, ___13 PP, ___23 TAL, ___ 14MCP. Method: ___6010, ___ 6020, ___200.7 Other:_____

Dissolved Metals Field Filtered? ___ Yes ___ No

Samples shipped: _____ice, _____dry ice, _____ambient

[3]Preservative: HCL, MeOH, HNO3, H2SO4, NaOH, O-Other, Specify_____

	Date/Time	Received by: (Signature)	Date/Time	Shipped Via: Number:
Relinquished by: (Signature) Lee Rosberg	3/20/13 16:00	will for HDE to match p.1	3/22/13 11:05	
Relinquished by: (Signature)	Date/Time	Received by: (Signature) 3/27/13 09:54	Date/Time	**Turnaround Time Requirements:** <14days must have Pre-Authorization.
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	

Notes/Comments: **Custody Seal Intact?:** Y N N/A Sample Temp at Lab.

EDD Required: Specify Type? Excel, (i.e., Equis EZLoad, Excel spreadsheet, Other)

Report Package level needed: ✓ Level II (results, SS recoveries), ___ Level III (results, all QC), ✓ Level IV (FULL, CLP-like)

STONE ENVIRONMENTAL INC

CHAIN-OF-CUSTODY RECORD

Page 2 of 2

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102305-C Scotia Naval Depot
Sample Vials Not Used In Analysis: SDG-5

Lab ID	Location ID	Depth	Matrix	Sample Name	Vial(s) Not Used in Analysis
SEI-250	Drums-IDW	000.03	Groundwater	Drums 13-18-IDW	Vial #2
SEI-247	Drums-IDW	000.01	Groundwater	Drums 1-6-IDW	Vial #2
SEI-251	Drums-IDW	000.04	Groundwater	Drums 19-24-IDW	Vial #2
SEI-253	Drums-IDW	000.06	Groundwater	Drums 28-30-IDW	Vial #2
SEI-249	Drums-IDW	000.02	Groundwater	Drums 7-12-IDW	Vial #2
SEI-248	MW-25-IDW	050.00	Groundwater	MW-25-50.0-IDW	Vial #2
SEI-256	MW-25-IDW	075.00	Groundwater	MW-25-75.0-IDW	Vial #2
SEI-255	MW-26-IDW	110.00	Groundwater	MW-26-110.0-IDW	Vial #2
SEI-246	MW-26-IDW	050.00	Groundwater	MW-26-50.0-IDW	Vial #2
SEI-257	MW-27-IDW	025.00	Groundwater	MW-27-25.0-IDW	Vial #2
SEI-254	MW-27-IDW	050.00	Groundwater	MW-27-50.0-IDW	Vial #2
SEI-258	TB-IDW	000.01	Groundwater	TB-01-IDW	Vial #2

102305-C Scotia Naval Depot
Samples With Manual Integrations: SDG-5

Lab ID	Sample Name	Compounds(s) Manually Integrated
SEI-250	Drums 13-18-IDW	Chlorobenzene-d5, Trichloroethene
SEI-247	Drums 1-6-IDW	Chlorobenzene-d5, Trichloroethene
SEI-251	Drums 19-24-IDW	Chlorobenzene-d5
SEI-252	Drums 25-27-IDW	Chlorobenzene-d5
SEI-253	Drums 28-30-IDW	Chlorobenzene-d5, Trichloroethene
SEI-249	Drums 7-12-IDW	Chlorobenzene-d5, Trichloroethene
SEI-248	MW-25-50.0-IDW	Chlorobenzene-d5, 1,2,4-Trimethylbenzene
SEI-256	MW-25-75.0-IDW	Chlorobenzene-d5, Trichloroethene
SEI-255	MW-26-110.0-IDW	Chlorobenzene-d5
SEI-246	MW-26-50.0-IDW	Chlorobenzene-d5, Bromofluoroenzene, Tetrachloroethene, Ethylbenzene, m+p-xylenes, o-xylene
SEI-257	MW-27-25.0-IDW	Chlorobenzene-d5
SEI-254	MW-27-50.0-IDW	Chlorobenzene-d5, Trichloroethene
SEI-258	TB-01-IDW	Chlorobenzene-d5
VSTD ET	VSTD ET	Chlorobenzene-d5, Vinyl Chloride, 1,2-Dichloroethane, 1,1,2,2-Tetrachloroethane, Naphthalene
VBLK ET	VBLK ET	Chlorobenzene-d5
LCS ET	LCS ET	Chlorobenzene-d5

LABORATORY ANALYTICAL RESULTS

Laboratory Results

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/20/2013 - 03/20/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	TB-IDW	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Sample Name	CAS #	TB-01-IDW	
Analysis Date		03/22/13 17:40	TB
Vinyl Chloride	75-01-4	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U
Chloroform	67-66-3	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U
Benzene	71-43-2	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U
Trichloroethene	79-01-6	2.0	U
Toluene	108-88-3	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U
Tetrachloroethene	127-18-4	2.0	U
Ethylbenzene	100-41-4	2.0	U
m,p-Xylenes	136777612	2.0	U
o-Xylene	95-47-6	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U
Naphthalene	91-20-3	2.0	U
Bromofluorobenzene (SS)	460-00-4	91	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Laboratory Results

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/19/2013 - 03/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	Drums-IDW	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Sample Name	CAS #	Drums 1-6-IDW		Drums 7-12-IDW		Drums 13-18-IDW		Drums 19-24-IDW		Drums 25-27-IDW		Drums 28-30-IDW	
Analysis Date		03/22/13 12:58	N	03/22/13 13:30	N	03/22/13 13:46	N	03/22/13 14:02	N	03/22/13 17:54	N	03/22/13 18:24	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	0.21	J	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	37		15		8.2		9.9		2.0	U	32	
Toluene	108-88-3	23		7.4		1.2	J	5.6		2.8		8.0	
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	1.0	J	1.2	J	1.4	J	0.72	J	0.73	J	0.45	J
Ethylbenzene	100-41-4	0.56	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	3.3		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	1.8	J	0.44	J	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	0.69	J	2.4		2.0	U	5.8		2.0	U	0.56	J
1,3,5-Trimethylbenzene	108-67-8	2.0	U	0.63	J	2.0	U	1.2	J	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	0.86	J	2.0	U	23	J	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	108	%	92	%	99	%	99	%	108	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Laboratory Results

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/18/2013 - 03/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	MW-25-IDW	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	050.00		075.00	
Sample Name		MW-25-50.0-IDW		MW-25-75.0-IDW	
Analysis Date		03/22/13 13:14	N	03/22/13 17:10	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	3.5	
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	2.2		47	
Toluene	108-88-3	0.90	J	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	0.33	J	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	98	%	106	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Laboratory Results

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/18/2013 - 03/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	MW-26-IDW	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	050.00		110.00	
Sample Name		MW-26-50.0-IDW		MW-26-110.0-IDW	
Analysis Date		03/22/13 12:42	N	03/22/13 16:55	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	0.24	J	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	9.9		2.0	U
Toluene	108-88-3	20		0.79	J
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	1.3	J	2.0	U
Ethylbenzene	100-41-4	0.56	J	2.0	U
m,p-Xylenes	136777612	2.4		2.0	U
o-Xylene	95-47-6	1.6	J	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	3.8		2.0	U
1,3,5-Trimethylbenzene	108-67-8	1.0	J	2.0	U
Naphthalene	91-20-3	1.9	J	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	97	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Laboratory Results

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/20/2013 - 03/20/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	MW-27-IDW	**Prep Method:**	Soils (SW), EPA 5035A0H/ASTM D62520-00 Ground Waters (NPW), ASTM D6520-00

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	025.00		050.00	
Sample Name		MW-27-25.0-IDW		MW-27-50.0-IDW	
Analysis Date		03/22/13 17:25	N	03/22/13 18:09	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	2.4		20	
Toluene	108-88-3	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	99	%	100	%

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

QUALITY CONTROL SUMMARIES

Continuing Calibration Verification (VSTD)

Laboratory Method Blank Summaries (VBLK)

Laboratory Control Sample Summaries (LCS)

Stone Environmental Inc. Project Number: 102305-RC
Volatile Standard Analyses Summary

QC Batch: ET
Analysis Date: 03/22/2013
Spike Amount: 20

Analyte	VSTD Conc. (ug/L)	VSTD % Difference (Acceptable Limit <=20 %)	
Vinyl Chloride	16.45	17.8	
1,1-Dichloroethene	17.16	14.2	
trans-1,2-Dichloroethene	19.26	3.7	
1,1-Dichloroethane	21.47	-7.3	
cis-1,2-Dichloroethene	22.65	-13.3	
Chloroform	21.65	-8.2	
Carbon Tetrachloride	17.67	11.7	
Benzene	19.66	1.7	
1,2-Dichloroethane	26.3	-31.5	*
Trichloroethene	20.08	-.4	
Toluene	19.32	3.4	
1,1,2-Trichloroethane	23.4	-17.0	
Tetrachloroethene	17.27	13.7	
Ethylbenzene	16.87	15.7	
m,p-Xylenes	34.07	14.8	
o-Xylene	18.14	9.3	
1,1,2,2-Tetrachloroethane	23.87	-19.4	
1,2,4-Trimethylbenzene	19.18	4.1	
1,3,5-Trimethylbenzene	19.39	3.1	
Naphthalene	28.66	-43.3	*
Bromofluorobenzene (SS)	117.55 %	117.55 %	

U = Not detected above the specified reporting limit.
J = Estimated value.
* = Outside acceptable limit

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK EH
Date Analyzed	3/11/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	88	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Blank Sample Analysis Summary

Sample ID	VBLK ET
Date Analyzed	3/22/2013

Analyte	Result (ug/L)	
Vinyl Chloride	2.0	U
1,1-Dichloroethene	2.0	U
trans-1,2-Dichloroethene	2.0	U
1,1-Dichloroethane	2.0	U
cis-1,2-Dichloroethene	2.0	U
Chloroform	2.0	U
Carbon Tetrachloride	2.0	U
Benzene	2.0	U
1,2-Dichloroethane	2.0	U
Trichloroethene	2.0	U
Toluene	2.0	U
1,1,2-Trichloroethane	2.0	U
Tetrachloroethene	2.0	U
Ethylbenzene	2.0	U
m,p-Xylenes	2.0	U
o-Xylene	2.0	U
1,1,2,2-Tetrachloroethane	2.0	U
1,2,4-Trimethylbenzene	2.0	U
1,3,5-Trimethylbenzene	2.0	U
Naphthalene	2.0	U
Bromofluorobenzene (SS)	102	%

U = Not detected above the specified reporting limit.
J = Estimated value.

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: EH

Analysis Date: 03/11/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	21	105	50-140
1,1-Dichloroethene	2.0 U	19	95	70-130
trans-1,2-Dichloroethene	2.0 U	18	90	60-140
1,1-Dichloroethane	2.0 U	21	105	70-130
cis-1,2-Dichloroethene	2.0 U	20	100	70-125
Chloroform	2.0 U	20	100	65-135
Carbon Tetrachloride	2.0 U	21	105	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	20	100	70-130
Trichloroethene	2.0 U	21	105	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	24	120	75-125
Tetrachloroethene	2.0 U	20	100	45-150
Ethylbenzene	2.0 U	21	105	75-125
m,p-Xylenes	2.0 U	42	105	75-130
o-Xylene	2.0 U	21	105	80-120
1,1,2,2-Tetrachloroethane	2.0 U	24	120	65-130
1,2,4-Trimethylbenzene	2.0 U	20	100	75-130
1,3,5-Trimethylbenzene	2.0 U	21	105	75-130
Naphthalene	2.0 U	24	120	55-140
Bromofluorobenzene (SS)	102 %	99 %	99 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

Stone Environmental Inc. Project Number: 102305-R-C
Laboratory Control Sample Summary

QC Batch: ET

Analysis Date: 03/22/2013

Method: 8260C

Spike Amount: 20

Analyte	Lab Blank Conc. (ug/L)	LCS Conc.(ug/L)	LCS % Recovery	QC Limits (% Recovery)
Vinyl Chloride	2.0 U	18	90	50-145
1,1-Dichloroethene	2.0 U	17	85	70-130
trans-1,2-Dichloroethene	2.0 U	18	90	60-140
1,1-Dichloroethane	2.0 U	22	110	70-135
cis-1,2-Dichloroethene	2.0 U	22	110	70-125
Chloroform	2.0 U	22	110	65-135
Carbon Tetrachloride	2.0 U	18	90	65-140
Benzene	2.0 U	21	105	80-120
1,2-Dichloroethane	2.0 U	27	135 *	70-130
Trichloroethene	2.0 U	21	105	70-125
Toluene	2.0 U	20	100	75-120
1,1,2-Trichloroethane	2.0 U	24	120	75-125
Tetrachloroethene	2.0 U	17	85	45-150
Ethylbenzene	2.0 U	18	90	75-125
m,p-Xylenes	2.0 U	35	88	75-130
o-Xylene	2.0 U	17	85	80-120
1,1,2,2-Tetrachloroethane	2.0 U	24	120	65-130
1,2,4-Trimethylbenzene	2.0 U	16	80	75-130
1,3,5-Trimethylbenzene	2.0 U	16	80	75-130
Naphthalene	2.0 U	24	120	55-140
Bromofluorobenzene (SS)	102 %	99 %	99 %	75-120

U = Not detected above the specified reporting limit.
J = Estimated value.
NA = Compound not present.
* = Percent Recovery outside QC Limits

DATA VALIDATION
(Tier II Stage 2B-Electronic and Manual)
FOR

Contract No. W912WJ-11-D-0001
CERCLIS Number: NYN000204534
P2 Project Number: 397651
DEFENSE NATIONAL STOCKPILE CENTER SCOTIA DEPOT SITE
February 2013 Sampling Round

ANALYSIS DATA
Volatile Organics in Water Samples

Sample Delivery Group (SDG) No. SDG#1-SDG#5

Chemical Analyses Performed By:

Stone Environmental, Inc
Mobile Laboratory
535 Stone Cutters Way
Montpelier, VT 05602

For:

Joseph Schmidl
Stone Environmental Inc
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Montpelier, VT 05602

Data Validation Report By:

Kim B. Watson
Stone Environmental, Inc.
535 Stone Cutters Way
Montpelier, VT 05602

August 13, 2013

Reference #102305-07
VOCs/SDG#1-SDG#5/kbw

EXECUTIVE SUMMARY

Stone Environmental, Inc. (Stone) has completed the validation of the Volatile Organics, analysis data prepared by Stone's Mobile Laboratory from the Scotia Depot Site in Glenville, New York. The laboratory reported the data under Sample Delivery Group (SDG*)* Nos. 1-5 that was submitted as five data packages. Attached are the SDG Narratives, Chain of Custodies along with the electronic data validation printouts indicating the qualifications based on the data validation efforts.

Validation codes are assigned during the electronic ADR.net validation process and the manual validation process and are based on the electronic and manual data review of the results, the supporting materials, and documentation provided from the laboratory. The reviewed electronic data deliverables (EDDs) contains all data generated by the laboratory and flagged as a result of the data validation effort. Attachment A contains the Data Review Outlier Summaries as generated by the ADR.net review software. All reviewed EDDs are submitted electronically.

The Overall Evaluation of Data (Section XI) presents the rationale for the decisions that have been implemented and are summarized above. The validation findings and conclusions for each analytical parameter are detailed in the remaining sections of this report and are based on the following information.

QC Criteria	Were acceptance criteria met for Contaminates of Concern?		
	Yes	No	NA
Chain of custody (COC)/sample integrity/holding times	√		
Data completeness	√		
Holding times and sample preservation	√		
Calibrations and Instrument Performance		√	
Blanks (Field, Prep, Instrument)		√	
Surrogate analytes	√		
Matrix spike/matrix spike duplicate (MS/MSD) results		√	
Field Duplicates	√		
Laboratory Duplicates			NA
Sensitivity Check	√		
Laboratory control samples/Accuracy Check		√	
Target Analyte Identification	√		
Analyte quantitation and Reported Quantitation Limits* (no calculations in Tier II)	√		√ - Tier II (calculations)
System Performance	√		√ - Tier II (chromatograms)
NA- *Not applicable indicates that either the QC is not applicable to this data set or not required by the method.*			

This validation report shall be considered part of the data package for all future distributions of the volatile organics in water analysis data.

INTRODUCTION

Analyses were performed according to the Stone's SOP and Method 8260C. The target compound lists were limited to the standard lists as specified in the Quality Assurance Project Plan, April 2013.

To the extent possible, Stone's validation was performed in conformance with Tier II (Stage 2b electronic and manual for calibrations) guidelines as defined by EPA Region I, "Region I EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses", March 1996 and the laboratory standard operating procedure. "EPA's National Functional Guidelines for Organic Data Review" (EPA 540/R-99/008, 10/99) was also considered during the evaluation, and professional judgment was applied as necessary and appropriate.

The data validation process evaluates data on a technical basis for chemical analyses conducted under the CLP or other well-defined methods. Contract compliance is evaluated only in specific situations. Issues pertaining to contractual compliance are noted where applicable. It is assumed that the data package is presented in accordance with the CLP requirements. It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. During the validation process, laboratory data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data validator. Raw data is **not** examined in detail to check calculations, compound identification, and/or transcription errors in a Tier II evaluation unless otherwise noted. The validation effort was limited to review of the QC summary forms submitted (i.e., Calibrations (initial and continuing) summaries, laboratory control samples, laboratory/field duplicates, matrix spike summaries and %D for positive hits on the two columns). Validated results are either qualified or unqualified; if results are unqualified, this means that the reported values may be used without reservation. Final validated results are annotated with the following codes, as defined in the EPA National and Region I Functional Guidelines:

U - The analyte was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit. The sample quantitation limit accounts for sample specific dilution factors and percent solids corrections or sample sizes that deviate from those required by the method.

J - The associated numerical value is an estimated quantity.

UJ - The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

R - The data are unusable (analyte may or may not be present). Resampling and reanalysis is necessary for verification. The R replaces the numerical value or sample quantitation limit. In some instances (e.g., a dilution) a result may be indicated as “rejected” to avoid confusion when a more quantitatively accurate result is available.

EB, TB, BB - An analyte that was identified in an aqueous equipment (field) blank, trip blank, or bottle blank that was used to assess field contamination associated with air/sediment samples. These qualifiers are to be applied to air/sediment sample results only.

These codes are assigned during the electronic ADR.net validation data review and the manual validation process, and are based on the electronic and manual data review of the results, the supporting materials and documentation provided from the laboratory. The EDD contains all data generated by the laboratory and flagged as a result of the data validation effort. Attachment A contains the Data Review Summaries as generated by the ADR.net review software. All reviewed EDDs are submitted electronically.

All data users should note two facts. First, **the "R" qualifier means that the laboratory-reported value is completely unusable.** The analysis is invalid due to significant quality control problems, and provides no information as to whether the compound is present or not. Rejected values should not appear on data tables because they have no useful purpose under any circumstances. Second, **no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable.** While strict quality control conformance provides well-defined confidence in the reported results, any analytical result will always contain some uncertainty as demonstrated in the laboratory derived control limits.

The user is also cautioned that the validation effort is based on the materials provided by the laboratory. Software manipulation, resulting in misleading raw data printouts, cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

ATTACHMENT A
ADR Electronic Data Validation Summaries
SDG Nos. SDG#1-SDG#5
Volatile Organics in Water Samples

(also, submitted electronically)

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Comments	Lab ID Parent	Custody ID	pH	Preservative	Temperature Units	Composite Sample
SEI-26	MW13	078.00	Groundwater	MW13-78.0-GW	Normal Sample	3	DJL	2/7/2013	12:40 PM	Grab	HDE	2/7/2013	1:51 PM	6						C	FALSE
SEI-25	MWGEP1	073.00	Groundwater	MWGEP1-73.0-GW	Normal Sample	2	LJR	2/7/2013	11:50 AM	Grab	HDE	2/7/2013	12:17 PM	6						C	FALSE
SEI-1	WP-01	000.01	Groundwater	WP-01-EB	Equipment Blank	2	WJW	2/5/2013	9:30 AM	SEI 10.5.x	HDE	2/5/2013	3:45 PM	6						C	FALSE
SEI-2	WP-01	070.00	Groundwater	WP-01-70.0	Normal Sample	2	WJW	2/5/2013	2:06 PM	SEI 10.5.x	HDE	2/5/2013	3:45 PM	6						C	FALSE
SEI-3	WP-01	075.00	Groundwater	WP-01-75.0	Normal Sample	2	WJW	2/5/2013	4:18 PM	SEI 10.5.x	HDE	2/5/2013	4:39 PM	6						C	FALSE
SEI-5	WP-01	080.00	Groundwater	WP-01-80.0	Normal Sample	2	WJW	2/5/2013	5:35 PM	SEI 10.5.x	HDE	2/5/2013	5:48 PM	6						C	FALSE
SEI-8	WP-01	084.50	Groundwater	WP-01-84.5	Normal Sample	2	WJW	2/6/2013	9:20 AM	SEI 10.5.x	HDE	2/6/2013	10:47 AM	6						C	FALSE
SEI-9	WP-01	091.50	Groundwater	WP-01-91.5	Normal Sample	2	WJW	2/6/2013	10:09 AM	SEI 10.5.x	HDE	2/6/2013	10:47 AM	6						C	FALSE
SEI-10	WP-01	095.00	Groundwater	WP-01-95.0	Normal Sample	2	WJW	2/6/2013	11:16 AM	SEI 10.5.x	HDE	2/6/2013	1:15 PM	6		SEI-10				C	FALSE
SEI-10-MS	WP-01	095.00	Groundwater	WP-01-95.0-MS	Matrix Spike	2	WJW	2/6/2013	11:16 AM	SEI 10.5.x	HDE	2/6/2013	1:15 PM	6		SEI-10				C	FALSE
SEI-10-MSD	WP-01	095.00	Groundwater	WP-01-95.0-MSD	Matrix Spike Duplicate	2	WJW	2/6/2013	11:16 AM	SEI 10.5.x	HDE	2/6/2013	1:15 PM	6		SEI-10				C	FALSE
SEI-16	WP-01	100.00	Groundwater	WP-01-100.0	Normal Sample	2	WJW	2/6/2013	2:15 PM	SEI 10.5.x	HDE	2/6/2013	4:21 PM	6						C	FALSE
SEI-17	WP-01	105.00	Groundwater	WP-01-105.0	Normal Sample	2	WJW	2/6/2013	3:23 PM	SEI 10.5.x	HDE	2/6/2013	4:21 PM	6						C	FALSE
SEI-19	WP-01	110.00	Groundwater	WP-01-110.0	Normal Sample	2	WJW	2/6/2013	4:22 PM	SEI 10.5.x	HDE	2/6/2013	5:45 PM	6						C	FALSE
SEI-20	WP-01	115.00	Groundwater	WP-01-115.0	Normal Sample	2	WJW	2/6/2013	5:11 PM	SEI 10.5.x	HDE	2/6/2013	5:45 PM	6						C	FALSE
SEI-21	WP-01	120.00	Groundwater	WP-01-120.0	Normal Sample	2	WJW	2/7/2013	9:35 AM	SEI 10.5.x	HDE	2/7/2013	10:12 AM	6						C	FALSE
SEI-22	WP-01	125.00	Groundwater	WP-01-125.0	Normal Sample	2	WJW	2/7/2013	10:20 AM	SEI 10.5.x	HDE	2/7/2013	11:33 AM	6						C	FALSE
SEI-23	WP-01	130.00	Groundwater	WP-01-130.0	Normal Sample	2	WJW	2/7/2013	11:14 AM	SEI 10.5.x	HDE	2/7/2013	11:33 AM	6						C	FALSE
SEI-29	WP-01	135.00	Groundwater	WP-01-135.0	Normal Sample	2	WJW	2/7/2013	12:27 PM	SEI 10.5.x	HDE	2/7/2013	1:51 PM	6						C	FALSE
SEI-30	WP-01	140.00	Groundwater	WP-01-140.0	Normal Sample	2	WJW	2/7/2013	1:58 PM	SEI 10.5.x	HDE	2/7/2013	4:44 PM	6						C	FALSE
SEI-31	WP-01	141.60	Groundwater	WP-01-141.6	Normal Sample	2	WJW	2/7/2013	2:56 PM	SEI 10.5.x	HDE	2/7/2013	4:44 PM	6						C	FALSE
SEI-6	WP-02	000.01	Groundwater	WP-02-EB	Equipment Blank	2	WAN	2/5/2013	12:00 AM	SEI 10.5.x	HDE	2/5/2013	5:48 PM	6						C	FALSE
SEI-90	WP-02	000.01	Groundwater	WP-02a-EB	Equipment Blank	2	WJW	2/12/2013	9:45 AM	SEI 10.5.x	HDE	2/12/2013	10:05 AM	6						C	FALSE
SEI-4	WP-02	070.00	Groundwater	WP-02-70.0	Normal Sample	2	WAN	2/5/2013	5:29 PM	SEI 10.5.x	HDE	2/5/2013	5:39 PM	6						C	FALSE
SEI-7	WP-02	075.00	Groundwater	WP-02-75.0	Normal Sample	2	WAN	2/6/2013	10:07 AM	SEI 10.5.x	HDE	2/6/2013	10:47 AM	6						C	FALSE
SEI-13	WP-02	079.50	Groundwater	WP-02-79.5	Normal Sample	2	WAN	2/6/2013	12:36 PM	SEI 10.5.x	HDE	2/6/2013	1:15 PM	6						C	FALSE
SEI-14	WP-02	087.15	Groundwater	WP-02-87.15	Normal Sample	2	WAN	2/6/2013	1:44 PM	SEI 10.5.x	HDE	2/6/2013	4:21 PM	6						C	FALSE
SEI-15	WP-02	092.00	Groundwater	WP-02-92.0	Normal Sample	2	WAN	2/6/2013	3:03 PM	SEI 10.5.x	HDE	2/6/2013	4:21 PM	6						C	FALSE
SEI-18	WP-02	096.40	Groundwater	WP-02-96.4	Normal Sample	2	WAN	2/6/2013	5:26 PM	SEI 10.5.x	HDE	2/6/2013	5:45 PM	6						C	FALSE
SEI-24	WP-02	102.14	Groundwater	WP-02-102.14	Normal Sample	2	WAN	2/7/2013	9:55 AM	SEI 10.5.x	HDE	2/7/2013	11:33 AM	6						C	FALSE
SEI-27	WP-02	107.00	Groundwater	WP-02-107.0	Normal Sample	2	WAN	2/7/2013	11:20 AM	SEI 10.5.x	HDE	2/7/2013	1:51 PM	6						C	FALSE
SEI-28	WP-02	110.20	Groundwater	WP-02-110.2	Normal Sample	2	WAN	2/7/2013	12:50 PM	SEI 10.5.x	HDE	2/7/2013	1:51 PM	6						C	FALSE
SEI-32	WP-02	115.00	Groundwater	WP-02-115.0	Normal Sample	2	WAN	2/7/2013	2:32 PM	SEI 10.5.x	HDE	2/7/2013	4:44 PM	6						C	FALSE
SEI-33	WP-02	120.00	Groundwater	WP-02-120.0	Normal Sample	2	WAN	2/7/2013	3:41 PM	SEI 10.5.x	HDE	2/7/2013	4:44 PM	6						C	FALSE
SEI-34	WP-02	125.00	Groundwater	WP-02-125.0	Normal Sample	2	WAN	2/7/2013	4:46 PM	SEI 10.5.x	HDE	2/7/2013	5:42 PM	6						C	FALSE
SEI-35	WP-02	129.00	Groundwater	WP-02-129.0	Normal Sample	2	WAN	2/8/2013	9:00 AM	SEI 10.5.x	HDE	2/8/2013	9:45 AM	6		SEI-35				C	FALSE
SEI-35-MS	WP-02	129.00	Groundwater	WP-02-129.0-MS	Matrix Spike	2	WAN	2/8/2013	9:00 AM	SEI 10.5.x	HDE	2/8/2013	9:45 AM	6		SEI-35				C	FALSE
SEI-35-MSD	WP-02	129.00	Groundwater	WP-02-129.0-MSD	Matrix Spike Duplicate	2	WAN	2/8/2013	9:00 AM	SEI 10.5.x	HDE	2/8/2013	9:45 AM	6		SEI-35				C	FALSE
SEI-94	WP-02	132.80	Groundwater	WP-02-132.8	Normal Sample	2	WJW	2/12/2013	12:18 PM	SEI 10.5.x	HDE	2/12/2013	12:45 PM	6						C	FALSE
SEI-95	WP-02	137.50	Groundwater	WP-02-137.5	Normal Sample	2	WJW	2/12/2013	1:12 PM	SEI 10.5.x	HDE	2/12/2013	2:05 PM	6						C	FALSE
SEI-97	WP-02	142.00	Groundwater	WP-02-142.0	Normal Sample	2	WJW	2/12/2013	2:29 PM	SEI 10.5.x	HDE	2/12/2013	3:25 PM	6						C	FALSE
SEI-99	WP-02	147.10	Groundwater	WP-02-147.1	Normal Sample	2	WJW	2/12/2013	3:44 PM	SEI 10.5.x	HDE	2/12/2013	5:30 PM	6						C	FALSE
SEI-100	WP-02	151.00	Groundwater	WP-02-151.0	Normal Sample	2	WJW	2/12/2013	5:13 PM	SEI 10.5.x	HDE	2/12/2013	5:30 PM	6						C	FALSE
SEI-102	WP-02	153.10	Groundwater	WP-02-153.1	Normal Sample	2	WJW	2/13/2013	9:28 AM	SEI 10.5.x	HDE	2/13/2013	1:00 PM	6		SEI-102				C	FALSE
SEI-102-MS	WP-02	153.10	Groundwater	WP-02-153.1-MS	Matrix Spike	2	WJW	2/13/2013	9:28 AM	SEI 10.5.x	HDE	2/13/2013	1:00 PM	6		SEI-102				C	FALSE
SEI-102-MSD	WP-02	153.10	Groundwater	WP-02-153.1-MSD	Matrix Spike Duplicate	2	WJW	2/13/2013	9:28 AM	SEI 10.5.x	HDE	2/13/2013	1:00 PM	6		SEI-102				C	FALSE
SEI-101	WP-03	000.01	Groundwater	WP-03b-EB	Equipment Blank	2	WAN	2/13/2013	8:47 AM	SEI 10.5.x	HDE	2/13/2013	1:00 PM	6						C	FALSE
SEI-36	WP-03	000.01	Groundwater	WP-03-EB	Equipment Blank	2	WJW	2/8/2013	7:50 AM	SEI 10.5.x	HDE	2/8/2013	9:45 AM	6						C	FALSE
SEI-75	WP-03	000.01	Groundwater	WP-03a-EB	Equipment Blank	2	WAN	2/11/2013	9:43 AM	SEI 10.5.x	HDE	2/11/2013	10:58 AM	6						C	FALSE
SEI-39	WP-03	072.00	Groundwater	WP-03-72.0	Normal Sample	2	WJW	2/8/2013	11:19 AM	SEI 10.5.x	HDE	2/8/2013	11:50 AM	6						C	FALSE
SEI-41	WP-03	077.10	Groundwater	WP-03-77.1	Normal Sample	2	WJW	2/8/2013	12:14 PM	SEI 10.5.x	HDE	2/8/2013	1:17 PM	6						C	FALSE
SEI-44	WP-03	082.70	Groundwater	WP-03-82.7	Normal Sample	2	WJW	2/8/2013	2:11 PM	SEI 10.5.x	HDE	2/8/2013	2:34 PM	6						C	FALSE
SEI-45	WP-03	087.50	Groundwater	WP-03-87.5	Normal Sample	2	WJW	2/8/2013	3:01 PM	SEI 10.5.x	HDE	2/8/2013	3:40 PM	6						C	FALSE
SEI-50	WP-03	092.50	Groundwater	WP-03-92.5	Normal Sample	2	WJW	2/8/2013	3:44 PM	SEI 10.5.x	HDE	2/8/2013	5:15 PM	6						C	FALSE
SEI-51	WP-03	093.70	Groundwater	WP-03-93.7	Normal Sample	2	WJW	2/8/2013	4:40 PM	SEI 10.5.x	HDE	2/8/2013	5:15 PM	6						C	FALSE
SEI-80	WP-03	107.80	Groundwater	WP-03-107.8	Normal Sample	2	WAN	2/11/2013	1:11 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6		SEI-80				C	FALSE
SEI-80-FD	WP-03	107.80	Groundwater	WP-03-107.8-FD	Field Duplicate	2	WAN	2/11/2013	1:11 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6		SEI-80				C	FALSE
SEI-86	WP-03	112.80	Groundwater	WP-03-112.8	Normal Sample	2	WAN	2/11/2013	2:55 PM	SEI 10.5.x	HDE	2/11/2013	3:18 PM	6						C	FALSE
SEI-87	WP-03	117.80	Groundwater	WP-03-117.8	Normal Sample	2	WAN	2/11/2013	4:01 PM	SEI 10.5.x	HDE	2/11/2013	4:20 PM	6		SEI-87				C	FALSE
SEI-87-FD	WP-03	117.80	Groundwater	WP-03-117.8-D	Field Duplicate	2	WAN	2/11/2013	4:01 PM	SEI 10.5.x	HDE	2/11/2013	4:20 PM	6		SEI-87				C	FALSE
SEI-89	WP-03	122.80	Groundwater	WP-03-122.8	Normal Sample	2	WAN	2/11/2013	5:22 PM	SEI 10.5.x	HDE	2/11/2013	5:24 PM	6						C	FALSE
SEI-91	WP-03	127.30	Groundwater	WP-03-127.3	Normal Sample	2	WAN	2/12/2013	9:35 AM	SEI 10.5.x	HDE	2/12/2013	10:05 AM	6						C	FALSE
SEI-92	WP-03	132.40	Groundwater	WP-03-132.4	Normal Sample	2	WAN	2/12/2013	11:00 AM	SEI 10.5.x	HDE	2/12/2013	12:45 PM	6						C	FALSE
SEI-93	WP-03	137.50	Groundwater	WP-03-137.5	Normal Sample	2	WAN	2/12/2013	12:08 PM	SEI 10.5.x	HDE	2/12/2013	12:45 PM	6						C	FALSE
SEI-96	WP-03	142.60	Groundwater	WP-03-142.6	Normal Sample	2	WAN	2/12/2013	1:37 PM	SEI 10.5.x	HDE	2/12/2013	2:05 PM	6						C	FALSE
SEI-98	WP-03	145.60	Groundwater	WP-03-145.6	Normal Sample	2	WAN	2/12/2013	2:51 PM	SEI 10.5.x	HDE	2/12/2013	3:25 PM	6						C	FALSE
SEI-106	WP-03	159.00	Groundwater	WP-03-159.0	Normal Sample	2	WAN	2/19/2013	11:42 AM	SEI 10.5.x	HDE	2/19/2013	12:03 PM	6		SEI-106				C	FALSE
SEI-106-FD	WP-03	159.00	Groundwater	WP-03-159.0-D	Field Duplicate	2	WAN	2/19/2013	11:42 AM	SEI 10.5.x	HDE	2/19/2013	12:03 PM	6		SEI-106				C	FALSE
SEI-106-MS	WP-03	159.00	Groundwater	WP-03-159.0-MS	Matrix Spike	2	WAN	2/19/2013	11:42 AM	SEI 10.5.x	HDE	2/19/2013	12:03 PM	6		SEI-106				C	FALSE

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Comments	Lab ID Parent	Custody ID	pH	Preservative	Temperature Units	Composite Sample
SEI-106-MSD	WP-03	159.00	Groundwater	WP-03-159.0-MSD	Matrix Spike Duplicate	2	WAN	2/19/2013	11:42 AM	SEI 10.5.x	HDE	2/19/2013	12:03 PM	6		SEI-106				C	FALSE
SEI-110	WP-03	163.90	Groundwater	WP-03-163.9	Normal Sample	2	WAN	2/19/2013	12:55 PM	SEI 10.5.x	HDE	2/19/2013	1:10 PM	6						C	FALSE
SEI-111	WP-03	164.80	Groundwater	WP-03-164.8	Normal Sample	2	WAN	2/19/2013	2:29 PM	SEI 10.5.x	HDE	2/19/2013	2:45 PM	6						C	FALSE
SEI-40	WP-04	000.01	Groundwater	WP-04-EB	Equipment Blank	2	WAN	2/8/2013	11:09 AM	SEI 10.5.x	HDE	2/8/2013	11:50 AM	6						C	FALSE
SEI-57	WP-04	000.02	Groundwater	WP-04-EB-2	Equipment Blank	2	DJL	2/9/2013	4:30 PM	SEI 10.5.x	HDE	2/9/2013	5:12 PM	6						C	FALSE
SEI-42	WP-04	072.70	Groundwater	WP-04-72.7	Normal Sample	2	WAN	2/8/2013	12:44 PM	SEI 10.5.x	HDE	2/8/2013	1:17 PM	6						C	FALSE
SEI-43	WP-04	077.50	Groundwater	WP-04-77.5	Normal Sample	2	WAN	2/8/2013	1:46 PM	SEI 10.5.x	HDE	2/8/2013	2:34 PM	6						C	FALSE
SEI-46	WP-04	082.50	Groundwater	WP-04-82.5	Normal Sample	2	WAN	2/8/2013	2:26 PM	SEI 10.5.x	HDE	2/8/2013	3:40 PM	6						C	FALSE
SEI-47	WP-04	087.70	Groundwater	WP-04-87.7	Normal Sample	2	WAN	2/8/2013	3:09 PM	SEI 10.5.x	HDE	2/8/2013	3:40 PM	6						C	FALSE
SEI-48	WP-04	092.70	Groundwater	WP-04-92.7	Normal Sample	2	WAN	2/8/2013	3:41 PM	SEI 10.5.x	HDE	2/8/2013	5:15 PM	6						C	FALSE
SEI-49	WP-04	097.70	Groundwater	WP-04-97.7	Normal Sample	2	WAN	2/8/2013	4:53 PM	SEI 10.5.x	HDE	2/8/2013	5:15 PM	6						C	FALSE
SEI-53	WP-04	102.70	Groundwater	WP-04-102.7	Normal Sample	2	WAN	2/9/2013	12:52 PM	SEI 10.5.x	HDE	2/9/2013	1:20 PM	6		SEI-53				C	FALSE
SEI-53-MS	WP-04	102.70	Groundwater	WP-04-102.7-MS	Matrix Spike	2	WAN	2/9/2013	12:52 PM	SEI 10.5.x	HDE	2/9/2013	1:20 PM	6		SEI-53				C	FALSE
SEI-53-MSD	WP-04	102.70	Groundwater	WP-04-102.7-MSD	Matrix Spike Duplicate	2	WAN	2/9/2013	12:52 PM	SEI 10.5.x	HDE	2/9/2013	1:20 PM	6		SEI-53				C	FALSE
SEI-61	WP-04	107.70	Groundwater	WP-04-107.7	Normal Sample	2	WAN	2/10/2013	12:51 PM	SEI 10.5.x	HDE	2/10/2013	1:15 PM	6						C	FALSE
SEI-65	WP-04	112.50	Groundwater	WP-04-112.5	Normal Sample	2	WAN	2/10/2013	2:49 PM	SEI 10.5.x	HDE	2/10/2013	3:20 PM	6						C	FALSE
SEI-70	WP-04	117.60	Groundwater	WP-04-117.6	Normal Sample	2	WAN	2/10/2013	4:22 PM	SEI 10.5.x	HDE	2/10/2013	4:55 PM	6						C	FALSE
SEI-73	WP-04	120.50	Groundwater	WP-04-120.5	Normal Sample	2	WAN	2/11/2013	9:04 AM	SEI 10.5.x	HDE	2/11/2013	10:05 AM	6						C	FALSE
SEI-52	WP-05	000.01	Groundwater	WP-05-EB	Equipment Blank	2	WJW	2/9/2013	12:25 PM	SEI 10.5.x	HDE	2/9/2013	1:20 PM	6						C	FALSE
SEI-54	WP-05	067.70	Groundwater	WP-05-67.7	Normal Sample	2	WJW	2/9/2013	3:23 PM	SEI 10.5.x	HDE	2/9/2013	3:55 PM	6						C	FALSE
SEI-58	WP-05	073.00	Groundwater	WP-05-73.0	Normal Sample	2	WJW	2/9/2013	4:35 PM	SEI 10.5.x	HDE	2/9/2013	5:12 PM	6						C	FALSE
SEI-59	WP-05	078.00	Groundwater	WP-05-78.0	Normal Sample	2	WJW	2/10/2013	9:36 AM	SEI 10.5.x	HDE	2/10/2013	9:58 AM	6						C	FALSE
SEI-60	WP-05	082.80	Groundwater	WP-05-82.8	Normal Sample	2	WJW	2/10/2013	11:06 AM	SEI 10.5.x	HDE	2/10/2013	11:22 AM	6						C	FALSE
SEI-62	WP-05	087.80	Groundwater	WP-05-87.8	Normal Sample	2	WJW	2/10/2013	12:11 PM	SEI 10.5.x	HDE	2/10/2013	1:15 PM	6						C	FALSE
SEI-63	WP-05	092.80	Groundwater	WP-05-92.8	Normal Sample	2	WJW	2/10/2013	1:08 PM	SEI 10.5.x	HDE	2/10/2013	2:15 PM	6						C	FALSE
SEI-64	WP-05	097.70	Groundwater	WP-05-97.7	Normal Sample	2	WJW	2/10/2013	1:56 PM	SEI 10.5.x	HDE	2/10/2013	2:15 PM	6						C	FALSE
SEI-66	WP-05	102.90	Groundwater	WP-05-102.9	Normal Sample	2	WJW	2/10/2013	2:40 PM	SEI 10.5.x	HDE	2/10/2013	3:20 PM	6						C	FALSE
SEI-67	WP-05	107.90	Groundwater	WP-05-107.9	Normal Sample	2	WJW	2/10/2013	3:46 PM	SEI 10.5.x	HDE	2/10/2013	4:05 PM	6		SEI-67				C	FALSE
SEI-67-MS	WP-05	107.90	Groundwater	WP-05-107.9-MS	Matrix Spike	2	WJW	2/10/2013	3:46 PM	SEI 10.5.x	HDE	2/10/2013	4:05 PM	6		SEI-67				C	FALSE
SEI-67-MSD	WP-05	107.90	Groundwater	WP-05-107.9-MSD	Matrix Spike Duplicate	2	WJW	2/10/2013	3:46 PM	SEI 10.5.x	HDE	2/10/2013	4:05 PM	6		SEI-67				C	FALSE
SEI-71	WP-05	112.80	Groundwater	WP-05-112.8	Normal Sample	2	WJW	2/10/2013	4:32 PM	SEI 10.5.x	HDE	2/10/2013	4:55 PM	6						C	FALSE
SEI-72	WP-05	117.30	Groundwater	WP-05-117.3	Normal Sample	2	WJW	2/11/2013	8:53 AM	SEI 10.5.x	HDE	2/11/2013	10:05 AM	6						C	FALSE
SEI-74	WP-05	122.20	Groundwater	WP-05-122.2	Normal Sample	2	WJW	2/11/2013	9:50 AM	SEI 10.5.x	HDE	2/11/2013	10:58 AM	6						C	FALSE
SEI-76	WP-05	127.50	Groundwater	WP-05-127.5	Normal Sample	2	WJW	2/11/2013	11:13 AM	SEI 10.5.x	HDE	2/11/2013	12:06 PM	6						C	FALSE
SEI-77	WP-05	132.40	Groundwater	WP-05-132.4	Normal Sample	2	WJW	2/11/2013	12:01 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6						C	FALSE
SEI-78	WP-05	137.30	Groundwater	WP-05-137.3	Normal Sample	2	WJW	2/11/2013	1:00 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6		SEI-78				C	FALSE
SEI-78-FD	WP-05	137.30	Groundwater	WP-05-137.3-D	Field Duplicate	2	WJW	2/11/2013	1:00 PM	SEI 10.5.x	HDE	2/11/2013	1:50 PM	6		SEI-78				C	FALSE
SEI-82	WP-05	142.40	Groundwater	WP-05-142.4	Normal Sample	2	WJW	2/11/2013	2:12 PM	SEI 10.5.x	HDE	2/11/2013	2:50 PM	6		SEI-82				C	FALSE
SEI-82-FD	WP-05	142.40	Groundwater	WP-05-142.4-D	Field Duplicate	2	WJW	2/11/2013	2:12 PM	SEI 10.5.x	HDE	2/11/2013	2:50 PM	6		SEI-82				C	FALSE
SEI-82-MS	WP-05	142.40	Groundwater	WP-05-142.4-MS	Matrix Spike	2	WJW	2/11/2013	2:12 PM	SEI 10.5.x	HDE	2/11/2013	2:50 PM	6		SEI-82				C	FALSE
SEI-82-MSD	WP-05	142.40	Groundwater	WP-05-142.4-MSD	Matrix Spike Duplicate	2	WJW	2/11/2013	2:12 PM	SEI 10.5.x	HDE	2/11/2013	2:50 PM	6		SEI-82				C	FALSE

TSDG-11

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305 Scotia Naval Depot.

Project Location: Scotia, NY.

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-01-EB	WJW	2/5/13	09:30	HDE	2/5/13	15:45	1	2	2	—		✓		SE1-1	HDE	
WP-01-70.0	"	"	14:06	"	"	"	1	2	2	—		✓		SE1-2	"	
WP-01-75.0	"	"	16:18	"	"	16:39	1	2	2	—		✓		SE1-3	"	
WP-02-70.0	WAN	"	17:29	"	"	17:39	1	2	2	—		✓		SE1-4	"	
WP-01-80.0	WJW	"	17:35	"	"	17:48	1	2	2	—		✓		SE1-5	"	
WP-02-EB	WAN	"		"	"	"	1	2	2	—		✓		SE1-6	"	
WP-02-75.0	"	2/6/13	10:07	"	2/6/13	10:47	1	2	2	—		✓		SE1-7	"	
WP-01-84.5	WJW	"	09:20	"	"	"	1	2	2	—		✓		SE1-8	"	
WP-01-91.5	"	"	10:09	"	"	"	1	2	2	—		✓		SE1-9	"	
WP-01-95.0	WJW	2/6/13	11:16	"	"	13:15	1	2	2	—		✓		SE1-10	"	vials 1+2 used
WP-02-79.5	WAN	"	12:36	"	"	"	1	2	2	—		✓		SE1-13	"	
WP-01-95.0-MS	WJW	"	11:16	"	"	13:15	1	2	2	+		✓		SE1-10-MS	"	vials 1+2 used
WP-01-95.0-MSD	"	"	11:16	"	"	13:15	1	2	2	—		✓		SE1-10-MSD	"	vials 1+2 used
WP-02-87.15	WAN	"	13:44	"	"	16:21	1	2	2	+		✓		SE1-14	"	
WP-02-92.0	"	"	15:03	"	"	"	1	2	2	—		✓		SE1-15	"	
WP-01-100.00	WJW	"	14:15	"	"	"	1	2	2	—		✓		SE1-16	"	
WP-01-105.00	"	"	15:23	"	"	"	1	2	2	+		✓		SE1-17	"	
WP-02-96.4	WAN	"	17:26	"	"	17:45	1	2	2	—		✓		SE1-18	"	
WP-01-110.0	WJW	"	16:22	"	"	"	1	2	2	—		✓		SE1-19	"	
WP-01-115.0	"	"	17:11	"	"	"	1	2	2	—		✓		SE1-20	"	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

NOTE: 4 vials collected for each depth SE1 only received 2 vials. storing remaining 2 vials in fridge for potential split sample for another lab.

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other _____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-01-120.0	WJW	217/13	09:35	HDE	217/13	10:12	1	2	2	—		✓		SE1-21	HDE	
WP-01-125.0	↓	↓	10:20	↓	↓	11:33	1	2	2	—		✓		SE1-22	↓	
WP-01-130.0	↓	↓	11:14	↓	↓	↓	1	2	2	—		✓		SE1-23	↓	
WP-02-102.14	WAN	↓	09:55	↓	↓	↓	1	2	2	—		✓		SE1-24	↓	GRAB sample
MWGEP1-73.0-GW	LJR	↓	11:50	↓	↓	12:17	1	2	2	—		✓		SE1-25	↓	GRAB sample
MW13-78.0-GW	DJL	↓	12:40	↓	↓	13:51	1	2	3	2		✓		ZE1-26	↓	
WP-02-107.0	WAN	↓	11:20	↓	↓	↓	1	2	2	—		✓		SE1-27	↓	
WP-02-110.2	↓	↓	12:50	↓	↓	↓	1	2	2	—		✓		SE1-28	↓	
WP-01-135.0	WJW	↓	12:27	↓	↓	↓	1	2	2	—		✓		SE1-29	↓	
WP-01-140.0	↓	↓	13:58	↓	↓	16:44	1	2	2	—		✓		SE1-30	↓	
WP-01-141.6	↓	↓	14:56	↓	↓	↓	1	2	2	—		✓		SE1-31	↓	
WP-02-115.0	WAN	↓	14:32	↓	↓	↓	1	2	2	—		✓		SE1-32	↓	
WP-02-120.0	↓	↓	15:41	↓	↓	↓	1	2	2	—		✓		SE1-33	↓	
WP-02-125.0	↓	↓	16:46	↓	↓	17:42	1	2	2	—		✓		SE1-34	↓	
WP-02-129.0	WAN	218/13	09:00	↓	218/13	09:45	1	2	2	—		✓		SE1-35	↓	
WP-03-EB	WJW	↓	07:50	↓	↓	↓	1	2	2	—		✓		SE1-36	↓	
WP-02-129.0-MS	WAN	↓	09:00	↓	↓	09:45	1	2	2	—		✓		SE1-35-MS	↓	
WP-02-129.0-MSD	WAN	↓	09:00	↓	↓	09:45	1	2	2	—		✓		SE1-35-MSD	↓	
WP-03-72.0	WJW	↓	11:19	↓	↓	11:50	1	2	2	—		✓		SE1-39	↓	
WP-04-EB	WAN	↓	11:09	↓	↓	↓	1	2	2	—		✓		SE1-40	↓	

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other ____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-03-77.1	WJW	2/8/13	12:14	MDE	2/8/13	13:17	1	2	2	—		✓		SE1-41	MDE	
WP-04-72.7	WAN	2/8/13	12:44			↓	1	2	2	-		✓		SE1-42		
WP-04-77.5	↓		13:46			14:34	1	2	2	-		✓		SE1-43		
WP-03-82.7	WJW		14:11			↓	1	2	2	-		✓		SE1-44		
WP-03-87.5	↓		15:01			15:40	1	2	2	—		✓		SE1-45		
WP-04-82.5	WAN		14:26			↓	1	2	2	—		✓		SE1-46		
WP-04-87.7	↓		15:09			↓	1	2	2	—		✓		SE1-47		
WP-04-92.7	WAN		15:41			17:15	1	2	2	—		✓		SE1-48		
WP-04-97.7	↓		16:53			↓	1	2	2	—		✓		SE1-49		
WP-03-92.5	WJW		15:44			↓	1	2	2	—		✓		SE1-50		
WP-03-93.7	↓	↓	16:40		↓	↓	1	2	2	—		✓		SE1-51		
WP-05-EB	WJW	2/9/13	12:25		2/9/13	13:20	1	2	2	—		✓		SE1-52		
WP-04-102.7	WAN		12:52			↓	1	2	2	-		✓		SE1-53		
WP-05-67.7	WJW		15:23			15:55	1	2	2	-		✓		SE1-54		
WP-04-102.7-MS	WAN		12:52			13:20	1	2	2	—		✓		SE1-53-MS		vials 1+2 used
WP-04-102.7-MSD	↓		12:52			↓	1	2	2	—		✓		SE1-53-MSD		vials 1+2 used
WP-04-EB-2	DJL		16:30			17:12	1	2	2	—		✓		SE1-57		
WP-05-73.0	WJW	↓	16:35		↓	↓	1	2	2	—		✓		SE1-58		
WP-05-78.0	↓	2/10/13	09:36		2/10/13	09:58	1	2	2	—		✓		SE1-59		
WP-05-82.8	WJW	↓	11:06	↓	↓	11:22								SE1-60	↓	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot.

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP04-107.7	WAN	2/10/13	12:51	HOE	2/10/13	13:15	1	2	2	—		✓		SE1-61	HOE	
WP-05-87.8	WJW		12:11			1	1	2	2	–		✓		SE1-62		
WP-05-92.8			13:08			14:15	1	2	2	–		✓		SE1-63		
WP-05-97.7			13:56			1	1	2	2	–		✓		SE1-64		
WP-04-112.5	WAN		14:49			15:20	1	2	2	–		✓		SE1-65		
WP-05-102.9	WJW		14:40			1	1	2	2	–		✓		SE1-66		
WP-05-107.9			15:46			16:05	1	2	2	—		✓		SE1-67		
WP-05-107.9-MS			15:46			1	1	2	2	–		✓		SE1-67-MS		
WP-05-107.9-MSD			15:46			1	1	2	2	–		✓		SE1-67-MSD		
WP-04-117.6	WAN		16:22			16:55	1	2	2	–		✓		SE1-70		
WP-05-112.8	WJW	—	16:32		—	1	1	2	2	–		✓		SE1-71		
WP-05-117.3	WJW	2/11/13	08:53		2/11/13	10:05	1	2	2	–		✓		SE1-72		
WP-04-120.5	WAN		09:04			1	1	2	2	–		✓		SE1-73		
WP-05-122.2	WJW		09:50			10:58	1	2	2	–		✓		SE1-74		
WP-03a-EB	WAN		09:43			1	1	2	2	–		✓		SE1-75		
WP-05-127.5	WJW		11:13			12:06	1	2	2	–		✓		SE1-76		
WP-05-132.4	WJW		12:01			13:50	1	2	2	–		✓		SE1-77		
WP-05-137.3			13:00				1	2	2	–		✓		SE1-78		
WP-05-137.3-D			13:00				1	2	2	–		✓		SE1-78-FD		
* WP-~~05~~ 03 107.8	WAN	—	13:11		—	—	1	2	2	–		✓		SE1-80	—	

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

mjs 3/11/13

STONE ENVIRONMENTAL INC

* Removed "a" from sample location. Client request of Joe Schmidt would like samples WP-03, WP-03a, and WP-03b to all show up as one location: WP-03 mjs 3/11/13

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot.

Project Location: Scotia, NY

	Sample ID	Collected: By	Collected: Date	Collected: Time	Received: By	Received: Date	Received: Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
*	WP-03A-107.8-D	WAN	2/11/13	13:11	HDE	2/11/13	13:50	1	2	2	–		✓		SE1-80-FD	HDE	
	WP-05-142.4 (2/11/13)	WJW		14:12			14:50	1	2	2	–		✓		SE1-82-*		
	WP-05-142.4-D	⊥		⊥			⊥	1	2	2	–		✓		SE1-82-FD		
	WP-05-142.4-MS	WJW		14:12			14:50	1	2	2	–		✓		SE1-82-MS		
	WP-05-142.4-MSD	⊥		⊥			⊥	1	2	2	–		✓		SE1-82-MSD		
*	WP-03A-112.8	WAN		14:55			15:18	1	2	2	–		✓		SE1-86		
*	WP-03A-117.8			16:01			16:20	1	2	2	–		✓		SE1-87		
*	WP-03A-117.8-D			16:01			⊥	1	2	2	–		✓		SE1-87-FD		
*	WP-03A-122.8	⊥	⊥	17:22		⊥	17:24	1	2	2	–		✓		SE1-89		
	WP-02a-EB	WJW	2/12/13	09:45		2/12/13	10:05	1	2	2	–		✓		SE1-90		
*	WP-03A-127.3	WAN		09:35			⊥	1	2	2	–		✓		SE1-91		
*	WP-03A-132.4			11:00			12:45	1	2	2	–		✓		SE1-92		
*	WP-03A-137.5	⊥		12:08			⊥	1	2	2	–		✓		SE1-93		
*	WP-02A-132.8	WJW		12:18			⊥	1	2	2	–		✓		SE1-94		
*	WP-02A-137.5	⊥		13:12			14:05	1	2	2	–		✓		SE1-95		
*	WP-03A-142.6	WAN		13:37			⊥	1	2	2	–		✓		SE1-96		
*	WP-02A-142.0	WJW		14:29			15:25	1	2	2	–		✓		SE1-97		
*	WP-03A-145.6	WAN		14:51			⊥	1	2	2	–		✓		SE1-98		
*	WP-02A-147.1	WJW		15:44			17:30	1	2	2	–		✓		SE1-99		
*	WP-02A-151.0	⊥	⊥	17:13	—	—	⊥	1	2	2	–		✓		SE1-100	—	

mjs 3/14/13

mjs 3/11/13

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

L:\RASC\Analytical\Forms\Moblie Lab 2 – Sample Log Sheet.doc Mobile Lab 1 is VIN# 1UK500G29V1022699 Mobil Lab 2 is VIN# 1UK500F2541047129

C:\Forms\Mobile Lab 2 – Sample Log Sheet.doc Truck 2 is VIN# JW6CEJ1G7SL002457

* Removed "a" from sample location. Client request 2/20/13. Joe Schmidl would like samples WP-03, WP-03a and WP-03b to all show up as one location: WP-03. mjs 3/14/13. Same with WP-02a and WP-02 mjs 3/11/13

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other ____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-036-EB	WAN	2/13/13	08:47	HDE	2/13/13	13:00	1	2	2	—		✓		SEI-101	HDE	
* WP-02~~a~~-153.1	WJW	2/13/13	09:28			⊥	1	2	2	—		✓		SEI-102		
* WP-02~~a~~-153.1-MS	⊥	⊥	⊥			13:00	1	2	2	—		✓		SEI-102-MS		
* WP-02~~a~~-153.1-MSD	⊥	⊥	⊥			⊥	1	2	2	—		✓		SEI-102-MSD	⊥	

mjs 3/11/13

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other ____

*** Preservation: (1) ice (2) HCl (3) Other ____

STONE ENVIRONMENTAL INC

* removed "a" from sample location. Client request. Joe Schmidl would like samples from WP-02 and WP-02a to show up as one location: WP-02 mjs 3/11/13

SDG-2

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-07-EB	TWM	2/18/13	11:36	HDE	2/18/13	12:53	1	2	2	–		✓		SE1-105	HDE	
WP-03~~6~~-159.0	WAN	2/19/13	11:42		2/19/13	12:03	1	2	2	–		✓		SE1-106		
WP-03~~6~~-159.0-D	⊥	⊥	⊥				1	2	2	–		✓		SE1-106-FD		
WP-03~~6~~-159.0-MS	WAN	2/19/13	11:42				1	2	2	–		✓		SE1-106-MS		
WP-03~~6~~-159.0-MSD	⊥		⊥				1	2	2	–		✓		SE1-106-MSD		
WP-03~~6~~-163.9	WAN		12:55			13:10	1	2	2	–		✓		SE1-110		
WP-03~~6~~-164.8	⊥		14:29			14:45	1	2	2	–		✓		SE1-111		
WP-08-EB	WAN		15:28			15:52	1	2	2	–		✓		SE1-112		
WP-07-67.6	TWM	⊥	17:08		⊥	17:20	1	2	2	–		✓		SE1-113		
WP-07-72.4	TWM	2/20/13	08:54		2/20/13	09:10	1	2	2	–		✓		SE1-114		
WP-07-77.4	TWM		10:00			10:20	1	2	2	–		✓		SE1-116		
WP-07-77.4-D	⊥		10:00			⊥	1	2	2	–		✓		SE1-116-FD		
WP-07-82.4	⊥		11:04			11:28	1	2	2	–		✓		SE1-118		
WP-08-65.9	WAN		11:09			⊥	1	2	2	–		✓		SE1-119		
WP-07-90.2	TWM		12:22			12:48	1	2	2	–		✓		SE1-120		
WP-08-70.4	WAN		11:47			⊥	1	2	2	–		✓		SE1-121		
WP-08-75.7	⊥		12:24			⊥	1	2	2	–		✓		SE1-122		
WP-08-80.8	WAN		12:52			13:37	1	2	2	–		✓		SE1-123		
WP-07-95.2	TWM		13:28			14:00	1	2	2	–		✓		SE1-124		
WP-08-84.9	WAN	⊥	13:32	⊥	⊥	⊥	1	2	2	–		✓		SE1-125	⊥	

removed "b" from sample location and moved these WP-03 samples to SDG-1 so all WP-03 samples would be together.

MJB 3/4/13

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.*n* Groundwater Profiling and KPRO Testing.
☐ _____

STONE ENVIRONMENTAL INC

MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 28, 2013

This data package presents the analytical results for groundwater samples analyzed by Stone Environmental, Inc. Laboratory (Stone) on-site at the Scotia Navy Depot Site in Scotia, New York. Samples in this sample delivery group (SDG-1) were collected at the Scotia Site between February 5 and 19, 2013. A total of 96 groundwater samples were collected during this period by Stone personnel from seven locations: MW13, MWGEP1, and WP-01 through WP-05, including five field duplicate samples and nine equipment blanks. Matrix spike and matrix spike duplicate (MS/MSD) sample pairs were analyzed in association with seven of the parent groundwater samples. All samples in SDG-1 were received and analyzed at the mobile laboratory between February 5 and 19, 2013.

After sample collection, all samples were hand delivered to the mobile laboratory and kept refrigerated until analysis; therefore, temperatures of samples were not measured at receipt. The sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. As samples were received at the on-site laboratory, they were recorded on Stone's Sample Log Sheet. A copy of the Sample Log Sheet and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with the samples presented in this report were generated under a quality system that adheres to requirements

specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS), laboratory method blanks (VBLK), matrix spike and matrix spike duplicate samples (MS/MSDs) and field duplicate samples (FD)) are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards.

Exceptions are noted below:

- VSTD Deficiencies:
    - No deficiencies noted.
- LCS Deficiencies:
    - No deficiencies noted.
- VBLK Deficiencies:
    - No deficiencies noted.
- MS/MSD Deficiencies:
    - No deficiencies noted.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

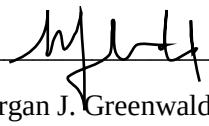
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

Field QC Assignments and Associated Samples

EDD File Name: SDG-1
eQapp Name: ScotiaNavyDepot3

	Associated Samples	Sample Collection Date
Field QC Sample: WP-01-EB **QC Type:** Equipment_Blank		
	WP-01-80.0	2/5/2013 5:35:00 PM
	WP-01-135.0	2/7/2013 12:27:00 PM
	WP-01-120.0	2/7/2013 9:35:00 AM
	WP-01-75.0	2/5/2013 4:18:00 PM
	WP-01-130.0	2/7/2013 11:14:00 AM
	WP-01-140.0	2/7/2013 1:58:00 PM
	WP-01-125.0	2/7/2013 10:20:00 AM
	WP-01-95.0	2/6/2013 11:16:00 AM
	WP-01-100.0	2/6/2013 2:15:00 PM
	WP-01-141.6	2/7/2013 2:56:00 PM
	WP-01-84.5	2/6/2013 9:20:00 AM
	WP-01-91.5	2/6/2013 10:09:00 AM
	WP-01-110.0	2/6/2013 4:22:00 PM
	WP-01-115.0	2/6/2013 5:11:00 PM
	WP-01-70.0	2/5/2013 2:06:00 PM
	WP-01-105.0	2/6/2013 3:23:00 PM
Field QC Sample: WP-02a-EB **QC Type:** Equipment_Blank		
	WP-02-120.0	2/7/2013 3:41:00 PM
	WP-02-102.14	2/7/2013 9:55:00 AM
	WP-02-125.0	2/7/2013 4:46:00 PM
	WP-02-151.0	2/12/2013 5:13:00 PM
	WP-02-110.2	2/7/2013 12:50:00 PM
	WP-02-87.15	2/6/2013 1:44:00 PM
	WP-02-107.0	2/7/2013 11:20:00 AM
	WP-02-147.1	2/12/2013 3:44:00 PM
	WP-02-129.0	2/8/2013 9:00:00 AM
	WP-02-70.0	2/5/2013 5:29:00 PM
	WP-02-137.5	2/12/2013 1:12:00 PM
	WP-02-153.1	2/13/2013 9:28:00 AM
	WP-02-132.8	2/12/2013 12:18:00 PM
	WP-02-142.0	2/12/2013 2:29:00 PM
	WP-02-75.0	2/6/2013 10:07:00 AM

	Associated Samples	Sample Collection Date
	WP-02-96.4	2/6/2013 5:26:00 PM
	WP-02-79.5	2/6/2013 12:36:00 PM
	WP-02-115.0	2/7/2013 2:32:00 PM
	WP-02-92.0	2/6/2013 3:03:00 PM
Field QC Sample: WP-02-EB **QC Type:** Equipment_Blank		
	WP-02-120.0	2/7/2013 3:41:00 PM
	WP-02-102.14	2/7/2013 9:55:00 AM
	WP-02-125.0	2/7/2013 4:46:00 PM
	WP-02-151.0	2/12/2013 5:13:00 PM
	WP-02-110.2	2/7/2013 12:50:00 PM
	WP-02-87.15	2/6/2013 1:44:00 PM
	WP-02-107.0	2/7/2013 11:20:00 AM
	WP-02-147.1	2/12/2013 3:44:00 PM
	WP-02-129.0	2/8/2013 9:00:00 AM
	WP-02-70.0	2/5/2013 5:29:00 PM
	WP-02-137.5	2/12/2013 1:12:00 PM
	WP-02-153.1	2/13/2013 9:28:00 AM
	WP-02-132.8	2/12/2013 12:18:00 PM
	WP-02-142.0	2/12/2013 2:29:00 PM
	WP-02-75.0	2/6/2013 10:07:00 AM
	WP-02-96.4	2/6/2013 5:26:00 PM
	WP-02-79.5	2/6/2013 12:36:00 PM
	WP-02-115.0	2/7/2013 2:32:00 PM
	WP-02-92.0	2/6/2013 3:03:00 PM
Field QC Sample: WP-03-107.8-FD **QC Type:** Field_Duplicate		
	WP-03-107.8	2/11/2013 1:11:00 PM
Field QC Sample: WP-03-117.8-D **QC Type:** Field_Duplicate		
	WP-03-117.8	2/11/2013 4:01:00 PM
Field QC Sample: WP-03-159.0-D **QC Type:** Field_Duplicate		
	WP-03-159.0	2/19/2013 11:42:00 AM

	Associated Samples	Sample Collection Date
Field QC Sample: WP-03a-EB **QC Type:** Equipment_Blank		
	WP-03-92.5	2/8/2013 3:44:00 PM
	WP-03-107.8	2/11/2013 1:11:00 PM
	WP-03-93.7	2/8/2013 4:40:00 PM
	WP-03-112.8	2/11/2013 2:55:00 PM
	WP-03-72.0	2/8/2013 11:19:00 AM
	WP-03-159.0	2/19/2013 11:42:00 AM
	WP-03-163.9	2/19/2013 12:55:00 PM
	WP-03-82.7	2/8/2013 2:11:00 PM
	WP-03-159.0-D	2/19/2013 11:42:00 AM
	WP-03-137.5	2/12/2013 12:08:00 PM
	WP-03-117.8	2/11/2013 4:01:00 PM
	WP-03-77.1	2/8/2013 12:14:00 PM
	WP-03-122.8	2/11/2013 5:22:00 PM
	WP-03-132.4	2/12/2013 11:00:00 AM
	WP-03-107.8-FD	2/11/2013 1:11:00 PM
	WP-03-117.8-D	2/11/2013 4:01:00 PM
	WP-03-127.3	2/12/2013 9:35:00 AM
	WP-03-164.8	2/19/2013 2:29:00 PM
	WP-03-87.5	2/8/2013 3:01:00 PM
	WP-03-145.6	2/12/2013 2:51:00 PM
	WP-03-142.6	2/12/2013 1:37:00 PM
Field QC Sample: WP-03b-EB **QC Type:** Equipment_Blank		
	WP-03-92.5	2/8/2013 3:44:00 PM
	WP-03-107.8	2/11/2013 1:11:00 PM
	WP-03-93.7	2/8/2013 4:40:00 PM
	WP-03-112.8	2/11/2013 2:55:00 PM
	WP-03-72.0	2/8/2013 11:19:00 AM
	WP-03-159.0	2/19/2013 11:42:00 AM
	WP-03-163.9	2/19/2013 12:55:00 PM
	WP-03-82.7	2/8/2013 2:11:00 PM
	WP-03-159.0-D	2/19/2013 11:42:00 AM
	WP-03-137.5	2/12/2013 12:08:00 PM
	WP-03-117.8	2/11/2013 4:01:00 PM
	WP-03-77.1	2/8/2013 12:14:00 PM
	WP-03-122.8	2/11/2013 5:22:00 PM
	WP-03-132.4	2/12/2013 11:00:00 AM
	WP-03-107.8-FD	2/11/2013 1:11:00 PM
	WP-03-117.8-D	2/11/2013 4:01:00 PM
	WP-03-127.3	2/12/2013 9:35:00 AM

	Associated Samples	Sample Collection Date
	WP-03-164.8	2/19/2013 2:29:00 PM
	WP-03-87.5	2/8/2013 3:01:00 PM
	WP-03-145.6	2/12/2013 2:51:00 PM
	WP-03-142.6	2/12/2013 1:37:00 PM

Field QC Sample: WP-03-EB
QC Type: Equipment_Blank

	WP-03-92.5	2/8/2013 3:44:00 PM
	WP-03-107.8	2/11/2013 1:11:00 PM
	WP-03-93.7	2/8/2013 4:40:00 PM
	WP-03-112.8	2/11/2013 2:55:00 PM
	WP-03-72.0	2/8/2013 11:19:00 AM
	WP-03-159.0	2/19/2013 11:42:00 AM
	WP-03-163.9	2/19/2013 12:55:00 PM
	WP-03-82.7	2/8/2013 2:11:00 PM
	WP-03-159.0-D	2/19/2013 11:42:00 AM
	WP-03-137.5	2/12/2013 12:08:00 PM
	WP-03-117.8	2/11/2013 4:01:00 PM
	WP-03-77.1	2/8/2013 12:14:00 PM
	WP-03-122.8	2/11/2013 5:22:00 PM
	WP-03-132.4	2/12/2013 11:00:00 AM
	WP-03-107.8-FD	2/11/2013 1:11:00 PM
	WP-03-117.8-D	2/11/2013 4:01:00 PM
	WP-03-127.3	2/12/2013 9:35:00 AM
	WP-03-164.8	2/19/2013 2:29:00 PM
	WP-03-87.5	2/8/2013 3:01:00 PM
	WP-03-145.6	2/12/2013 2:51:00 PM
	WP-03-142.6	2/12/2013 1:37:00 PM

Field QC Sample: WP-04-EB
QC Type: Equipment_Blank

	WP-04-97.7	2/8/2013 4:53:00 PM
	WP-04-77.5	2/8/2013 1:46:00 PM
	WP-04-82.5	2/8/2013 2:26:00 PM
	WP-04-107.7	2/10/2013 12:51:00 PM
	WP-04-120.5	2/11/2013 9:04:00 AM
	WP-04-87.7	2/8/2013 3:09:00 PM
	WP-04-117.6	2/10/2013 4:22:00 PM
	WP-04-72.7	2/8/2013 12:44:00 PM
	WP-04-102.7	2/9/2013 12:52:00 PM
	WP-04-112.5	2/10/2013 2:49:00 PM
	WP-04-92.7	2/8/2013 3:41:00 PM

	Associated Samples	Sample Collection Date
Field QC Sample: WP-04-EB-2 **QC Type:** Equipment_Blank		
	WP-04-97.7	2/8/2013 4:53:00 PM
	WP-04-77.5	2/8/2013 1:46:00 PM
	WP-04-82.5	2/8/2013 2:26:00 PM
	WP-04-107.7	2/10/2013 12:51:00 PM
	WP-04-120.5	2/11/2013 9:04:00 AM
	WP-04-87.7	2/8/2013 3:09:00 PM
	WP-04-117.6	2/10/2013 4:22:00 PM
	WP-04-72.7	2/8/2013 12:44:00 PM
	WP-04-102.7	2/9/2013 12:52:00 PM
	WP-04-112.5	2/10/2013 2:49:00 PM
	WP-04-92.7	2/8/2013 3:41:00 PM
Field QC Sample: WP-05-137.3-D **QC Type:** Field_Duplicate		
	WP-05-137.3	2/11/2013 1:00:00 PM
Field QC Sample: WP-05-142.4-D **QC Type:** Field_Duplicate		
	WP-05-142.4	2/11/2013 2:12:00 PM
Field QC Sample: WP-05-EB **QC Type:** Equipment_Blank		
	WP-05-67.7	2/9/2013 3:23:00 PM
	WP-05-137.3	2/11/2013 1:00:00 PM
	WP-05-92.8	2/10/2013 1:08:00 PM
	WP-05-87.8	2/10/2013 12:11:00 PM
	WP-05-107.9	2/10/2013 3:46:00 PM
	WP-05-73.0	2/9/2013 4:35:00 PM
	WP-05-142.4-D	2/11/2013 2:12:00 PM
	WP-05-137.3-D	2/11/2013 1:00:00 PM
	WP-05-97.7	2/10/2013 1:56:00 PM
	WP-05-132.4	2/11/2013 12:01:00 PM
	WP-05-127.5	2/11/2013 11:13:00 AM
	WP-05-112.8	2/10/2013 4:32:00 PM
	WP-05-78.0	2/10/2013 9:36:00 AM
	WP-05-122.2	2/11/2013 9:50:00 AM
	WP-05-102.9	2/10/2013 2:40:00 PM
	WP-05-142.4	2/11/2013 2:12:00 PM

	Associated Samples	Sample Collection Date
	WP-05-82.8	2/10/2013 11:06:00 AM
	WP-05-117.3	2/11/2013 8:53:00 AM

Data Qualifier Summary

Lab Reporting Batch ID: SDG-1 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-1_General2A_13_052913k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **MW13-78.0-GW** ***Collected:*** **2/7/2013 12:40:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.19	J	0.19	MDL	2.0	RDL	ug/L	J	RI
TETRACHLOROETHENE	0.43	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **MWGEP1-73.0-GW** ***Collected:*** **2/7/2013 11:50:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.85	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-01-100.0** ***Collected:*** **2/6/2013 2:15:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.27	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-01-115.0** ***Collected:*** **2/6/2013 5:11:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.30	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-01-125.0** ***Collected:*** **2/7/2013 10:20:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.81	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-01-135.0** ***Collected:*** **2/7/2013 12:27:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.28	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-01-70.0** ***Collected:*** **2/5/2013 2:06:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.42	J	0.22	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-1 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-1_General2A_13_052913k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-01-75.0** ***Collected:*** **2/5/2013 4:18:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.26	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-01-84.5** ***Collected:*** **2/6/2013 9:20:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.32	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-01-91.5** ***Collected:*** **2/6/2013 10:09:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.31	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-01-EB** ***Collected:*** **2/5/2013 9:30:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
O-XYLENE	0.27	J	0.13	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-02-110.2** ***Collected:*** **2/7/2013 12:50:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.76	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-02-115.0** ***Collected:*** **2/7/2013 2:32:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.21	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-02-129.0** ***Collected:*** **2/8/2013 9:00:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
O-XYLENE	0.18	J	0.13	MDL	2.0	RDL	ug/L	U	Eb

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: SDG-1 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-1_General2A_13_052913k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-02-132.8** ***Collected:*** **2/12/2013 12:18:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.39	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-02-70.0** ***Collected:*** **2/5/2013 5:29:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.29	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-02-92.0** ***Collected:*** **2/6/2013 3:03:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.33	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-02-96.4** ***Collected:*** **2/6/2013 5:26:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.30	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-02a-EB** ***Collected:*** **2/12/2013 9:45:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
O-XYLENE	0.13	J	0.13	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-02-EB** ***Collected:*** **2/5/2013 12:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
O-XYLENE	0.22	J	0.13	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-03-72.0** ***Collected:*** **2/8/2013 11:19:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.56	J	0.22	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-1 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-1_General2A_13_052913k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-03-77.1** ***Collected:*** **2/8/2013 12:14:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.51	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-03-93.7** ***Collected:*** **2/8/2013 4:40:00 PM** ***Analysis Type:*** **Initial/TOT/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	1.4	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CIS-1,2-DICHLOROETHENE	0.62	J	0.1	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-03a-EB** ***Collected:*** **2/11/2013 9:43:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
O-XYLENE	0.19	J	0.13	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-04-112.5** ***Collected:*** **2/10/2013 2:49:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.41	J	0.22	MDL	2.0	RDL	ug/L	J	RI
TRICHLOROETHENE	0.92	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-04-72.7** ***Collected:*** **2/8/2013 12:44:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.72	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHANE	1.4	J	0.12	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.66	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CARBON TETRACHLORIDE	1.3	J	0.54	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.57	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-04-77.5** ***Collected:*** **2/8/2013 1:46:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI
CIS-1,2-DICHLOROETHENE	1.6	J	0.1	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-1 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-1_General2A_13_052913k **eQAPP Name: ScotiaNavyDepot3**

Method Category: VOA

Method: 8260C **Matrix: Water**

Sample ID: WP-04-82.5 **Collected:** 2/8/2013 2:26:00 PM **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.49	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-04-87.7 **Collected:** 2/8/2013 3:09:00 PM **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.92	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-04-92.7 **Collected:** 2/8/2013 3:41:00 PM **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.30	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-04-EB **Collected:** 2/8/2013 11:09:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
O-XYLENE	0.14	J	0.13	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-05-102.9 **Collected:** 2/10/2013 2:40:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.91	J	0.19	MDL	2.0	RDL	ug/L	U	Eb

Sample ID: WP-05-107.9 **Collected:** 2/10/2013 3:46:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.55	J	0.19	MDL	2.0	RDL	ug/L	U	Eb

Sample ID: WP-05-112.8 **Collected:** 2/10/2013 4:32:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.43	J	0.19	MDL	2.0	RDL	ug/L	U	Eb

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: SDG-1 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-1_General2A_13_052913k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-05-117.3** ***Collected:*** **2/11/2013 8:53:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
TRICHLOROETHENE	0.37	J	0.19	MDL	2.0	RDL	ug/L	U	Eb

Sample ID: **WP-05-EB** ***Collected:*** **2/9/2013 12:25:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
O-XYLENE	0.14	J	0.13	MDL	2.0	RDL	ug/L	J	RI
TRICHLOROETHENE	0.39	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-1

Laboratory: STONE

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-1_General2A_13_052913k

eQAPP Name: ScotiaNavyDepot3

Reason Code Legend

Reason Code	*Description*
Eb	Equipment Blank Contamination
RI	Reporting Limit Trace Value

* denotes a non-reportable result

EDD Warning Log

Lab Reporting Batch ID: SDG-1

eQAPP: ScotiaNavyDepot3

Laboratory: STONE

Table	Line #	Column	Value	Warning	Description
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'LJ' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	PreparationBatch 'LQ' does not have any client samples associated to it.

102305-C Scotia Naval Depot
Sample Login Summary
SDG-2

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Comments	Lab ID Parent	TemperatureUnits
SEI-105	WP-07	000.01	Groundwater	WP-07-EB	Equipment Blank	2	TWM	2/18/2013	11:36 AM	SEI 10.5.x	HDE	2/18/2013	12:53 PM	6			C
SEI-112	WP-08	000.01	Groundwater	WP-08-EB	Equipment Blank	2	WAN	2/19/2013	3:28 PM	SEI 10.5.x	HDE	2/19/2013	3:52 PM	6			C
SEI-113	WP-07	067.60	Groundwater	WP-07-67.6	Normal Sample	2	TWM	2/19/2013	5:08 PM	SEI 10.5.x	HDE	2/19/2013	5:26 PM	6			C
SEI-114	WP-07	072.40	Groundwater	WP-07-72.4	Normal Sample	2	TWM	2/20/2013	8:54 AM	SEI 10.5.x	HDE	2/20/2013	9:10 AM	6			C
SEI-116	WP-07	077.40	Groundwater	WP-07-77.4	Normal Sample	2	TWM	2/20/2013	10:00 AM	SEI 10.5.x	HDE	2/20/2013	10:20 AM	6		SEI-116	C
SEI-116-FD	WP-07	077.40	Groundwater	WP-07-77.4-D	Field Duplicate	2	TWM	2/20/2013	10:00 AM	SEI 10.5.x	HDE	2/20/2013	10:20 AM	6		SEI-116	C
SEI-118	WP-07	082.40	Groundwater	WP-07-82.4	Normal Sample	2	TWM	2/20/2013	11:04 AM	SEI 10.5.x	HDE	2/20/2013	11:28 AM	6			C
SEI-119	WP-08	065.90	Groundwater	WP-08-65.9	Normal Sample	2	WAN	2/20/2013	11:09 AM	SEI 10.5.x	HDE	2/20/2013	11:28 AM	6			C
SEI-120	WP-07	090.20	Groundwater	WP-07-90.2	Normal Sample	2	TWM	2/20/2013	12:22 PM	SEI 10.5.x	HDE	2/20/2013	12:48 PM	6			C
SEI-121	WP-08	070.40	Groundwater	WP-08-70.4	Normal Sample	2	WAN	2/20/2013	11:47 AM	SEI 10.5.x	HDE	2/20/2013	12:48 PM	6			C
SEI-122	WP-08	075.70	Groundwater	WP-08-75.7	Normal Sample	2	WAN	2/20/2013	12:24 PM	SEI 10.5.x	HDE	2/20/2013	12:48 PM	6			C
SEI-123	WP-08	080.80	Groundwater	WP-08-80.8	Normal Sample	2	WAN	2/20/2013	12:52 PM	SEI 10.5.x	HDE	2/20/2013	1:37 PM	6			C
SEI-124	WP-07	095.20	Groundwater	WP-07-95.2	Normal Sample	2	TWM	2/20/2013	1:28 PM	SEI 10.5.x	HDE	2/20/2013	2:00 PM	6			C
SEI-125	WP-08	084.90	Groundwater	WP-08-84.9	Normal Sample	2	WAN	2/20/2013	1:32 PM	SEI 10.5.x	HDE	2/20/2013	2:00 PM	6		SEI-125	C
SEI-125-MS	WP-08	084.90	Groundwater	WP-08-84.9-MS	Matrix Spike	2	WAN	2/20/2013	1:32 PM	SEI 10.5.x	HDE	2/20/2013	2:00 PM	6		SEI-125	C
SEI-125-MSD	WP-08	084.90	Groundwater	WP-08-84.9-MSD	Matrix Spike Duplicate	2	WAN	2/20/2013	1:32 PM	SEI 10.5.x	HDE	2/20/2013	2:00 PM	6		SEI-125	C
SEI-128	WP-08	090.00	Groundwater	WP-08-90.0	Normal Sample	2	WAN	2/20/2013	2:01 PM	SEI 10.5.x	HDE	2/20/2013	3:10 PM	6			C
SEI-129	WP-08	095.00	Groundwater	WP-08-95.0	Normal Sample	2	WAN	2/20/2013	2:48 PM	SEI 10.5.x	HDE	2/20/2013	3:10 PM	6			C
SEI-130	WP-07	100.30	Groundwater	WP-07-100.3	Normal Sample	2	TWM	2/20/2013	2:27 PM	SEI 10.5.x	HDE	2/20/2013	3:10 PM	6			C
SEI-131	WP-07	105.20	Groundwater	WP-07-105.2	Normal Sample	2	TWM	2/20/2013	3:32 PM	SEI 10.5.x	HDE	2/20/2013	3:50 PM	6			C
SEI-132	WP-08	100.00	Groundwater	WP-08-100.0	Normal Sample	2	WAN	2/20/2013	3:24 PM	SEI 10.5.x	HDE	2/20/2013	3:50 PM	6			C
SEI-133	WP-08	105.00	Groundwater	WP-08-105.0	Normal Sample	2	WAN	2/20/2013	4:27 PM	SEI 10.5.x	HDE	2/20/2013	5:11 PM	6			C
SEI-134	WP-07	110.00	Groundwater	WP-07-110.0	Normal Sample	2	TWM	2/20/2013	4:55 PM	SEI 10.5.x	HDE	2/20/2013	5:11 PM	6			C
SEI-135	WP-08	110.00	Groundwater	WP-08-110.0	Normal Sample	2	WAN	2/20/2013	5:12 PM	SEI 10.5.x	HDE	2/20/2013	5:33 PM	6			C
SEI-136	WP-08	113.40	Groundwater	WP-08-113.4	Normal Sample	2	WAN	2/21/2013	8:52 AM	SEI 10.5.x	HDE	2/21/2013	9:41 AM	6			C
SEI-137	WP-07	115.20	Groundwater	WP-07-115.2	Normal Sample	2	TWM	2/21/2013	9:07 AM	SEI 10.5.x	HDE	2/21/2013	9:41 AM	6		SEI-137	C
SEI-137-MS	WP-07	115.20	Groundwater	WP-07-115.2-MS	Matrix Spike	2	TWM	2/21/2013	9:07 AM	SEI 10.5.x	HDE	2/21/2013	9:41 AM	6		SEI-137	C
SEI-137-MSD	WP-07	115.20	Groundwater	WP-07-115.2-MSD	Matrix Spike Duplicate	2	TWM	2/21/2013	9:07 AM	SEI 10.5.x	HDE	2/21/2013	9:41 AM	6		SEI-137	C

SDG-2

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-07-EB	TWM	2/18/13	11:36	HDE	2/18/13	12:53	1	2	2	–		✓		SEI-105	HDE	
WP-03~~6~~-159.0	WAN	2/19/13	11:42	|	2/19/13	12:03	1	2	2	–		✓		SEI-106	|	
WP-03~~6~~-159.0-D	⊥	⊥	⊥	|	|	|	1	2	2	–		✓		SEI-106-FD	|	
WP-03~~6~~-159.0-MS	WAN	2/19/13	11:42	|	|	|	1	2	2	–		✓		SEI-106-MS	|	
WP-03~~6~~-159.0-MSD	⊥	⊥	⊥	|	|	|	1	2	2	–		✓		SEI-106-MSD	|	
WP-03~~6~~-163.9	WAN		12:55	|	|	13:10	1	2	2	–		✓		SEI-110	|	
WP-03~~6~~-164.8	⊥		14:29	|	|	14:45	1	2	2	–		✓		SEI-111	|	
WP-08-EB	WAN		15:28	|	|	15:52	1	2	2	–		✓		SEI-112	|	
WP-07-67.6	TWM	⊥	17:08	|	⊥	17:26	1	2	2	–		✓		SEI-113	|	
WP-07-72.4	TWM	2/20/13	08:54	|	2/20/13	09:10	1	2	2	–		✓		SEI-114	|	
WP-07-77.4	TWM	|	10:00	|	|	10:20	1	2	2	–		✓		SEI-116	|	
WP-07-77.4-D	|	|	10:00	|	|	⊥	1	2	2	–		✓		SEI-116-FD	|	
WP-07-82.4	⊥	|	11:04	|	|	11:28	1	2	2	–		✓		SEI-118	|	
WP-08-65.9	WAN	|	11:09	|	|	⊥	1	2	2	–		✓		SEI-119	|	
WP-07-90.2	TWM	|	12:22	|	|	12:48	1	2	2	–		✓		SEI-120	|	
WP-08-70.4	WAN	|	11:47	|	|	|	1	2	2	–		✓		SEI-121	|	
WP-08-75.7	⊥	|	12:24	|	|	⊥	1	2	2	–		✓		SEI-122	|	
WP-08-80.8	WAN	|	12:52	|	|	13:37	1	2	2	–		✓		SEI-123	|	
WP-07-95.2	TWM	|	13:28	|	|	14:00	1	2	2	–		✓		SEI-124	|	
WP-08-84.9	WAN	⊥	13:32	⊥	⊥	⊥	1	2	2	–		✓		SEI-125	⊥	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.*n* Groundwater Profiling and KPRO Testing.
☐ _____

removed "b" from sample loc# 03-159.0 and moved these WP-03 samples to SDG-1 so all WP-03 samples would be together.

MJS 3/4/13

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

	Collected			Received							Analysis					
Sample ID	By	Date	Time	By	Date	Time	Type*	Container**	Number of Containers	Preservation***	ASTM D6520 & Modified 8021/8015	8260	Other _____	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-08-84.9-MS	WAN	2/20/13	13:32	HDE	2/20/13	14:00	1	2	2	–		✓		SEI-125-MS	HDE	
WP-08-84.9-MSD	↓		13:32			↓	1	2	2	–		✓		SEI-125-MSD		
WP-08-90.0			14:07			15:10	1	2	2	–		✓		SEI-128		
WP-08-95.0	↓		14:48			↓	1	2	2	–		✓		SEI-129		
WP-07-100.3	TWM		14:27			↓	1	2	2	–		✓		SEI-130		
WP-07-105.2	↓		15:32			15:50	1	2	2	–		✓		SEI-131		
WP-08-100.0	WAN		15:24			↓	1	2	2	–		✓		SEI-132		
WP-08-105.0	~~WAN~~ ~~TWM~~ ITE 2/20/13		~~16:27~~ ~~16:55~~ ITE 2/20/13			17:11	1	2	2	–		✓		SEI-133		
WP-07-110.0	TWM		16:55			↓	~~1~~ 1	2	2	–		✓		SEI-134		
WP-08-110.0	WAN	↓	17:12		↓	17:33	1	2	2	–		✓		SEI-135		
WP-08-113.4	↓	2/21/13	08:52		2/21/13	09:41	1	2	2	–		✓		SEI-136		
WP-07-115.2	TWM		09:07			↓	~~1~~ 1	2	2	–		✓		SEI-137		
WP-07-115.2-MS	↓		09:07			09:41	1	2	2	–		✓		SEI-137-MS		
WP-07-115.2-MSD	↓	↓	09:07		↓	↓	1	2	2	–		✓		SEI-137-MSD	↓	

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 28, 2013

This data package presents the analytical results for groundwater samples analyzed by Stone Environmental, Inc. Laboratory (Stone) on-site at the Scotia Navy Depot Site in Scotia, New York. Samples in this sample delivery group (SDG-2) were collected at the Scotia Site between February 18 and 21, 2013. A total of 24 groundwater samples were collected during this period by Stone personnel from two borings: WP-07 and WP-08, including one field duplicate sample and two equipment blanks. Matrix spike and matrix spike duplicate (MS/MSD) sample pairs were analyzed in association with two of the parent groundwater samples. All samples in SDG-2 were received and analyzed at the mobile laboratory between February 18 and 21, 2013.

After sample collection, all samples were hand delivered to the mobile laboratory and kept refrigerated until analysis; therefore, temperatures of samples were not measured at receipt. The sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. As samples were received at the on-site laboratory, they were recorded on Stone's Sample Log Sheet. A copy of the Sample Log Sheet and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with the samples presented in this report were generated under a quality system that adheres to requirements

specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS), laboratory method blanks (VBLK), matrix spike and matrix spike duplicate samples (MS/MSDs) and field duplicate samples (FD)) are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards. Exceptions are noted below:

- VSTD Deficiencies:
    - No deficiencies noted.
- LCS Deficiencies:
    - No deficiencies noted.
- VBLK Deficiencies:
    - No deficiencies noted.
- MS/MSD Deficiencies:
    - Trichloroethene recoveries were below acceptance criteria (70-125%) for the MS (20% recovery) and MSD (10% recovery) samples associated with parent sample WP-08-84.9. No data were qualified on this basis.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

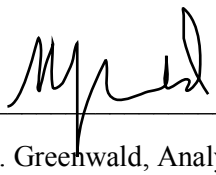
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

Field QC Assignments and Associated Samples

EDD File Name: SDG-2
eQapp Name: ScotiaNavyDepot3

	Associated Samples	Sample Collection Date
Field QC Sample: WP-07-77.4-D **QC Type:** Field_Duplicate		
	WP-07-77.4	2/20/2013 10:00:00 AM
Field QC Sample: WP-07-EB **QC Type:** Equipment_Blank		
	WP-07-115.2	2/21/2013 9:07:00 AM
	WP-07-72.4	2/20/2013 8:54:00 AM
	WP-07-105.2	2/20/2013 3:32:00 PM
	WP-07-110.0	2/20/2013 4:55:00 PM
	WP-07-82.4	2/20/2013 11:04:00 AM
	WP-07-67.6	2/19/2013 5:08:00 PM
	WP-07-95.2	2/20/2013 1:28:00 PM
	WP-07-90.2	2/20/2013 12:22:00 PM
	WP-07-100.3	2/20/2013 2:27:00 PM
	WP-07-77.4-D	2/20/2013 10:00:00 AM
	WP-07-77.4	2/20/2013 10:00:00 AM
Field QC Sample: WP-08-EB **QC Type:** Equipment_Blank		
	WP-08-84.9	2/20/2013 1:32:00 PM
	WP-08-100.0	2/20/2013 3:24:00 PM
	WP-08-110.0	2/20/2013 5:12:00 PM
	WP-08-75.7	2/20/2013 12:24:00 PM
	WP-08-70.4	2/20/2013 11:47:00 AM
	WP-08-65.9	2/20/2013 11:09:00 AM
	WP-08-95.0	2/20/2013 2:48:00 PM
	WP-08-113.4	2/21/2013 8:52:00 AM
	WP-08-105.0	2/20/2013 4:27:00 PM
	WP-08-90.0	2/20/2013 2:01:00 PM
	WP-08-80.8	2/20/2013 12:52:00 PM

Data Qualifier Summary

Lab Reporting Batch ID: SDG-2 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-2_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-07-100.3** ***Collected:*** **2/20/2013 2:27:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	1.1	J	0.15	MDL	2.0	RDL	ug/L	J	RI
TRICHLOROETHENE	1.6	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-105.2** ***Collected:*** **2/20/2013 3:32:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.35	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-110.0** ***Collected:*** **2/20/2013 4:55:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.27	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-67.6** ***Collected:*** **2/19/2013 5:08:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.23	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-72.4** ***Collected:*** **2/20/2013 8:54:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.30	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-77.4** ***Collected:*** **2/20/2013 10:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.31	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-77.4-D** ***Collected:*** **2/20/2013 10:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.29	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-RC - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-2 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-2_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-07-82.4** ***Collected:*** **2/20/2013 11:04:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.33	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-90.2** ***Collected:*** **2/20/2013 12:22:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.29	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-95.2** ***Collected:*** **2/20/2013 1:28:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.30	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-07-EB** ***Collected:*** **2/18/2013 11:36:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,2-DICHLOROETHENE	0.17	J	0.1	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-08-100.0** ***Collected:*** **2/20/2013 3:24:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.42	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.40	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-08-105.0** ***Collected:*** **2/20/2013 4:27:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.78	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-08-110.0** ***Collected:*** **2/20/2013 5:12:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.19	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-RC - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-2 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-2_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: VOA

Method: 8260C **Matrix: Water**

Sample ID: WP-08-65.9 **Collected:** 2/20/2013 11:09:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.37	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-08-70.4 **Collected:** 2/20/2013 11:47:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.26	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-08-75.7 **Collected:** 2/20/2013 12:24:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.32	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-08-80.8 **Collected:** 2/20/2013 12:52:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.36	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-08-84.9 **Collected:** 2/20/2013 1:32:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.31	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-08-90.0 **Collected:** 2/20/2013 2:01:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.40	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-08-95.0 **Collected:** 2/20/2013 2:48:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.24	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-RC - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-2

Laboratory: STONE

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-2_General2A_13_053013k

eQAPP Name: ScotiaNavyDepot3

Reason Code Legend

Reason Code	*Description*
Ms	Matrix Spike Lower Estimation
Ms	Matrix Spike Precision
RI	Reporting Limit Trace Value

* denotes a non-reportable result

EDD Warning Log

Lab Reporting Batch ID: SDG-2

eQAPP: ScotiaNavyDepot3

Laboratory: STONE

Table	Line #	Column	Value	Warning	Description
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'LT' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'LS' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

102305-C Scotia Naval Depot
Sample Login Summary
SDG-3

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Temp. Units	Comments
SEI-140	WP-06	000.01	Groundwater	WP-06-EB	Equipment Blank	2	WAN	2/21/2013	10:40 AM	SEI 10.5.x	HDE	2/22/2013	9:00 AM	6	C	
SEI-141	WP-06	072.00	Groundwater	WP-06-72.0	Normal Sample	2	WAN	2/22/2013	1:19 PM	SEI 10.5.x	HDE	2/22/2013	1:42 PM	6	C	
SEI-141-MS	WP-06	072.00	Groundwater	WP-06-72.0-MS	Matrix Spike	2	WAN	2/22/2013	1:19 PM	SEI 10.5.x	HDE	2/22/2013	1:42 PM	6	C	
SEI-141-MSD	WP-06	072.00	Groundwater	WP-06-72.0-MSD	Matrix Spike Duplicate	2	WAN	2/22/2013	1:19 PM	SEI 10.5.x	HDE	2/22/2013	1:42 PM	6	C	
SEI-144	WP-06	077.00	Groundwater	WP-06-77.0	Normal Sample	2	WAN	2/22/2013	2:01 PM	SEI 10.5.x	HDE	2/22/2013	2:40 PM	6	C	
SEI-145	WP-06	082.00	Groundwater	WP-06-82.0	Normal Sample	2	WAN	2/22/2013	3:10 PM	SEI 10.5.x	HDE	2/22/2013	3:30 PM	6	C	
SEI-145-FD	WP-06	082.00	Groundwater	WP-06-82.0-D	Field Duplicate	2	WAN	2/22/2013	3:10 PM	SEI 10.5.x	HDE	2/22/2013	3:30 PM	6	C	
SEI-147	WP-06	087.00	Groundwater	WP-06-87.0	Normal Sample	2	WAN	2/22/2013	3:59 PM	SEI 10.5.x	HDE	2/22/2013	4:11 PM	6	C	
SEI-148	WP-06	092.00	Groundwater	WP-06-92.0	Normal Sample	2	TWM	2/25/2013	11:51 AM	SEI 10.5.x	HDE	2/25/2013	12:08 PM	6	C	
SEI-150	WP-06	097.00	Groundwater	WP-06-97.0	Normal Sample	2	TWM	2/25/2013	12:53 PM	SEI 10.5.x	HDE	2/25/2013	1:08 PM	6	C	
SEI-149	WP-09	000.01	Groundwater	WP-09-EB	Equipment Blank	2	WJW	2/25/2013	11:50 AM	SEI 10.5.x	HDE	2/25/2013	12:08 PM	6	C	
SEI-152	WP-09	072.00	Groundwater	WP-09-72.0	Normal Sample	2	WJW	2/25/2013	4:50 PM	SEI 10.5.x	HDE	2/25/2013	5:10 PM	6	C	
SEI-153	WP-09	077.00	Groundwater	WP-09-77.0	Normal Sample	2	WJW	2/26/2013	8:41 AM	SEI 10.5.x	HDE	2/26/2013	9:31 AM	6	C	
SEI-154	WP-09	082.10	Groundwater	WP-09-82.1	Normal Sample	2	WJW	2/26/2013	9:54 AM	SEI 10.5.x	HDE	2/26/2013	10:34 AM	6	C	
SEI-155	WP-09	087.20	Groundwater	WP-09-87.2	Normal Sample	2	WJW	2/26/2013	10:43 AM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-156	WP-09	092.00	Groundwater	WP-09-92.0	Normal Sample	2	WJW	2/26/2013	11:22 AM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-157	WP-09	097.10	Groundwater	WP-09-97.1	Normal Sample	2	WJW	2/26/2013	12:11 PM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-160	WP-09	101.80	Groundwater	WP-09-101.8	Normal Sample	2	WJW	2/26/2013	1:05 PM	SEI 10.5.x	HDE	2/26/2013	1:34 PM	6	C	
SEI-162	WP-09	106.80	Groundwater	WP-09-106.8	Normal Sample	2	WJW	2/26/2013	2:02 PM	SEI 10.5.x	HDE	2/26/2013	2:56 PM	6	C	
SEI-162-FD	WP-09	106.80	Groundwater	WP-09-106.8-D	Field Duplicate	2	WJW	2/26/2013	2:02 PM	SEI 10.5.x	HDE	2/26/2013	2:56 PM	6	C	
SEI-167	WP-09	112.00	Groundwater	WP-09-112.0	Normal Sample	2	WJW	2/26/2013	2:44 PM	SEI 10.5.x	HDE	2/26/2013	3:31 PM	6	C	
SEI-168	WP-09	116.20	Groundwater	WP-09-116.2	Normal Sample	2	WJW	2/26/2013	3:34 PM	SEI 10.5.x	HDE	2/26/2013	3:59 PM	6	C	
SEI-168-MS	WP-09	116.20	Groundwater	WP-09-116.2-MS	Matrix Spike	2	WJW	2/26/2013	3:34 PM	SEI 10.5.x	HDE	2/26/2013	3:59 PM	6	C	
SEI-168-MSD	WP-09	116.20	Groundwater	WP-09-116.2-MSD	Matrix Spike Duplicate	2	WJW	2/26/2013	3:34 PM	SEI 10.5.x	HDE	2/26/2013	3:59 PM	6	C	
SEI-151	WP-10	000.01	Groundwater	WP-10-EB	Equipment Blank	2	TWM	2/25/2013	4:23 PM	SEI 10.5.x	HDE	2/25/2013	5:10 PM	6	C	
SEI-203	WP-10	000.02	Groundwater	WP-10-EB-A	Equipment Blank	2	TWM	3/1/2013	10:40 AM	SEI 10.5.x	HDE	3/1/2013	1:35 PM	6	C	
SEI-158	WP-10	068.00	Groundwater	WP-10-68.0	Normal Sample	2	TWM	2/26/2013	11:04 AM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-159	WP-10	073.00	Groundwater	WP-10-73.0	Normal Sample	2	TWM	2/26/2013	11:58 AM	SEI 10.5.x	HDE	2/26/2013	12:55 PM	6	C	
SEI-161	WP-10	078.00	Groundwater	WP-10-78.0	Normal Sample	2	TWM	2/26/2013	12:47 PM	SEI 10.5.x	HDE	2/26/2013	1:34 PM	6	C	
SEI-164	WP-10	083.00	Groundwater	WP-10-83.0	Normal Sample	2	TWM	2/26/2013	1:30 PM	SEI 10.5.x	HDE	2/26/2013	2:56 PM	6	C	
SEI-165	WP-10	088.00	Groundwater	WP-10-88.0	Normal Sample	2	TWM	2/26/2013	2:16 PM	SEI 10.5.x	HDE	2/26/2013	2:56 PM	6	C	
SEI-166	WP-10	093.00	Groundwater	WP-10-93.0	Normal Sample	2	TWM	2/26/2013	3:05 PM	SEI 10.5.x	HDE	2/26/2013	3:31 PM	6	C	
SEI-171	WP-10	098.00	Groundwater	WP-10-98.0	Normal Sample	2	TWM	2/26/2013	4:04 PM	SEI 10.5.x	HDE	2/26/2013	4:15 PM	6	C	
SEI-172	WP-10	103.00	Groundwater	WP-10-103.0	Normal Sample	2	TWM	2/27/2013	8:59 AM	SEI 10.5.x	HDE	2/27/2013	9:30 AM	6	C	
SEI-174	WP-10	108.00	Groundwater	WP-10-108.0	Normal Sample	2	TWM	2/27/2013	10:22 AM	SEI 10.5.x	HDE	2/27/2013	10:57 AM	6	C	
SEI-175	WP-10	112.80	Groundwater	WP-10-112.8	Normal Sample	2	TWM	2/27/2013	11:23 AM	SEI 10.5.x	HDE	2/27/2013	12:17 PM	6	C	
SEI-204	WP-10	118.00	Groundwater	WP-10-118.0	Normal Sample	2	TWM	3/1/2013	2:54 PM	SEI 10.5.x	HDE	3/1/2013	3:08 PM	6	C	
SEI-205	WP-10	123.00	Groundwater	WP-10-123.0	Normal Sample	2	TWM	3/1/2013	3:41 PM	SEI 10.5.x	HDE	3/1/2013	4:21 PM	6	C	
SEI-206	WP-10	128.00	Groundwater	WP-10-128.0	Normal Sample	2	TWM	3/1/2013	4:28 PM	SEI 10.5.x	HDE	3/1/2013	4:40 PM	6	C	
SEI-207	WP-10	133.00	Groundwater	WP-10-133.0	Normal Sample	2	TWM	3/4/2013	12:31 PM	SEI 10.5.x	HDE	3/4/2013	1:15 PM	6	C	
SEI-207-MS	WP-10	133.00	Groundwater	WP-10-133.0-MS	Matrix Spike	2	TWM	3/4/2013	12:31 PM	SEI 10.5.x	HDE	3/4/2013	1:15 PM	6	C	
SEI-207-MSD	WP-10	133.00	Groundwater	WP-10-133.0-MSD	Matrix Spike Duplicate	2	TWM	3/4/2013	12:31 PM	SEI 10.5.x	HDE	3/4/2013	1:15 PM	6	C	
SEI-210	WP-10	136.30	Groundwater	WP-10-136.3	Normal Sample	2	TWM	3/4/2013	1:41 PM	SEI 10.5.x	HDE	3/4/2013	3:06 PM	6	C	
SEI-173	WP-11	000.01	Groundwater	WP-11-EB	Equipment Blank	2	WJW	2/27/2013	7:45 AM	SEI 10.5.x	HDE	2/27/2013	9:30 AM	6	C	
SEI-176	WP-11	071.90	Groundwater	WP-11-71.9	Normal Sample	2	WJW	2/27/2013	10:52 AM	SEI 10.5.x	HDE	2/27/2013	12:17 PM	6	C	
SEI-177	WP-11	076.90	Groundwater	WP-11-76.9	Normal Sample	2	WJW	2/27/2013	11:42 AM	SEI 10.5.x	HDE	2/27/2013	12:17 PM	6	C	
SEI-178	WP-11	081.90	Groundwater	WP-11-81.9	Normal Sample	2	WJW	2/27/2013	12:48 PM	SEI 10.5.x	HDE	2/27/2013	1:14 PM	6	C	
SEI-179	WP-11	087.00	Groundwater	WP-11-87.0	Normal Sample	2	WJW	2/27/2013	1:50 PM	SEI 10.5.x	HDE	2/27/2013	2:40 PM	6	C	
SEI-180	WP-11	091.60	Groundwater	WP-11-91.6	Normal Sample	2	WJW	2/27/2013	2:56 PM	SEI 10.5.x	HDE	2/27/2013	3:32 PM	6	C	
SEI-182	WP-11	094.20	Groundwater	WP-11-94.2	Normal Sample	2	WJW	2/27/2013	4:00 PM	SEI 10.5.x	HDE	2/27/2013	4:14 PM	6	C	
SEI-181	WP-12	000.01	Groundwater	WP-12-EB	Equipment Blank	2	TWM	2/27/2013	1:27 PM	SEI 10.5.x	HDE	2/27/2013	4:14 PM	6	C	
SEI-183	WP-12	073.00	Groundwater	WP-12-73.0	Normal Sample	2	TWM	2/27/2013	4:53 PM	SEI 10.5.x	HDE	2/27/2013	5:05 PM	6	C	
SEI-184	WP-12	078.00	Groundwater	WP-12-78.0	Normal Sample	2	TWM	2/28/2013	9:05 AM	SEI 10.5.x	HDE	2/28/2013	10:20 AM	6	C	
SEI-185	WP-12	083.00	Groundwater	WP-12-83.0	Normal Sample	2	TWM	2/28/2013	9:55 AM	SEI 10.5.x	HDE	2/28/2013	10:20 AM	6	C	

102305-C Scotia Naval Depot
Sample Login Summary
SDG-3

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Temp. Units	Comments
SEI-187	WP-12	088.00	Groundwater	WP-12-88.0	Normal Sample	2	TWM	2/28/2013	11:02 AM	SEI 10.5.x	HDE	2/28/2013	1:24 PM	6	C	
SEI-188	WP-12	093.00	Groundwater	WP-12-93.0	Normal Sample	2	TWM	2/28/2013	11:53 AM	SEI 10.5.x	HDE	2/28/2013	1:24 PM	6	C	
SEI-189	WP-12	098.00	Groundwater	WP-12-98.0	Normal Sample	2	TWM	2/28/2013	12:52 PM	SEI 10.5.x	HDE	2/28/2013	1:24 PM	6	C	
SEI-190	WP-12	103.00	Groundwater	WP-12-103.0	Normal Sample	2	TWM	2/28/2013	1:56 PM	SEI 10.5.x	HDE	2/28/2013	2:34 PM	6	C	
SEI-191	WP-12	108.00	Groundwater	WP-12-108.0	Normal Sample	2	TWM	2/28/2013	3:05 PM	SEI 10.5.x	HDE	2/28/2013	3:20 PM	6	C	
SEI-195	WP-12	113.00	Groundwater	WP-12-113.0	Normal Sample	2	TWM	2/28/2013	4:12 PM	SEI 10.5.x	HDE	2/28/2013	4:35 PM	6	C	
SEI-199	WP-12	118.00	Groundwater	WP-12-118.0	Normal Sample	2	TWM	3/1/2013	8:32 AM	SEI 10.5.x	HDE	3/1/2013	8:54 AM	6	C	
SEI-200	WP-12	123.00	Groundwater	WP-12-123.0	Normal Sample	2	TWM	3/1/2013	9:37 AM	SEI 10.5.x	HDE	3/1/2013	10:40 AM	6	C	
SEI-186	WP-13	000.01	Groundwater	WP-13-EB	Equipment Blank	2	WJW	2/28/2013	9:25 AM	SEI 10.5.x	HDE	2/28/2013	10:20 AM	6	C	
SEI-192	WP-13	068.00	Groundwater	WP-13-68.0	Normal Sample	2	WJW	2/28/2013	2:54 PM	SEI 10.5.x	HDE	2/28/2013	3:20 PM	6	C	
SEI-192-MS	WP-13	068.00	Groundwater	WP-13-68.0-MS	Matrix Spike	2	WJW	2/28/2013	2:54 PM	SEI 10.5.x	HDE	2/28/2013	3:20 PM	6	C	
SEI-192-MSD	WP-13	068.00	Groundwater	WP-13-68.0-MSD	Matrix Spike Duplicate	2	WJW	2/28/2013	2:54 PM	SEI 10.5.x	HDE	2/28/2013	3:20 PM	6	C	
SEI-196	WP-13	072.90	Groundwater	WP-13-72.9	Normal Sample	2	WJW	2/28/2013	3:43 PM	SEI 10.5.x	HDE	2/28/2013	4:35 PM	6	C	
SEI-196-FD	WP-13	072.90	Groundwater	WP-13-72.9-D	Field Duplicate	2	WJW	2/28/2013	3:43 PM	SEI 10.5.x	HDE	2/28/2013	4:35 PM	6	C	
SEI-198	WP-13	077.80	Groundwater	WP-13-77.8	Normal Sample	2	WJW	3/1/2013	8:18 AM	SEI 10.5.x	HDE	3/1/2013	8:54 AM	6	C	
SEI-201	WP-13	082.80	Groundwater	WP-13-82.8	Normal Sample	2	WJW	3/1/2013	9:48 AM	SEI 10.5.x	HDE	3/1/2013	10:40 AM	6	C	
SEI-202	WP-13	087.90	Groundwater	WP-13-87.9	Normal Sample	2	WJW	3/1/2013	10:47 AM	SEI 10.5.x	HDE	3/1/2013	11:42 AM	6	C	

SDG-3

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-06-EB	WAN	2121/13	10:40	HDE	2122/13	09:00	1	2	2	—		✓		SE1-140	HDE	
WP-06-72.0	WAN	2122/13	13:19			13:42	1	2	2	—		✓		SE1-141		
WP-06-72.0-MS			13:19			13:42	1	2	2	—		✓		SE1-141-MS		
WP-06-72.0-MSD			13:19			13:42	1	2	2	—		✓		SE1-141-MSD		
WP-06-77.0			14:07			14:40	1	2	2	—		✓		SE1-144		
WP-06-82.0			15:10			15:30	1	2	2	—		✓		SE1-145		
WP-06-82.0-D			15:10			1	1	2	2	—		✓		SE1-145-FD		
WP-06-87.0			~~15:59 SSE 2/22/13~~			16:11	1	2	2	—		✓		SE1-147		
WP-06-92.0	TWM	2125/13	11:51		2125/13	12:08	1	2	2	—		✓		SE1-148		
WP-09-EB	WJW		11:50			1	1	2	2	—		✓		SE1-149		
WP-06-97.0	TWM		12:53			13:08	1	2	2	—		✓		SE1-150		
WP-18-EB	1		16:23			17:10	1	2	2	—		✓		SE1-151		
WP-09-72.0	WJW		16:50			1	1	2	2	—		✓		SE1-152		
WP-09-77.0		2126/13	08:41		2126/13	09:31	1	2	2	—		✓		SE1-153		
WP-09-82.1			09:54			10:34	1	2	2	—		✓		SE1-154		
WP-09-87.2			10:43			12:55	1	2	2	—		✓		SE1-155		
WP-09-92.0			11:22				1	2	2	—		✓		SE1-156		
WP-09-97.1			12:11				1	2	2	—		✓		SE1-157		
WP-10-68.0	TWM		11:04				1	2	2	—		✓		SE1-158		
WP-10-73.0	1		11:58				1	2	2	—		✓		SE1-159		

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.*n* Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-09-101.8	WJK	2/26/13	13:05	HOE	2/26/13	13:34	1	2	2	–		✓		SEI-160	HOE	
WP-10-78.0	TWM		12:47			⊥	1	2	2	–		✓		SEI-161		
WP-09-106.8	WJW		14:02			1456	1	2	2	–		✓		SEI-162		
WP-09-106.8-D	⊥		⊥				1	2	2	–		✓		SEI-162-FD		
WP-10-83.0	TWM		13:30				1	2	2	–		✓		SEI-164		
WP-10-88.0	⊥		14:16			⊥	1	2	2	–		✓		SEI-165		
WP-10-93.0	TWM		15:05			15:31	1	2	2	–		✓		SEI-166		
WP-09-112.0	WJW		14:44			⊥	1	2	2	–		✓		SEI-167		
WP-09-116.2			15:34			15:59	1	2	2	–		✓		SEI-168		
WP-09-116.2-MS							1	2	2	–		✓		SEI-168-MS		
WP-09-116.2-MSD	⊥		⊥			⊥	1	2	2	–		✓		SEI-168-MSD		
WP-10-95.0	TWM		16:04			16:15	1	2	2	–		✓		SEI-171		
WP-10-103.0	⊥	2/27/13	08:59		2/27/13	09:30	1	2	2	–		✓		SEI-172		
WP-11-E3	WJW		07:45			⊥	1	2	2	–		✓		SEI-173		
WP-10-108.0	TWM		10:22			10:57	1	2	2	–		✓		SEI-174		
WP-10-112.8	⊥		11:23			12:17	1	2	2	–		✓		SEI-175		
WP-11-71.9	WJW		10:52			⊥	1	2	2	–		✓		SEI-176		
WP-11-76.9			11:42				1	2	2	–		✓		SEI-177		
WP-11-81.9			12:48			13:14	1	2	2	–		✓		SEI-178		
WP-11-87.0	⊥	⊥	13:50	⊥	⊥	14:40	1	2	2	–		✓		SEI-179	⊥	

Sampling in accordance with Method / SEI SOP:
- ☐ SEI 10.5.*n* Groundwater Profiling and KPRO Testing.
- ☐ _____

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot.

Project Location: Scotia, NY

	Collected			Received							Analysis					
Sample ID	By	Date	Time	By	Date	Time	Type*	Container**	Number of Containers	Preservation***	ASTM D6520 & Modified 8021/8015	8260	Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-11-91.6	WJW	2/27/13	14:56	MDE	2/27/13	15:32	1	2	2	–		✓		SE1-180	MDE	
WP-12-EB	TWM	↓	13:27	↓	↓	16:14	1	2	2	–		✓		SE1-181	↓	
WP-11-94.2	WJW	↓	16:00	↓	↓	↓	1	2	2	–		✓		SE1-182	↓	
WP-12-73.0	TWM	↓	16:53	↓	↓	17:05	1	2	2	–		✓		SE1-183	↓	
WP-12-78.0	↓	2/28/13	09:05	↓	2/28/13	10:20	1	2	2	–		✓		SE1-184	↓	
WP-12-83.0	↓	↓	09:55	↓	↓	↓	1	2	2	–		✓		SE1-185	↓	
WP-13-EB	WJW	↓	09:25	↓	↓	↓	1	2	2	–		✓		SE1-186	↓	
WP-12-88.0	TWM	↓	11:02	↓	↓	13:24	1	2	2	–		✓		SE1-187	↓	
WP-12-93.0	↓	↓	11:53	↓	↓	↓	1	2	2	–		✓		SE1-188	↓	
WP-12-98.0	↓	↓	12:52	↓	↓	↓	1	2	2	–		✓		SE1-189	↓	
WP-12-103.0	TWM	↓	13:56	↓	↓	14:34	1	2	2	–		✓		SE1-190	↓	
WP-12-108.0	↓	↓	15:05	↓	↓	15:20	1	2	2	–		✓		SE1-191	↓	
WP-13-68.0	WJW	↓	14:54	↓	↓	↓	1	2	2	–		✓		SE1-192	↓	
WP-13-68.0-MS	↓	↓	↓	↓	↓	15:20	1	2	2	–		✓		SE1-192-MS	↓	
WP-13-68.0-MSD	↓	↓	↓	↓	↓	↓	1	2	2	–		✓		SE1-192-MSD	↓	
WP-12-113.0	~~WJW~~ TWM	~~2/28/13~~ 3/1/13	16:12	↓	↓	16:35	1	2	2	–		✓		SE1-195	↓	
WP-13-72.9	WJW	↓	15:43	↓	↓	↓	1	2	2	–		✓		SE1-196	↓	
WP-13-72.9-D	↓	↓	↓	↓	↓	↓	1	2	2	–		✓		SE1-196-FD	↓	
WP-13-77.8	WJW	3/1/13	08:18	↓	3/1/13	08:54	1	2	2	–		✓		SE1-198	↓	
WP-12-118.0	TWM	↓	08:32	↓	↓	↓	1	2	2	–		✓		SE1-199	–	

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-12-123.0	TWM	3/1/13	09:37	HOE	3/1/13	10:40	1	2	2	–		✓		SEI-200	HOE	
WP-13-82.8	WJW	"	09:48	"	"	"	1	2	2	–		✓		SEI-201	"	
WP-13-87.9	"	"	10:47	"	"	11:42	1	2	2	–		✓		SEI-202	"	
WP-10-EB-A	TWM	"	10:40	"	"	13:35	1	2	2	–		✓		SEI-203	"	
WP-10-118.0	"	"	14:54	"	"	15:08	1	2	2	–		✓		SEI-204	"	
WP-10-123.0	"	"	15:41	"	"	16:21	1	2	2	–		✓		SEI-205	"	
WP-10-125.0	"	"	16:28	"	"	16:40	1	2	2	–		✓		SEI-206	"	
WP-10-133.0	"	3/4/13	12:31	"	3/4/13	13:15	1	2	2	–		✓		SEI-207	"	
WP-10-133.0-MS	"	"	"	"	"	"	1	2	2	–		✓		SEI-207-MS	"	
WP-10-133.0-MSD	"	"	"	"	"	"	1	2	2	–		✓		SEI-207-MSD	"	
WP-10-136.3	"	"	13:41	"	"	15:06	1	2	2	–		✓		SEI-210	"	

Sampling in accordance with Method / SEI SOP:
☑ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

* Type of Sample: (1) water (2) soil
** Container: (1) bag (2) bottle (3) other _____
*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 29, 2013

This data package presents the analytical results for groundwater samples analyzed by Stone Environmental, Inc. Laboratory (Stone) on-site at the Scotia Navy Depot Site in Scotia, New York. Samples in this sample delivery group (SDG-3) were collected at the Scotia Site between February 21 and March 1, 2013. A total of 63 groundwater samples were collected during this period by Stone personnel from six borings: WP-06 and WP-09 through WP-13, including three field duplicate samples and seven equipment blanks. Matrix spike and matrix spike duplicate (MS/MSD) sample pairs were analyzed in association with four of the parent groundwater samples. All samples in SDG-3 were received and analyzed at the mobile laboratory between February 21 and March 1, 2013.

After sample collection, all samples were hand delivered to the mobile laboratory and kept refrigerated until analysis; therefore, temperatures of samples were not measured at receipt. The sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. As samples were received at the on-site laboratory, they were recorded on Stone's Sample Log Sheet. A copy of the Sample Log Sheet and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with the samples presented in this report were generated under a quality system that adheres to requirements

specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS), laboratory method blanks (VBLK), matrix spike and matrix spike duplicate samples (MS/MSDs) and field duplicate samples (FD)) are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards. Exceptions are noted below:

- VSTD Deficiencies:
    - No deficiencies noted.
- LCS Deficiencies:
    - No deficiencies noted.
- VBLK Deficiencies:
    - No deficiencies noted.
- MS/MSD Deficiencies:
    - Trichloroethene recoveries were below acceptance criteria (70-125%) for the MS (45% recovery) and MSD (35% recovery) samples associated with parent sample WP-09-116.2. No data were qualified on this basis.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

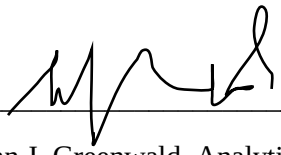
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

Field QC Assignments and Associated Samples

EDD File Name: SDG-3
eQapp Name: ScotiaNavyDepot3

	Associated Samples	Sample Collection Date
Field QC Sample: WP-06-82.0-D **QC Type:** Field_Duplicate		
	WP-06-82.0	2/22/2013 3:10:00 PM
Field QC Sample: WP-06-EB **QC Type:** Equipment_Blank		
	WP-06-97.0	2/25/2013 12:53:00 PM
	WP-06-82.0-D	2/22/2013 3:10:00 PM
	WP-06-82.0	2/22/2013 3:10:00 PM
	WP-06-92.0	2/25/2013 11:51:00 AM
	WP-06-87.0	2/22/2013 3:59:00 PM
	WP-06-77.0	2/22/2013 2:01:00 PM
	WP-06-72.0	2/22/2013 1:19:00 PM
Field QC Sample: WP-09-106.8-D **QC Type:** Field_Duplicate		
	WP-09-106.8	2/26/2013 2:02:00 PM
Field QC Sample: WP-09-EB **QC Type:** Equipment_Blank		
	WP-09-92.0	2/26/2013 11:22:00 AM
	WP-09-112.0	2/26/2013 2:44:00 PM
	WP-09-116.2	2/26/2013 3:34:00 PM
	WP-09-97.1	2/26/2013 12:11:00 PM
	WP-09-77.0	2/26/2013 8:41:00 AM
	WP-09-72.0	2/25/2013 4:50:00 PM
	WP-09-87.2	2/26/2013 10:43:00 AM
	WP-09-106.8-D	2/26/2013 2:02:00 PM
	WP-09-82.1	2/26/2013 9:54:00 AM
	WP-09-106.8	2/26/2013 2:02:00 PM
	WP-09-101.8	2/26/2013 1:05:00 PM

	Associated Samples	Sample Collection Date
Field QC Sample: WP-10-EB **QC Type:** Equipment_Blank		
	WP-10-93.0	2/26/2013 3:05:00 PM
	WP-10-88.0	2/26/2013 2:16:00 PM
	WP-10-78.0	2/26/2013 12:47:00 PM
	WP-10-128.0	3/1/2013 4:28:00 PM
	WP-10-118.0	3/1/2013 2:54:00 PM
	WP-10-68.0	2/26/2013 11:04:00 AM
	WP-10-112.8	2/27/2013 11:23:00 AM
	WP-10-123.0	3/1/2013 3:41:00 PM
	WP-10-136.3	3/4/2013 1:41:00 PM
	WP-10-103.0	2/27/2013 8:59:00 AM
	WP-10-108.0	2/27/2013 10:22:00 AM
	WP-10-73.0	2/26/2013 11:58:00 AM
	WP-10-83.0	2/26/2013 1:30:00 PM
	WP-10-98.0	2/26/2013 4:04:00 PM
	WP-10-133.0	3/4/2013 12:31:00 PM
Field QC Sample: WP-10-EB-A **QC Type:** Equipment_Blank		
	WP-10-93.0	2/26/2013 3:05:00 PM
	WP-10-88.0	2/26/2013 2:16:00 PM
	WP-10-78.0	2/26/2013 12:47:00 PM
	WP-10-128.0	3/1/2013 4:28:00 PM
	WP-10-118.0	3/1/2013 2:54:00 PM
	WP-10-68.0	2/26/2013 11:04:00 AM
	WP-10-112.8	2/27/2013 11:23:00 AM
	WP-10-123.0	3/1/2013 3:41:00 PM
	WP-10-136.3	3/4/2013 1:41:00 PM
	WP-10-103.0	2/27/2013 8:59:00 AM
	WP-10-108.0	2/27/2013 10:22:00 AM
	WP-10-73.0	2/26/2013 11:58:00 AM
	WP-10-83.0	2/26/2013 1:30:00 PM
	WP-10-98.0	2/26/2013 4:04:00 PM
	WP-10-133.0	3/4/2013 12:31:00 PM
Field QC Sample: WP-11-EB **QC Type:** Equipment_Blank		
	WP-11-71.9	2/27/2013 10:52:00 AM
	WP-11-87.0	2/27/2013 1:50:00 PM
	WP-11-91.6	2/27/2013 2:56:00 PM
	WP-11-94.2	2/27/2013 4:00:00 PM

	Associated Samples	Sample Collection Date
	WP-11-81.9	2/27/2013 12:48:00 PM
	WP-11-76.9	2/27/2013 11:42:00 AM
Field QC Sample: WP-12-EB **QC Type:** Equipment_Blank		
	WP-12-123.0	3/1/2013 9:37:00 AM
	WP-12-78.0	2/28/2013 9:05:00 AM
	WP-12-98.0	2/28/2013 12:52:00 PM
	WP-12-118.0	3/1/2013 8:32:00 AM
	WP-12-93.0	2/28/2013 11:53:00 AM
	WP-12-83.0	2/28/2013 9:55:00 AM
	WP-12-103.0	2/28/2013 1:56:00 PM
	WP-12-88.0	2/28/2013 11:02:00 AM
	WP-12-73.0	2/27/2013 4:53:00 PM
	WP-12-108.0	2/28/2013 3:05:00 PM
	WP-12-113.0	2/28/2013 4:12:00 PM
Field QC Sample: WP-13-72.9-D **QC Type:** Field_Duplicate		
	WP-13-72.9	2/28/2013 3:43:00 PM
Field QC Sample: WP-13-EB **QC Type:** Equipment_Blank		
	WP-13-82.8	3/1/2013 9:48:00 AM
	WP-13-72.9-D	2/28/2013 3:43:00 PM
	WP-13-77.8	3/1/2013 8:18:00 AM
	WP-13-87.9	3/1/2013 10:47:00 AM
	WP-13-68.0	2/28/2013 2:54:00 PM
	WP-13-72.9	2/28/2013 3:43:00 PM

Data Qualifier Summary

Lab Reporting Batch ID: SDG-3 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-3_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: VOA

Method: 8260C **Matrix:** Water

Sample ID: WP-06-72.0 **Collected:** 2/22/2013 1:19:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.71	J	0.12	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.78	J	0.19	MDL	2.0	RDL	ug/L	U	Eb
CIS-1,2-DICHLOROETHENE	0.96	J	0.1	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-06-77.0 **Collected:** 2/22/2013 2:01:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	1.2	J	0.54	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.39	J	0.19	MDL	2.0	RDL	ug/L	U	Eb

Sample ID: WP-06-82.0 **Collected:** 2/22/2013 3:10:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	1.4	J	0.54	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.33	J	0.19	MDL	2.0	RDL	ug/L	U	Eb
TRICHLOROETHENE	1.1	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-06-82.0-D **Collected:** 2/22/2013 3:10:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	1.7	J	0.54	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.38	J	0.19	MDL	2.0	RDL	ug/L	U	Eb
TRICHLOROETHENE	1.3	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-06-87.0 **Collected:** 2/22/2013 3:59:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	0.79	J	0.54	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	U	Eb

Sample ID: WP-06-92.0 **Collected:** 2/25/2013 11:51:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	0.80	J	0.54	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-3 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-3_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-06-97.0** ***Collected:*** **2/25/2013 12:53:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBON TETRACHLORIDE	0.64	J	0.54	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-06-EB** ***Collected:*** **2/21/2013 10:40:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.31	J	0.19	MDL	2.0	RDL	ug/L	J	RI
O-XYLENE	0.15	J	0.13	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-09-116.2** ***Collected:*** **2/26/2013 3:34:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	73		0.19	MDL	2.0	RDL	ug/L	J-	Ms

Sample ID: **WP-10-103.0** ***Collected:*** **2/27/2013 8:59:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.22	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.52	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.22	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-108.0** ***Collected:*** **2/27/2013 10:22:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.28	J	0.2	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.28	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-112.8** ***Collected:*** **2/27/2013 11:23:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.23	J	0.2	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.27	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-3 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-3_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-10-118.0** ***Collected:*** **3/1/2013 2:54:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.25	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.54	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.30	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-123.0** ***Collected:*** **3/1/2013 3:41:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.26	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.73	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.31	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-128.0** ***Collected:*** **3/1/2013 4:28:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	1.0	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.42	J	0.19	MDL	2.0	RDL	ug/L	J	RI
CIS-1,2-DICHLOROETHENE	0.21	J	0.1	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-133.0** ***Collected:*** **3/4/2013 12:31:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	1.5	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-136.3** ***Collected:*** **3/4/2013 1:41:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	1.0	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-68.0** ***Collected:*** **2/26/2013 11:04:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.19	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-3 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-3_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-10-73.0** ***Collected:*** **2/26/2013 11:58:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.21	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-78.0** ***Collected:*** **2/26/2013 12:47:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-83.0** ***Collected:*** **2/26/2013 1:30:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.19	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-88.0** ***Collected:*** **2/26/2013 2:16:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.28	J	0.15	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-93.0** ***Collected:*** **2/26/2013 3:05:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.36	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-10-98.0** ***Collected:*** **2/26/2013 4:04:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.22	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-11-81.9** ***Collected:*** **2/27/2013 12:48:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.29	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-3 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-3_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-11-91.6** ***Collected:*** **2/27/2013 2:56:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.35	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.23	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-12-103.0** ***Collected:*** **2/28/2013 1:56:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.47	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.49	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.26	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-12-108.0** ***Collected:*** **2/28/2013 3:05:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	1.9	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.47	J	0.19	MDL	2.0	RDL	ug/L	J	RI
TRICHLOROETHENE	0.23	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-12-78.0** ***Collected:*** **2/28/2013 9:05:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.20	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-12-83.0** ***Collected:*** **2/28/2013 9:55:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.26	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-12-88.0** ***Collected:*** **2/28/2013 11:02:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.34	J	0.2	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-3 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-3_General2A_13_053013k **eQAPP Name: ScotiaNavyDepot3**

Method Category: VOA

Method: 8260C **Matrix:** Water

Sample ID: WP-12-93.0 **Collected:** 2/28/2013 11:53:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.36	J	0.2	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.22	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-12-98.0 **Collected:** 2/28/2013 12:52:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.46	J	0.2	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.23	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-13-72.9 **Collected:** 2/28/2013 3:43:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: WP-13-72.9-D **Collected:** 2/28/2013 3:43:00 **Analysis Type:** Initial/TOT **Dilution:** 1.0

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.19	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-3

Laboratory: STONE

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-3_General2A_13_053013k

eQAPP Name: ScotiaNavyDepot3

Reason Code Legend

Reason Code	*Description*
Eb	Equipment Blank Contamination
Ms	Matrix Spike Lower Estimation
Rl	Reporting Limit Trace Value

EDD Warning Log

Lab Reporting Batch ID: SDG-3

eQAPP: ScotiaNavyDepot3

Laboratory: STONE

Table	Line #	Column	Value	Warning	Description
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'LX' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'LZ' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'MB' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

102305-C Scotia Naval Depot
Sample Login Summary
SDG-4

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Comments	Lab ID Parent	Received Temp	Temperature Units
SEI-220	IDW	000.02	Groundwater	Collective Purge-IDW	Normal Sample	2	DJL	3/5/2013	2:14 PM	SEI 10.5.x	HDE	3/5/2013	2:35 PM			6	C
SEI-217	IDW	000.01	Groundwater	MW-24-IDW	Normal Sample	2	DJL	3/5/2013	10:51 AM	SEI 10.5.x	HDE	3/5/2013	11:10 AM			6	C
SEI-226	WP-14	103.00	Groundwater	WP-14-103.0	Normal Sample	2	TWM	3/6/2013	9:21 AM	SEI 10.5.x	HDE	3/6/2013	9:40 AM			6	C
SEI-229	WP-14	108.00	Groundwater	WP-14-108.0	Normal Sample	2	TWM	3/6/2013	10:32 AM	SEI 10.5.x	HDE	3/6/2013	11:01 AM			6	C
SEI-231	WP-14	113.00	Groundwater	WP-14-113	Normal Sample	2	twm	3/6/2013	11:50 AM	SEI 10.5.x	mdr	3/6/2013	12:45 PM			6	C
SEI-234	WP-14	114.80	Groundwater	WP-14-114.8	Normal Sample	2	TWM	3/6/2013	12:47 PM	SEI 10.5.x	mdr	3/6/2013	3:20 PM			6	C
SEI-213	WP-14	068.00	Groundwater	WP-14-68.0	Normal Sample	2	TWM	3/5/2013	12:06 PM	SEI 10.5.x	HDE	3/5/2013	12:27 PM		SEI-213	6	C
SEI-213-MS	WP-14	068.00	Groundwater	WP-14-68.0-MS	Matrix Spike	2	TWM	3/5/2013	12:06 PM	SEI 10.5.x	HDE	3/5/2013	12:27 PM		SEI-213	6	C
SEI-213-MSD	WP-14	068.00	Groundwater	WP-14-68.0-MSD	Matrix Spike Duplicate	2	TWM	3/5/2013	12:06 PM	SEI 10.5.x	HDE	3/5/2013	12:27 PM		SEI-213	6	C
SEI-216	WP-14	073.00	Groundwater	WP-14-73.0	Normal Sample	2	TWM	3/5/2013	1:02 PM	SEI 10.5.x	HDE	3/5/2013	1:20 PM			6	C
SEI-218	WP-14	078.00	Groundwater	WP-14-78.0	Normal Sample	2	TWM	3/5/2013	1:59 PM	SEI 10.5.x	HDE	3/5/2013	2:35 PM		SEI-218	6	C
SEI-218-FD	WP-14	078.00	Groundwater	WP-14-78.0-D	Field Duplicate	2	TWM	3/5/2013	1:59 PM	SEI 10.5.x	HDE	3/5/2013	2:35 PM		SEI-218	6	C
SEI-221	WP-14	083.00	Groundwater	WP-14-83.0	Normal Sample	2	TWM	3/5/2013	3:27 PM	SEI 10.5.x	HDE	3/5/2013	3:45 PM		SEI-221	6	C
SEI-221-FD	WP-14	083.00	Groundwater	WP-14-83.0-D	Field Duplicate	2	TWM	3/5/2013	3:27 PM	SEI 10.5.x	HDE	3/5/2013	3:45 PM		SEI-221	6	C
SEI-223	WP-14	088.00	Groundwater	WP-14-88.0	Normal Sample	2	TWM	3/5/2013	4:22 PM	SEI 10.5.x	HDE	3/5/2013	4:35 PM			6	C
SEI-224	WP-14	093.00	Groundwater	WP-14-93.0	Normal Sample	2	TWM	3/5/2013	5:03 PM	SEI 10.5.x	HDE	3/5/2013	5:15 PM			6	C
SEI-225	WP-14	098.00	Groundwater	WP-14-98.0	Normal Sample	2	TWM	3/6/2013	8:27 AM	SEI 10.5.x	HDE	3/6/2013	8:40 AM			6	C
SEI-212	WP-14	000.01	Groundwater	WP-14-EB	Equipment Blank	2	WJW	3/4/2013	3:58 PM	SEI 10.5.x	HDE	3/5/2013	7:40 AM			6	C
SEI-227	WP-15	070.00	Groundwater	WP-15-70.0	Normal Sample	2	WJW	3/6/2013	9:25 AM	SEI 10.5.x	HDE	3/6/2013	9:40 AM			6	C
SEI-228	WP-15	075.40	Groundwater	WP-15-75.4	Normal Sample	2	WJW	3/6/2013	10:40 AM	SEI 10.5.x	HDE	3/6/2013	11:01 AM			6	C
SEI-230	WP-15	080.80	Groundwater	WP-15-80.8	Normal Sample	2	wjw	3/6/2013	11:52 AM	SEI 10.5.x	mdr	3/6/2013	12:45 PM			6	C
SEI-235	WP-15	085.60	Groundwater	WP-15-85.6	Normal Sample	2	wjw	3/6/2013	12:54 PM	SEI 10.5.x	mdr	3/6/2013	3:20 PM			6	C
SEI-232	WP-15	091.60	Groundwater	WP-15-91.6	Normal Sample	2	wjw	3/6/2013	2:57 PM	SEI 10.5.x	mdr	3/6/2013	3:10 PM			6	C
SEI-236	WP-15	095.70	Groundwater	WP-15-95.7	Normal Sample	2	wjw	3/6/2013	4:16 PM	SEI 10.5.x	mdr	3/6/2013	4:45 PM			6	C
SEI-211	WP-15	000.01	Groundwater	WP-15-EB	Equipment Blank	2	TWM	3/4/2013	3:45 PM	SEI 10.5.x	HDE	3/5/2013	7:40 AM			6	C
SEI-244	WP-16	101.60	Groundwater	WP-16-101.6	Normal Sample	2	twm	3/7/2013	3:32 PM	SEI 10.5.x	mdr	3/7/2013	3:40 PM			6	C
SEI-244-FD	WP-16	101.60	Groundwater	WP-16-101.6-D	Field Duplicate	2	twm	3/7/2013	3:32 PM	SEI 10.5.x	mdr	3/7/2013	3:40 PM			6	C
SEI-237	WP-16	068.00	Groundwater	WP-16-68.0	Normal Sample	2	twm	3/7/2013	9:20 AM	SEI 10.5.x	mdr	3/7/2013	10:15 AM			6	C
SEI-238	WP-16	073.00	Groundwater	WP-16-73.0	Normal Sample	2	twm	3/7/2013	9:52 AM	SEI 10.5.x	mdr	3/7/2013	10:15 AM			6	C
SEI-239	WP-16	078.00	Groundwater	WP-16-78.0	Normal Sample	2	twm	3/7/2013	10:46 AM	SEI 10.5.x	mdr	3/7/2013	10:55 AM			6	C
SEI-240	WP-16	083.00	Groundwater	WP-16-83.0	Normal Sample	2	twm	3/7/2013	11:36 AM	SEI 10.5.x	mdr	3/7/2013	11:50 AM			6	C
SEI-241	WP-16	088.00	Groundwater	WP-16-88.0	Normal Sample	2	twm	3/7/2013	12:27 PM	SEI 10.5.x	mdr	3/7/2013	12:35 PM			6	C
SEI-242	WP-16	093.00	Groundwater	WP-16-93.0	Normal Sample	2	twm	3/7/2013	1:39 PM	SEI 10.5.x	mdr	3/7/2013	1:45 PM			6	C
SEI-243	WP-16	097.80	Groundwater	WP-16-97.8	Normal Sample	2	twm	3/7/2013	2:34 PM	SEI 10.5.x	mdr	3/7/2013	2:45 PM			6	C
SEI-233	WP-16	000.01	Groundwater	WP-16-EB	Equipment Blank	2	TWM	3/6/2013	1:47 PM	SEI 10.5.x	mdr	3/6/2013	3:15 PM			6	C

SDG-4

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305-C Scotia Naval Depot

Project Location: Scotia, NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP-15-EB	TWM	3/4/13	15:45	HDE	3/5/203	07:40	1	2	2	–		✓		SE1-211	HDE	
WP-14-EB	WJW	〃	15:58			〃	1	2	2	–		✓		SE1-212		
WP-14-68.0	TWM	3/5/13	12:06			12:27	1	2	2	–		✓		SE1-213		
WP-14-68.0-MS	〃	〃	〃			〃	1	2	2	–		✓		SE1-213-MS		
WP-14-68.0-MSD	〃	〃	〃			〃	1	2	2	–		✓		SE1-213-MSD		
WP-14-73.0	〃	〃	13:02			13:20	1	2	2	–		✓		SE1-216		
MW-24-IDW	DJL	〃	10:51			11:10	1	2	2	–		✓		SE1-217		
WP-14-78.0	TWM	〃	13:59			14:35	1	2	2	–		✓		SE1-218		
WP-14-78.0D	〃	〃	〃			〃	1	2	2	–		✓		SE1-218-FD 3/5/13		
Collective Purge-IDW	DJL	〃	14:14			〃	1	2	2	–		✓		SE1-220		
WP-14-83.0	TWM	〃	15:27			15:45	1	2	2	–		✓		SE1-221		
WP-14-83.0D	〃	〃	〃			〃	1	2	2	–		✓		SE1-221-FD		
WP-14-88.0	TWM	〃	16:22			16:35	1	2	2	–		✓		SE1-223		
WP-14-93.0	〃	〃	17:03			17:15	1	2	2	–		✓		SE1-224		
WP-14-98.0	〃	3/6/13	08:27		3/6/13	08:40	1	2	2	–		✓		SE1-225		
WP-14-103.0	〃	〃	09:21		〃	09:40	1	2	2	–		✓		SE1-226		
WP-15-70.0	WJW	〃	09:25		〃	〃	1	2	2	–		✓		SE1-227		
WP-15-75.4	〃	〃	10:40		〃	11:01	1	2	2	–		✓		SE1-228		
WP-14-108.0	TWM	〃	10:32	〃	〃	〃	1	2	2	–		✓		SE1-229	〃	
WP-15-80.6	WJW	〃	11:52	MDF	3/6/13	12:45	1	2	2	–		✓		SE1-230	MDF	

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

STONE ENVIRONMENTAL INC

SDG-4

Mobile Lab 2 – SAMPLE LOG SHEET

Project ID: 10-2305 Scotia Naval Dept

Project Location: Scotia NY

Sample ID	Collected By	Collected Date	Collected Time	Received By	Received Date	Received Time	Type*	Container**	Number of Containers	Preservation***	Analysis: ASTM D6520 & Modified 8021/8015	Analysis: 8260	Analysis: Other	Lab ID	Analyst	Comments Or Vial ID / Final Wt(g)
WP14.113.0	TWM	3/6/13	1150	MDR	3/6/13	1245	1	2	2	-		✓		SEZ-231	MDR	
WP-15-91.6	WJW		1457			1510	1	2	2	-		✓		SEZ232	MDR	
WP-16-E13	TWM		1347			1515	1	2	2	-		✓		SEZ233	MDR	
WP-14-114.8	TWM		1247			1520	1	2	2	-		✓		SEZ-234		
WP-15-85.6	WJW		1254			1520	1	2	2	-		✓		SEZ-235		
WP-15-95.7	WJW		1616			1645	1	2	2	-		✓		SEZ-236		
WP-16-68.0	TWM	3/7/13	0920			1015	1	2	2	-		✓		SEZ-237		
WP-16-73.0			0952			1015	1	2	2	-		✓		SEZ-238		
WP-16-78.0			1046			1055	1	2	2	-		✓		SEZ-239		
WP-16-83.0			1136			1150	1	2	2	-		✓		SEZ-240		
WP-16-88.0			1227			1235	1	2	2	-		✓		SEZ-241		
WP-16-93			1339			1345	1	2	2	-		✓		SEZ-242		
WP-16-97.8			1434			1445	1	2	2	-		✓		SEZ-243		
WP16-101.6			1532		1540	~~1530~~	1	2	2	-		✓		SEZ-244		
WP16-101.6D	↓	↓	1532	↓	1540	~~1530~~	1	2	2	-		✓		~~SEZ-245~~ ↓	mjs 3/26/13	
					mjs 3/26/13									SE1-244-FD		

* Type of Sample: (1) water (2) soil

** Container: (1) bag (2) bottle (3) other _____

*** Preservation: (1) ice (2) HCl (3) Other _____

Sampling in accordance with Method / SEI SOP:
☐ SEI 10.5.n Groundwater Profiling and KPRO Testing.
☐ _____

STONE ENVIRONMENTAL INC

MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 29, 2013

This data package presents the analytical results for groundwater samples analyzed by Stone Environmental, Inc. Laboratory (Stone) on-site at the Scotia Navy Depot Site in Scotia, New York. Samples in this sample delivery group (SDG-4) were collected at the Scotia Site between March 4 and 7, 2013. A total of 31 groundwater samples were collected during this period by Stone personnel from three borings: WP-14, WP-15 and WP-16, including three field duplicate samples and three equipment blanks. A matrix spike and matrix spike duplicate (MS/MSD) sample pair was analyzed in association with one of the parent groundwater samples. SDG-4 also included two investigation-derived waste (IDW) samples. All samples in SDG-4 were received and analyzed at the mobile laboratory between March 4 and 7, 2013.

After sample collection, all samples were hand delivered to the mobile laboratory and kept refrigerated until analysis; therefore, temperatures of samples were not measured at receipt. The sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. As samples were received at the on-site laboratory, they were recorded on Stone's Sample Log Sheet. A copy of the Sample Log Sheet and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with

the samples presented in this report were generated under a quality system that adheres to requirements specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS), laboratory method blanks (VBLK), matrix spike and matrix spike duplicate samples (MS/MSDs) and field duplicate samples (FD)) are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards. Exceptions are noted below:

- VSTD Deficiencies:
    - No deficiencies noted.
- LCS Deficiencies:
    - No deficiencies noted.
- VBLK Deficiencies:
    - No deficiencies noted.
- MS/MSD Deficiencies:
    - 1,3,5-Trimethylbenzene recovery was below acceptance criteria (75-130%) for the MSD (70% recovery) sample associated with parent sample WP-14-68.0. No data were qualified on this basis.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

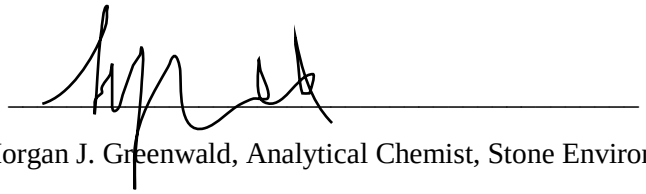
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

Field QC Assignments and Associated Samples

EDD File Name: SDG-4
eQapp Name: ScotiaNavyDepot3

	Associated Samples	Sample Collection Date
Field QC Sample: WP-14-78.0-D **QC Type:** Field_Duplicate		
	WP-14-78.0	3/5/2013 1:59:00 PM
Field QC Sample: WP-14-83.0-D **QC Type:** Field_Duplicate		
	WP-14-83.0	3/5/2013 3:27:00 PM
Field QC Sample: WP-14-EB **QC Type:** Equipment_Blank		
	WP-14-83.0-D	3/5/2013 3:27:00 PM
	WP-14-113	3/6/2013 11:50:00 AM
	WP-14-73.0	3/5/2013 1:02:00 PM
	WP-14-68.0	3/5/2013 12:06:00 PM
	WP-14-93.0	3/5/2013 5:03:00 PM
	WP-14-108.0	3/6/2013 10:32:00 AM
	WP-14-78.0-D	3/5/2013 1:59:00 PM
	WP-14-78.0	3/5/2013 1:59:00 PM
	WP-14-103.0	3/6/2013 9:21:00 AM
	WP-14-114.8	3/6/2013 12:47:00 PM
	WP-14-98.0	3/6/2013 8:27:00 AM
	WP-14-83.0	3/5/2013 3:27:00 PM
	WP-14-88.0	3/5/2013 4:22:00 PM
Field QC Sample: WP-15-EB **QC Type:** Equipment_Blank		
	WP-15-70.0	3/6/2013 9:25:00 AM
	WP-15-75.4	3/6/2013 10:40:00 AM
	WP-15-95.7	3/6/2013 4:16:00 PM
	WP-15-91.6	3/6/2013 2:57:00 PM
	WP-15-85.6	3/6/2013 12:54:00 PM
	WP-15-80.8	3/6/2013 11:52:00 AM

	Associated Samples	Sample Collection Date
Field QC Sample: WP-16-101.6-D **QC Type:** Field_Duplicate		
	WP-16-101.6	3/7/2013 3:32:00 PM
Field QC Sample: WP-16-EB **QC Type:** Equipment_Blank		
	WP-16-88.0	3/7/2013 12:27:00 PM
	WP-16-68.0	3/7/2013 9:20:00 AM
	WP-16-73.0	3/7/2013 9:52:00 AM
	WP-16-93.0	3/7/2013 1:39:00 PM
	WP-16-97.8	3/7/2013 2:34:00 PM
	WP-16-83.0	3/7/2013 11:36:00 AM
	WP-16-78.0	3/7/2013 10:46:00 AM
	WP-16-101.6	3/7/2013 3:32:00 PM
	WP-16-101.6-D	3/7/2013 3:32:00 PM

Data Qualifier Summary

Lab Reporting Batch ID: SDG-4 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-4_General2A_13k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **Collective Purge-IDW** ***Collected:*** **3/5/2013 2:14:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TETRACHLOROETHENE	0.36	J	0.22	MDL	2.0	RDL	ug/L	J	RI
TOLUENE	1.1	J	0.66	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **MW-24-IDW** ***Collected:*** **3/5/2013 10:51:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.52	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-103.0** ***Collected:*** **3/6/2013 9:21:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.31	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.32	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-108.0** ***Collected:*** **3/6/2013 10:32:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.39	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.35	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-113** ***Collected:*** **3/6/2013 11:50:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.44	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.26	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-114.8** ***Collected:*** **3/6/2013 12:47:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.33	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.43	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.20	J	0.19	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-4 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-4_General2A_13k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-14-68.0** ***Collected:*** **3/5/2013 12:06:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRIMETHYLBENZENE	2.0	U	0.43	MDL	2.0	RDL	ug/L	UJ	Ms
BENZENE	0.24	J	0.2	MDL	2.0	RDL	ug/L	J	RI
ETHYLBENZENE	0.16	J	0.12	MDL	2.0	RDL	ug/L	J	RI
O-XYLENE	0.35	J	0.13	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-73.0** ***Collected:*** **3/5/2013 1:02:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.23	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-78.0** ***Collected:*** **3/5/2013 1:59:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.24	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-78.0-D** ***Collected:*** **3/5/2013 1:59:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.34	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-83.0** ***Collected:*** **3/5/2013 3:27:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.28	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-83.0-D** ***Collected:*** **3/5/2013 3:27:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.27	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-88.0** ***Collected:*** **3/5/2013 4:22:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.29	J	0.2	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-4 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-4_General2A_13k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-14-93.0** ***Collected:*** **3/5/2013 5:03:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.26	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-14-98.0** ***Collected:*** **3/6/2013 8:27:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.29	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-15-70.0** ***Collected:*** **3/6/2013 9:25:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.40	J	0.2	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-15-75.4** ***Collected:*** **3/6/2013 10:40:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.75	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.25	J	0.15	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-15-80.8** ***Collected:*** **3/6/2013 11:52:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.61	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.26	J	0.15	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-15-85.6** ***Collected:*** **3/6/2013 12:54:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.47	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.28	J	0.15	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-15-91.6** ***Collected:*** **3/6/2013 2:57:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.38	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.19	J	0.15	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-4 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-4_General2A_13k **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **WP-15-95.7** ***Collected:*** **3/6/2013 4:16:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.69	J	0.2	MDL	2.0	RDL	ug/L	J	RI
1,1-DICHLOROETHENE	0.29	J	0.15	MDL	2.0	RDL	ug/L	J	RI
CHLOROFORM	0.21	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-16-78.0** ***Collected:*** **3/7/2013 10:46:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TRICHLOROETHENE	0.22	J	0.19	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **WP-16-EB** ***Collected:*** **3/6/2013 1:47:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
O-XYLENE	0.19	J	0.13	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-4

Laboratory: STONE

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-4_General2A_13k

eQAPP Name: ScotiaNavyDepot3

Reason Code Legend

Reason Code	*Description*
Ms	Matrix Spike Lower Estimation
RI	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

EDD Warning Log

Lab Reporting Batch ID: SDG-4

eQAPP: ScotiaNavyDepot3

Laboratory: STONE

Table	Line #	Column	Value	Warning	Description
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'ME' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'MF' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

102305-C Scotia Naval Depot
Sample Login Summary
SDG-5

Lab ID	Location ID	Depth	Matrix	Sample Name	Sample Code	Quantity	Collected By	Collected Date	Collected Time	Collection Method	Received By	Received Date	Received Time	Received Temp	Temperature Units	Comments	Preservative
SEI-250	Drums-IDW	000.03	Groundwater	Drums 13-18-IDW	Normal Sample	2	LJR	3/19/2013	11:30 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-247	Drums-IDW	000.01	Groundwater	Drums 1-6-IDW	Normal Sample	2	LJR	3/19/2013	10:00 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-251	Drums-IDW	000.04	Groundwater	Drums 19-24-IDW	Normal Sample	2	LJR	3/19/2013	12:00 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-252	Drums-IDW	000.05	Groundwater	Drums 25-27-IDW	Normal Sample	2	LJR	3/19/2013	12:35 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-253	Drums-IDW	000.06	Groundwater	Drums 28-30-IDW	Normal Sample	2	LJR	3/19/2013	12:50 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-249	Drums-IDW	000.02	Groundwater	Drums 7-12-IDW	Normal Sample	2	LJR	3/19/2013	11:00 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-248	MW-25-IDW	050.00	Groundwater	MW-25-50.0-IDW	Normal Sample	2	LJR	3/19/2013	10:20 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-256	MW-25-IDW	075.00	Groundwater	MW-25-75.0-IDW	Normal Sample	2	LJR	3/18/2013	11:50 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-255	MW-26-IDW	110.00	Groundwater	MW-26-110.0-IDW	Normal Sample	2	LJR	3/18/2013	4:45 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-246	MW-26-IDW	050.00	Groundwater	MW-26-50.0-IDW	Normal Sample	2	LJR	3/19/2013	9:00 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-257	MW-27-IDW	025.00	Groundwater	MW-27-25.0-IDW	Normal Sample	2	LJR	3/20/2013	10:10 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-254	MW-27-IDW	050.00	Groundwater	MW-27-50.0-IDW	Normal Sample	2	LJR	3/20/2013	7:45 AM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl
SEI-258	TB-IDW	000.01	Groundwater	TB-01-IDW	Trip Blank	2	LJR	3/20/2013	12:00 PM	Composite	HDE	3/22/2013	12:05 PM	6	C		HCl

STONE ENVIRONMENTAL INC

Project Number: 102305-R/C

Client Name and Address: Joseph Schmidl

Client Contact: Joe. Schmidl

Site Name/Location: Scotia Naval Depot / Scotia, NY

Samplers (Signature(s)): See Rosberg

Results and Invoice to:
Stone Environmental, Inc.
535 Stone Cutters Way
Montpelier, VT 05602

Telephone #: 802-229-4541
Fax: 802-229-5417
Project Manager: Joe Schmidl
PM Direct Phone # 603-455-0946

ANALYSES REQUESTED
Container type[2]

Sample Identification	DATE/TIME Sampled		Matrix[1]	No. of Containers: Composite	No. of Containers: Grab	8260								Remarks	Perservative added and final pH, if known[3]	Internal Billing Subproject Phase
														SET II		SET I
MW-26-50.0-IDW	3/19/13	09:00	L	2X40ml		X								246	HCl	230
Drums 1-6-IDW		10:00												247		231
MW-25-50.0-IDW		10:20												248		232
Drums 7-12-IDW		11:00												249		233
Drums 13-18-IDW		11:30												250		234
Drums 19-24-IDW		12:00												251		235
Drums 25-27-IDW		12:35												252		236
Drums 28-30-IDW	↓	12:50												253		237
MW-27-50.0-IDW	3/20/13	07:45												254		HE 3/22/13
MW-26-110.0-IDW	3/18/13	16:45	↓	↓		↓								255	↓	

Sampling Bottles/ Preservative Requirements

[1]**Matrix:** SL-Soil, SG-Soil Gas, GW-Groundwater, SD-Sediment, SW-Surface Water, WW-wastewater, L-liquid, Wipe, Solid, Other-specify_____(i.e., oil, concrete)

[2]**Container(s):** V-VOA 40mL vials, T-Tedlar Airbag
A - Amber 1L, G-Glass, 1L
M-250 mL-Glass Wide Mouth P-poly/plastic, O-other, specify_____

Metals, check one: ___8RCRA, ___13 PP, ___23 TAL, ___ 14MCP. Method: ___6010, ___ 6020, ___200.7 Other:_____
Dissolved Metals Field Filtered? ___Yes ___No

[3]Preservative: HCL, MeOH, HNO3, H2SO4, NaOH, O-Other, Specify_____

Samples shipped: _____ice, _____dry ice, _____ambient

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	Shipped Via:	Number:
See Rosberg	3/20/13 16:00		3/22/13 12:05		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	**Turnaround Time Requirements:** <14days must have Pre-Authorization.	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time		

Notes/Comments:

Custody Seal Intact?: Y N N/A Sample Temp at Lab.

EDD Required: Specify Type? Excel, (i.e., Equis EZLoad, Excel spreadsheet, Other)

Report Package level needed: ___Level II (results, SS recoveries), ___ Level III (results, all QC), ✓ Level IV (FULL, CLP-like)

HE 3/22/13

STONE ENVIRONMENTAL INC
CHAIN-OF-CUSTODY RECORD

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STONE ENVIRONMENTAL INC

Project Number: 102305.R1C **Client Name and Address:** Joseph Schmidl **Client Contact:** Joe S,	**Site Name/Location:** Scotia Naval Depot Scotia, NY	**Samplers (Signature(s)):** Lee Rosberg

Results and Invoice to:
Stone Environmental, Inc.
535 Stone Cutters Way
Montpelier, VT 05602

Telephone #: 802-229-4541
Fax: 802-229-5417
Project Manager: Joe Schmidl
PM Direct Phone # 603-485-0946

ANALYSES REQUESTED
Container type[2]

Sample Identification	DATE/TIME Sampled		Matrix[1]	No. of Containers: Composite	No. of Containers: Grab	8260									Remarks: SET #	Perservative added and final pH, if known[3]	Internal Billing Subproject Phase
MW-25-75.0-IDW	3/18/13	11:50	L	2X40 ml		X									256	HCl	
MW-27-25.0-IDW	3/20/13	10:10	↓	↓		↓									257	↓	
TB-01-IDW	3/20/13	12:00	↓	↓		—									258	—	

Sampling Bottles/ Preservative Requirements

[1]**Matrix:** SL-Soil, SG-Soil Gas, GW-Groundwater, SD-Sediment, SW-Surface Water, WW-wastewater, L-liquid, Wipe, Solid, Other-specify_____(i.e., oil, concrete)

[2]**Container(s):** V-VOA 40mL vials, T-Tedlar Airbag
A - Amber 1L, G-Glass, 1L
M-250 mL-Glass Wide Mouth P-poly/plastic, O-other, specify_____

Metals, check one: ___8RCRA, ___13 PP, ___23 TAL, ___ 14MCP. Method: ___6010, ___ 6020, ___200.7 Other:_____
Dissolved Metals Field Filtered? ___ Yes ___ No **Samples shipped:** _____ice, _____dry ice, _____ambient

[3]Preservative: HCL, MeOH, HNO3, H2SO4, NaOH, O-Other, Specify_____

	Date/Time	Received by: (Signature)	Date/Time	Shipped Via: Number:
Relinquished by: (Signature) Lee Rosberg	3/20/13 16:00	will for HDE to match p.1	3/22/13 11:05	
Relinquished by: (Signature)	Date/Time	Received by: (Signature) 3/27/13 09:54	Date/Time	**Turnaround Time Requirements:** <14days must have Pre-Authorization.
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time	

Notes/Comments: **Custody Seal Intact?:** Y N N/A Sample Temp at Lab.

EDD Required: Specify Type? Excel, (i.e., Equis EZLoad, Excel spreadsheet, Other)

Report Package level needed: ✓ Level II (results, SS recoveries), ___ Level III (results, all QC), ✓ Level IV (FULL, CLP-like)

STONE ENVIRONMENTAL INC
CHAIN-OF-CUSTODY RECORD

Page 2 of 2

MobiLab™

DEFENSIBLE REAL-TIME ANALYTICS

STONE ENVIRONMENTAL, INC. LABORATORY

NARRATIVE

March 28, 2013

This data package presents the analytical results for investigation-derived waste (IDW) samples analyzed by Stone Environmental, Inc. Laboratory (Stone) at Stone's fixed laboratory facility in Barre, Vermont. Samples in this sample delivery group (SDG-5) were collected at the Scotia Navy Depot Site in Scotia, New York between March 18 and 20, 2013. A total of 12 IDW samples were collected during this period by Stone personnel and samples were delivered on ice to the Barre, Vermont facility for analysis. One trip blank sample accompanied and was analyzed with the IDW samples. All samples in SDG-5 were received and analyzed at the mobile laboratory on March 22, 2013.

Samples were placed in the laboratory refrigerator for storage upon their arrival on March 20, 2013. Laboratory personnel removed the cooler from the refrigerator and unpacked the sample cooler on March 22, 2013. Therefore, the sample temperature recorded in the laboratory information management system (LIMS) was 6 degrees C for all samples, because the laboratory refrigerator is kept at or below 6 degrees C. A copy of the chain of custody and a summary of samples logged into Stone's LIMS are attached to this report. A list of sample vials not used in analysis is also attached to this report.

Samples were analyzed by EPA SW846 Method 8260C (gas chromatography / mass spectrometry (GC/MS)) set in selective ion monitoring (SIM) mode for 20 target volatile organic compounds (VOCs) in accordance with Stone's Standard Operating Procedure (SOP) SEI-10.15.9, "The Determination of Volatile Organic Compounds By GC/MS (SW846 USEPA Method 8260C)". Manual integrations have been checked by the secondary data reviewer. A list of samples with manual integrations is attached to this report.

Stone's Method 8260C (GC/MS) is accredited under the National Environmental Laboratory Accreditation Program (NELAP). Stone's Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) accreditation is currently pending. The analytical results associated with the samples presented in this report were generated under a quality system that adheres to requirements specified in the NELAP standards. Results for the quality control (QC) samples (continuing calibration verification samples (VSTD), laboratory control samples (LCS) and laboratory method blanks (VBLK))

are provided in the Quality Control Summaries section of this report. All QA/QC results associated with these data were found to be within the tolerances set forth in SOP SEI-10.15.9 and NELAP standards. Exceptions are noted below:

- VSTD Deficiencies:
    - VSTD % difference values were above acceptance criteria (<20%) for 1,2-Dichloroethane (31.5%) and Naphthalene (43.3%) for VSTD ET analyzed on March 22, 2013. Positive detections of these compounds in samples analyzed in this analytical batch may be biased high and, therefore, any positive detections were appropriately flagged with a J qualifier, as estimated.
- LCS Deficiencies:
    - 1,2-Dichloroethane recovery (135%) was above acceptance criteria (70-130%) for LCS ET analyzed on March 22, 2013.sample associated with initial calibration QA30311 on March 11, 2013. Positive detections of this compound in samples analyzed in this analytical batch may be biased high and, therefore, any positive detections were appropriately flagged with a J qualifier, as estimated.
- VBLK Deficiencies:
    - No deficiencies noted.

When applicable, the final results were annotated with the following codes:

U - The analyte was analyzed for, but was not detected above the reported quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

(1) The "J" qualifiers are applied to the Form 1's when the concentration of an analyte is less than the sample specific reporting limit.

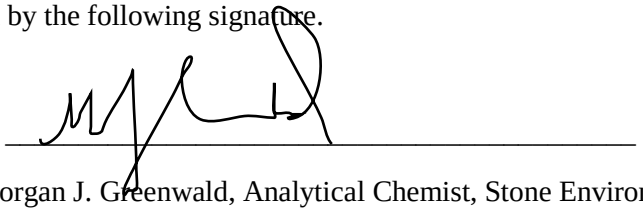
(2) The "J" qualifiers are applied when triggered by QA/QC.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

B - Indicates the analyte was found in the associated laboratory blank as well as the sample.

E - Estimated value, marginally above the calibration levels.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature: 

Morgan J. Greenwald, Analytical Chemist, Stone Environmental, Inc.

Field QC Assignments and Associated Samples

EDD File Name: SDG-5
eQapp Name: ScotiaNavyDepot3

	Associated Samples	Sample Collection Date

Data Qualifier Summary

Lab Reporting Batch ID: SDG-5 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-5_General2A_13_053013 **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **Drums 13-18-IDW** ***Collected:*** **3/19/2013 11:30:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
BENZENE	0.21	J	0.2	MDL	2.0	RDL	ug/L	J	RI
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv
TETRACHLOROETHENE	1.4	J	0.22	MDL	2.0	RDL	ug/L	J	RI
TOLUENE	1.2	J	0.66	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **Drums 1-6-IDW** ***Collected:*** **3/19/2013 10:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRIMETHYLBENZENE	0.69	J	0.52	MDL	2.0	RDL	ug/L	J	RI
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
ETHYLBENZENE	0.56	J	0.12	MDL	2.0	RDL	ug/L	J	RI
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv
O-XYLENE	1.8	J	0.13	MDL	2.0	RDL	ug/L	J	RI
TETRACHLOROETHENE	1.0	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **Drums 19-24-IDW** ***Collected:*** **3/19/2013 12:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
1,3,5-TRIMETHYLBENZENE	1.2	J	0.43	MDL	2.0	RDL	ug/L	J	RI
NAPHTHALENE	23	J	0.46	MDL	2.0	RDL	ug/L	J	Ccv
TETRACHLOROETHENE	0.72	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **Drums 25-27-IDW** ***Collected:*** **3/19/2013 12:35:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv
TETRACHLOROETHENE	0.73	J	0.22	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-5 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-5_General2A_13_053013 **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **Drums 28-30-IDW** ***Collected:*** **3/19/2013 12:50:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRIMETHYLBENZENE	0.56	J	0.52	MDL	2.0	RDL	ug/L	J	RI
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv
TETRACHLOROETHENE	0.45	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **Drums 7-12-IDW** ***Collected:*** **3/19/2013 11:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
1,3,5-TRIMETHYLBENZENE	0.63	J	0.43	MDL	2.0	RDL	ug/L	J	RI
NAPHTHALENE	0.86	J	0.46	MDL	2.0	RDL	ug/L	J	RI, Ccv
O-XYLENE	0.44	J	0.13	MDL	2.0	RDL	ug/L	J	RI
TETRACHLOROETHENE	1.2	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **MW-25-50.0-IDW** ***Collected:*** **3/19/2013 10:20:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv
TETRACHLOROETHENE	0.33	J	0.22	MDL	2.0	RDL	ug/L	J	RI
TOLUENE	0.90	J	0.66	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **MW-25-75.0-IDW** ***Collected:*** **3/18/2013 11:50:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv

Sample ID: **MW-26-110.0-IDW** ***Collected:*** **3/18/2013 4:45:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv
TOLUENE	0.79	J	0.66	MDL	2.0	RDL	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-5 **Laboratory: STONE**

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-5_General2A_13_053013 **eQAPP Name: ScotiaNavyDepot3**

Method Category: **VOA**

Method: **8260C** ***Matrix:*** **Water**

Sample ID: **MW-26-50.0-IDW** ***Collected:*** **3/19/2013 9:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
1,3,5-TRIMETHYLBENZENE	1.0	J	0.43	MDL	2.0	RDL	ug/L	J	RI
BENZENE	0.24	J	0.2	MDL	2.0	RDL	ug/L	J	RI
ETHYLBENZENE	0.56	J	0.12	MDL	2.0	RDL	ug/L	J	RI
NAPHTHALENE	1.9	J	0.46	MDL	2.0	RDL	ug/L	UJ	RI, Ccv
O-XYLENE	1.6	J	0.13	MDL	2.0	RDL	ug/L	J	RI
TETRACHLOROETHENE	1.3	J	0.22	MDL	2.0	RDL	ug/L	J	RI

Sample ID: **MW-27-25.0-IDW** ***Collected:*** **3/20/2013 10:10:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv

Sample ID: **MW-27-50.0-IDW** ***Collected:*** **3/20/2013 7:45:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1.0**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	2.0	U	0.3	MDL	2.0	RDL	ug/L	UJ	Ccv
NAPHTHALENE	2.0	U	0.46	MDL	2.0	RDL	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia Navy Depot

Data Qualifier Summary

Lab Reporting Batch ID: SDG-5

Laboratory: STONE

EDD Filename: 102305-07_ScotiaNavyDepot_SDG-5_General2A_13_053013

eQAPP Name: ScotiaNavyDepot3

Reason Code Legend

Reason Code	*Description*
Ccv	Continuing Calibration Verification Percent Recovery Upper Estimation
Lcs	Laboratory Control Spike Upper Estimation
Rl	Reporting Limit Trace Value

* denotes a non-reportable result

EDD Warning Log

Lab Reporting Batch ID: SDG-5

eQAPP: ScotiaNavyDepot3

Laboratory: STONE

Table	Line #	Column	Value	Warning	Description
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch 'ET' for Method '8260C' and Matrix 'Water'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

APPENDIX F: SOIL BORING / WELL INSTALLATION / WELL DEVELOPMENT LOGS

NYLD

NEW YORK LEAK DETECTION, INC.

Job Information

Date & Time: 1/24/2013 and 1/29/2013 Technician: Mark Manzari

Customer: Stone Environmental, Inc.

Site Address: Former Scotia Naval Depot- Glenville, NY @ Scotia Industrial Park

Contact Person: Joseph Schmidle Phone: 603-455-0946

Office Notes/Scope of Work:

Clear for borings

Type of Service

☐ *Leak Detection* ☒ *Utility Location/GPR* ☐ *Video Inspection*

Type of Equipment Used

☐ *LC2100 Leak Correlator* ☒ *RD4000* ☐ *Video Inspection Camera*

☐ *LC2500 Leak Correlator* ☐ *Noggin 250 mHz* ☐ *Gas Detector*

☐ *S-30 Surveyor* ☒ Noggin 500 mHz ☐ Other: _____

☐ *Sonde* ☐ Conquest 1000 mHz

Marking Used

☒ *Paint* ☐ *Flags*

☐ *Chalk* ☒ *Other:*

Mag Nails with pink & blue ribbon

Instructions from Customer Contact:

Clear utilities for 19 boring locations (30 ft. radius if possible)

Notes/Testing Results:

19 boring locations cleared. Mag nail with blue and pink ribbon set at each cleared location to drill. All boring locations should be drilled at set Mag nails that are at or near wood stakes installed by Stone Environmental unless otherwise indicated below. A 10 foot radius of clearance exists at each boring location.

Travel Time: 3.0 hrs. on 1/24 – 1.25 hrs. on 1/28 Arrival Time: 9:30 AM on 1/24 – 8:00 AM on 1/29

Onsite Hours: 7.0 hrs. on 1/24 – 6.0 hrs. on 1/29

Information Transfer

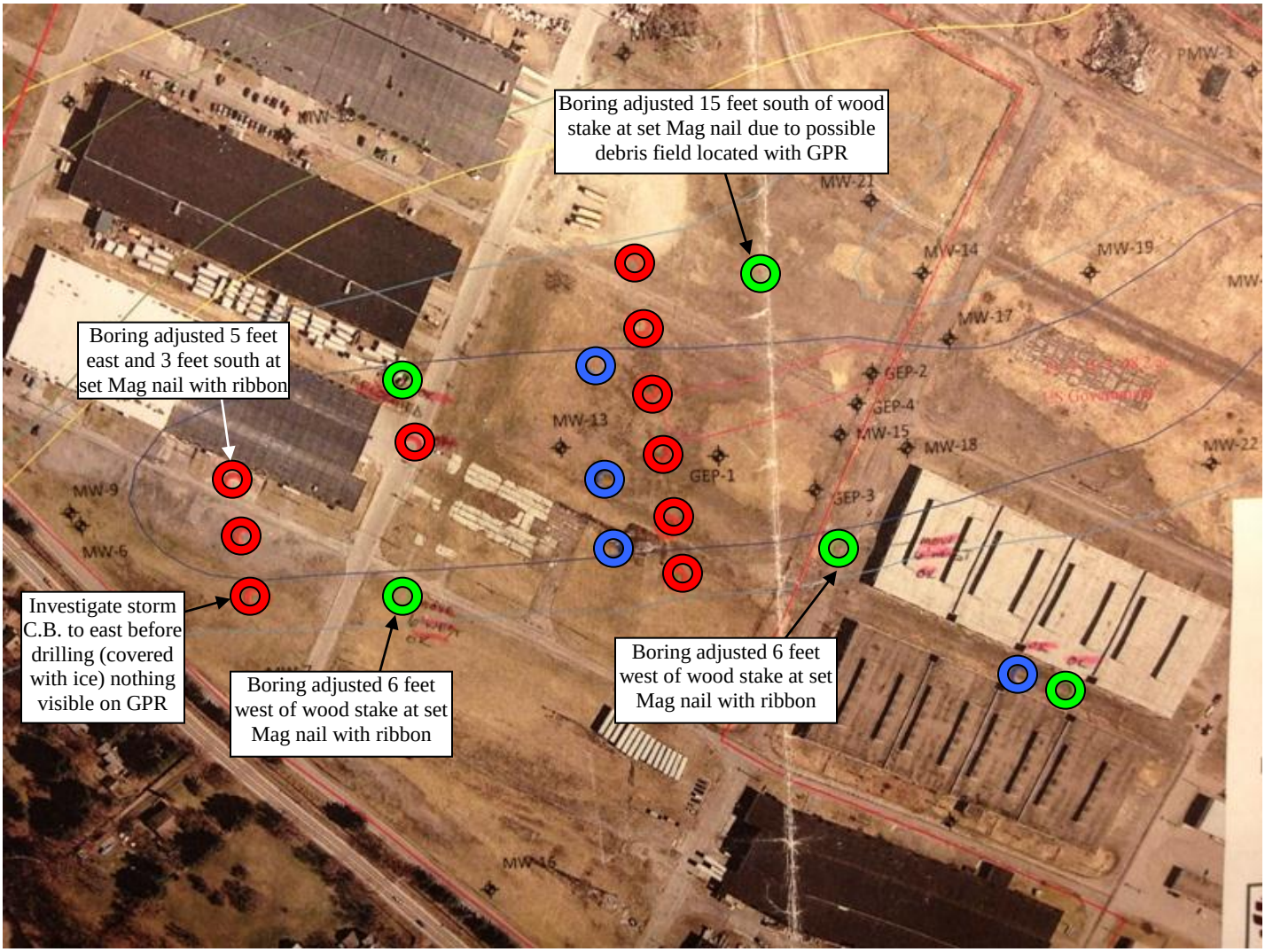
☒ *Information relayed on site to:* ☐ *Hand drawn map (forward to office for digital remake)* ☐ *All markings picked up by surveyors*

Joseph Schmidle

NYLD

NEW YORK LEAK DETECTION, INC.

Job Information





NYLD

NEW YORK LEAK DETECTION, INC.

Job Information

Date & Time: 2/15/2013 Technician: Mark Manzari

Customer: Stone Environmental, Inc.

Site Address: Former Scotia Naval Depot- Glenville, NY @ Scotia Industrial Park

Contact Person: Joseph Schmidle Phone: 603-455-0946

Office Notes/Scope of Work:

Clear for 3 additional boring locations

Type of Service

☐ *Leak Detection* ☒ *Utility Location/GPR* ☐ *Video Inspection*

Type of Equipment Used

☐ *LC2100 Leak Correlator* ☒ *RD4000* ☐ *Video Inspection Camera*

☐ *LC2500 Leak Correlator* ☐ *Noggin 250 mHz* ☐ *Gas Detector*

☐ *S-30 Surveyor* ☒ Noggin 500 mHz ☐ Other: _____

☐ *Sonde* ☐ Conquest 1000 mHz

Marking Used

☒ *Paint* ☐ *Flags*

☐ *Chalk* ☒ *Other:*

Mag Nails with pink & blue ribbon

Instructions from Customer Contact:

Clear utilities for 19 boring locations (30 ft. radius if possible)

Notes/Testing Results:

19 boring locations cleared. Mag nail with blue and pink ribbon set at each cleared location to drill. All boring locations should be drilled at set Mag nails that are at or near wood stakes installed by Stone Environmental unless otherwise indicated below. A 10 foot radius of clearance exists at each boring location.

(3 additional borings cleared on 2/15/13 with a 10 foot radius of clearance and are shown below in yellow)

Travel Time: 4.0 hrs. on 2/14 – 3.0 hrs. on 2/15 (7.0 total) Arrival Time: 8:00 AM

Onsite Hours: 2.5 hrs.

Information Transfer

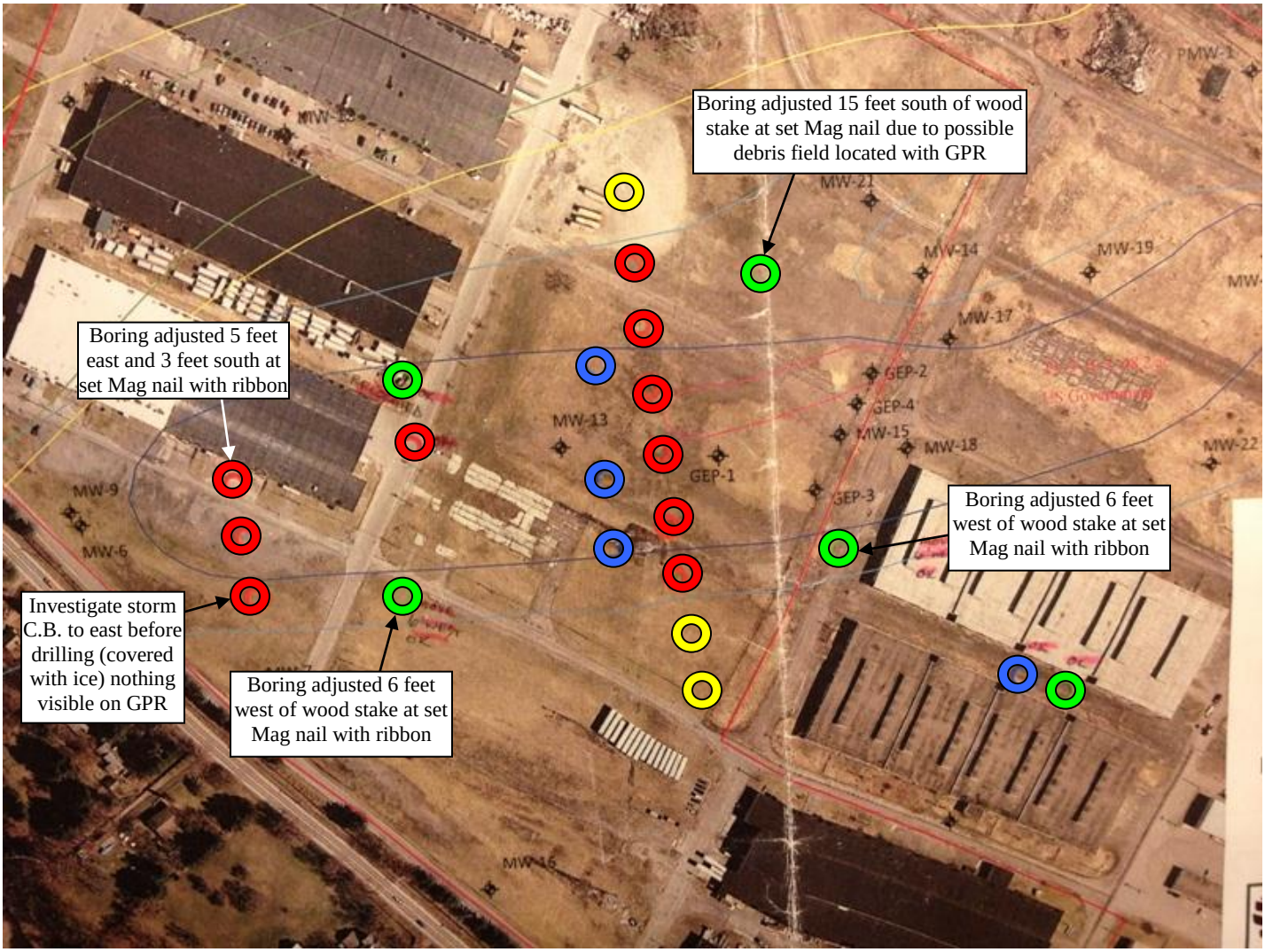
☒ *Information relayed on site to:* ☐ *Hand drawn map (forward to office for digital remake)* ☐ *All markings picked up by surveyors*

Joseph Schmidle

NYLD

NEW YORK LEAK DETECTION, INC.

Job Information





NYLD

NEW YORK LEAK DETECTION, INC.

Job Information

Date & Time: 2/25/2013 Technician: Mark Manzari

Customer: Stone Environmental, Inc.

Site Address: Former Scotia Naval Depot- Glenville, NY @ Scotia Industrial Park

Contact Person: Joseph Schmidle Phone: 603-455-0946

Office Notes/Scope of Work:

Clear for 6 additional boring locations

Type of Service

☐ *Leak Detection* ☒ *Utility Location/GPR* ☐ *Video Inspection*

Type of Equipment Used

☐ *LC2100 Leak Correlator* ☒ *RD4000* ☐ *Video Inspection Camera*

☐ *LC2500 Leak Correlator* ☐ *Noggin 250 mHz* ☐ *Gas Detector*

☐ *S-30 Surveyor* ☒ Noggin 500 mHz ☐ Other: _____

☒ *Sonde* ☐ Conquest 1000 mHz

Marking Used

☒ *Paint* ☐ *Flags*

☐ *Chalk* ☒ *Other:*

Mag Nails with pink & blue ribbon

Instructions from Customer Contact:

Clear utilities for 19 boring locations (30 ft. radius if possible)

Notes/Testing Results:

19 boring locations cleared. Mag nail with blue and pink ribbon set at each cleared location to drill. All boring locations should be drilled at set Mag nails that are at or near wood stakes installed by Stone Environmental unless otherwise indicated below. A 10 foot radius of clearance exists at each boring location.

(3 additional borings cleared on 2/15/13 with a 10 foot radius of clearance and are shown below in yellow)

(6 additional borings cleared on 2/25/13 with a 10 foot radius of clearance and are shown below in purple)

Travel Time: 2.5 hrs. Arrival Time: 12:00 PM Onsite Hours: 4.0 hrs.

Information Transfer

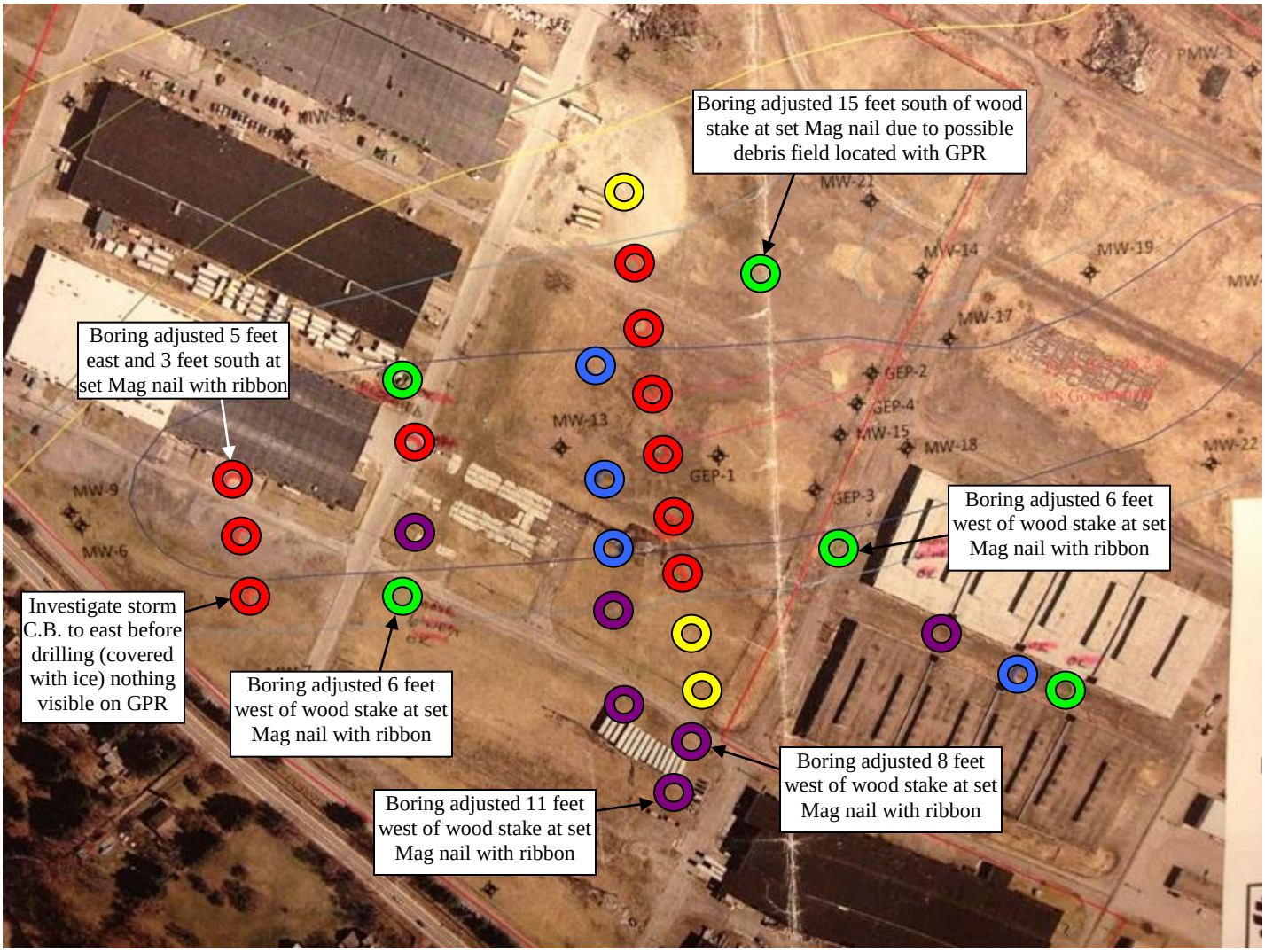
☒ *Information relayed on site to:* ☐ *Hand drawn map (forward to office for digital remake)* ☐ *All markings picked up by surveyors*

Joseph Schmidle

NYLD

NEW YORK LEAK DETECTION, INC.

Job Information





SOIL BORING LOG

Project Name: Scotia, NY Site Name: Scotia Naval Depot

Geosyntec Project Number: IA2305-C Client: USACE

BORING/WELL ID: MW-24	Date Drilled: 2/18/13		Location: West end of Transect, near WP-05. SW of power-line tower.
SOP followed:	Borehole Diam. (in)		
Deviations:	Well Diameter (in):		
Drilling Method: Mud Rot/Split Spoon	Screen Length (ft):		
Driller's name:	Screen Slot Size:		
Sampling method:	Sand Pack (ft):		
Core Length:	Well Seal (ft):		

Comments:
4.25" Augers to 20'. Tripped out, 6.5" conductor casing to ~19'. Roller-bit to ~90'. ~400 gallons of water used for mud-rotary. Split spoons 90-100', sampled from 94-96' spoon.

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			
0-20'	NA (Augers)	NC	NC	fine → Coarse sand w/ coarse gravel (sub-round) and cobbles. Sand med. brown. Cobbles very round.	NC	4.25" Augers to 20'
2/19/13 19-26'	NA (roller bit)	NC	NC	med → coarse sand, angular. Prob. chewed up gravel. Slightly more rounded clasts toward end of run.	NC	
26-31'	"	"	"	Coarse sand and chewed up gravel. Angular.	NC	

Geoscientist: Will Waterstrat	Signature:	Date: 2/18/13
Geoscientist:	Signature:	Date:

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			
31-36'	NA (roller bit)	NC	NC	coarse angular sand and ground up gravel. Mostly Qtz.	NC	-
36-41	"	"	"	Coarse angular sand and ground up gravel.	NC	"
41-46	"	"	"	Coarse angular sand and ground up gravel.	"	"
46-51	"	"	"	Coarse sand and gravel clasts, very angular	"	"
51-56	"	"	"	coarse angular sand and gravel clasts.		

Geoscientist:	Signature:	Date:
Geoscientist:	Signature:	Date:

SOIL BORING LOG

Project Name: Scotia Site Name: Scotia Naval Depot

Phone Project Number: Client: USACE

BORING/WELL ID: MW-21, cont'd	Date Drilled: 2/19/13		Location:
SOP followed:	Borehole Diam. (in)		
Deviations:	Well Diameter (in):		
Drilling Method:	Screen Length (ft):		
Driller's name: Glen Lansing	Screen Slot Size:		
Sampling method:	Sand Pack (ft):		
Core Length:	Well Seal (ft):		

Comments:

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			
56-61	N4 (roller bit)	NC	NC	coarse angular sand and gravel clasts. Some sub-angular clasts.		
61-71'	"	"	"	coarse angular sand and gravel clasts.		
71-76	"	"	"	med - coarse angular sand. More fines present. Fine-med sands at end of run		

Geoscientist:	Signature:	Date:
Geoscientist:	Signature:	Date:

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			
76-86'	NA (roller bit)	N/A	NL	fine-med angular sands	—	—
86-90	"	"	"	fine-coarse angular → subang. sand. Some fines.	—	—
90-92	0.9'	0-0.9'	0.0	fine dark brown sand	Blow counts 26, 29, 44, 35	split spoons
92-94	2'	1.0-1.5	0.0	fine dark brown sand	33, 42, 46, 58	"
94-96	1.7'	1.4-1.7	0.0	fine dark brown sand	33, 35, 34, 37 of 940	sample collected

Geoscientist:	Signature:	Date:
Geoscientist:	Signature:	Date:

SOIL BORING LOG

Project Name: Scotia, NY Site Name: Groton Naval Depot

Phone Project Number: Client:

BORING/WELL ID: MW29, cont'd	Date Drilled:	Location:
SOP followed:	Borehole Diam. (in)	
Deviations:	Well Diameter (in):	
Drilling Method:	Screen Length (ft):	
Driller's name: Glen	Screen Slot Size:	
Sampling method:	Sand Pack (ft):	
Core Length:	Well Seal (ft):	

Comments:

Blow Counts

Depth Interval (ft bgs)	Recovery (feet)	PID Interval (ft)	PID Reading (ppm v/v)	Soil Description (color, texture, moisture, remarks)	~~Sample~~ Collected (Depth, ID & Time)	Well Const. Details
96-98	2.0	1.5-2.0	0.0	fine dark brown sand	22, 44, 56, 68,	—
98-100	2.0	1.1-1.6	0.0	fine dark olive grey sand.	35, 43, 52, 50	—
				Screen 100-90' (2" well) Sand pack to 88' Bentonite to 85' Portland/Bentonite slurry to surface. 3' stick-up well casing.		

Geoscientist: Will Wallenstein	Signature:	Date: 2/20/13
Geoscientist:	Signature:	Date:

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			

Geoscientist:	Signature:	Date:
Geoscientist:	Signature:	Date:

SOIL BORING LOG

Project Name: Seaford, NY Site Name: Seaford Naval Depot

Stone Project Number: 102305-R Client: USACE

BORING/WELL ID:	Date Drilled: 2/21/13 →		Location:
SOP followed:	Borehole Diam. (in)		
Deviations:	Well Diameter (in):		
Drilling Method:	Screen Length (ft):		
Driller's name: Glen Lansing	Screen Slot Size:		
Sampling method:	Sand Pack (ft):		
Core Length:	Well Seal (ft):		

Comments: Augers to 20', conductor casing to ~19'.

Depth Interval (ft bgs)	Recovery (feet)	PID Interval (ft)	PID Reading (ppm v/v)	Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
0-20'	NA (Augers)	NC	NC	coarse sand, med brown. Large round cobbles.	NC	—
19-36'	NA (roller bit)	NC	NC	coarse angular sand and ground up cobbles. Some med dark grey olive grey sand	NC	—
36'-51'	4	11	11	~~med-coarse grain~~ med-coarse angular sand and gravel clasts. fine-med olive grey sand	NC	—

Geoscientist: Will Waterstraat	Signature:	Date: 2/22/13
Geoscientist:	Signature:	Date:

75-77, SS-87

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			
51 - 56	NA (roller bit)	NC	NC	Coarse angular sand and gravel clasts. Some fine - med olive grey sands.	NC	-
56 - 71	"	"	"	fine → coarse angular sand. Various colors.	"	"
71 - 75	"	"	"	fine → med sand. Angular → subangular. Various colors, >50% dark olive grey	"	"
SS 75 - 77	1.6'	0 - 1.6		med → coarse olive grey sand w/ ang → subang gravel clasts Coarse reddish brown sand in catcher	split spoon: Blow counts 14, 15, 19, 21	11:25
75 - 85	NA (roller bit)	NC	NC	med → coarse sand, subangular. Angular ground up gravel clasts.	NR	-

Geoscientist:	Signature:	Date:
Geoscientist:	Signature:	Date:

SOIL BORING LOG

Project Name: Scotia, NY Site Name: Scotia Naval Depot

Stone Project Number: 102305 Client:

BORING/WELL ID: WP05	Date Drilled:		Location:
SOP followed:	Borehole Diam. (in)		
Deviations:	Well Diameter (in):		
Drilling Method:	Screen Length (ft):		
Driller's name: Glen Lansing	Screen Slot Size:		
Sampling method:	Sand Pack (ft):		
Core Length:	Well Seal (ft):		

Comments:

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			
SS 85-87	1.5	0-1.5	~~33.9~~ 74.1	fine → med dark gray sand	1340	SS Blow count: 16, 19, 18, 18

Geoscientist: Nate Waterstraat	Signature:	Date: 2/22/13
Geoscientist:	Signature:	Date:

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			

Geoscientist:	Signature:	Date:
Geoscientist:	Signature:	Date:

SOIL BORING LOG

Project Name: Scotia, NY Site Name: Scotia Naval Depot

Zone Project Number: 102305-C Client: USACE

BORING/WELL ID: MW-25	Date Drilled: 3/11/13		Location: Between Buildings 403 and 404, GSA Property
SOP followed:	Borehole Diam. (in)	5	
Deviations:	Well Diameter (in):	2	
Drilling Method: Mud Rotary	Screen Length (ft):	10	
Driller's name: Glenn Lansing	Screen Slot Size:	10	
Sampling method: SplitSpoon	Sand Pack (ft):	0	
Core Length: 2 ft	Well Seal (ft):	Bentonite	

Comments:

Depth Interval (ft bgs)	Recovery (feet)	PID Interval (ft)	PID Reading (ppm v/v)	Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
0-14'	NA (Augers)	NC	NC	Coarse gravel (sub-round) and Cobbles, some coarse sand, brown, ~~dry~~	NC	4.25" Augers to 14', tripped out and advanced 6" surface casing
14-19'	NA (Roller bit)	NC	NC	med. to coarse sand and gravel, many colors, angular likely gravel crushed by roller bit.	NC	
19-24'	NA Roller bit	NC	NC	SAA, becoming sandier @ 23', Noticeable change in drilling, roller bit advanced easier and became less "chattery"	NC	

Geoscientist: Lee Rosbera	Signature: Lee Rosbera	Date: 3/11/13
Geoscientist: Joseph Schmidl	Signature: Joseph Schmidl	Date: 3/13/13

Depth Interval (ft bgs)	Recovery (feet)	PID		Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
		Interval (ft)	Reading (ppm v/v)			
24-34'	NA Roller Bit	NC	NC	Coarse angular sand and gravel.		
3/12/13						
34-42'	NA Roller bit	NC	NC	SAA w/some medium sand		
42-67.5	NA Roller bit	NC	NC	Coarse sand, with some medium sand, angular		
67.5-[illegible] (split spoon)	67.5-69.5 1.3	0 ppm	0.0	Brown medium to coarse sand w/little angular gravel, wet	Blow Counts 24-17-19,13	
72.5-74.5	1.5'	72.5-74.5	0.3	SAA	Blow Counts 19-23-30-30	Screen 75-65' Sand to 63' Bentonite chips from 63 to 59' Will grout to surface in Morning
						Trip grouted to surface. Completed w/ 2.5ft Stickup w/ concrete Pad.

Geoscientist:	Signature:	Date:
Geoscientist: Joseph Schmidl	Signature:	Date: 7/13/13

SOIL BORING LOG

Project Name: Scotia Naval Depot Site Name:

Zone Project Number: 102305-R-C / Task 5E Client: USACE, CENAE / CENAN

BORING/WELL ID: MW-26	Date Drilled: 3/13-15/13		Location: Near Trailer Parking Area West of intersection of Cst. and 5th St.
SOP followed:	Borehole Diam. (in)	5	
Deviations:	Well Diameter (in):	2	
Drilling Method: Mud Rotary	Screen Length (ft):	10	
Driller's name: Glenn Lunsing	Screen Slot Size:	10	
Sampling method: Split Spoon	Sand Pack (ft):	100-110	
Core Length: 2 ft	Well Seal (ft):	Bentonite	

Comments:

Depth Interval (ft bgs)	Recovery (feet)	PID Interval (ft)	PID Reading (ppm v/v)	Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
0-4			BKG	Gravelly Sand	Cuttings	
4-15			BKG	Sand	"	
15-22			BKG	Gravelly Sand	"	
22-45.5			BKG	Gravelly Sand	"	
45.5-67.5			BKG	Interbedded Sand and Gravelly sand	Cuttings	
~~46.5~~ 67	2.0/1.5		BKG	Dark Olive Brown f-m Gravelly (Subrounded) m-c Sand, saturated	MW26-~~46.5~~ 67-S	
~~49.5~~	17-14-15/15				split spoon	
67.5-69.5						
69.5-107.5			BKG	Sands and Gravelly Sands	Cuttings	well screen 10-5bt 2-in PVC 100-110 ft; #0 sand filter pack 98-110 ft; Bentonite 94-98 ft; Grout 2.5-94 ft 8-in road box completion
107.5-109.5	2.0/1.5		BKG	Olive brown silty fine Sand, saturated, cohesive	MW26-107.5-S	
	18-16-14-15					
110	End of Boring					

Geoscientist:	Signature:	Date:
Geoscientist: Joseph Schmidl	Signature:	Date: 3/15/13

SOIL BORING LOG

Project Name: Scotia Naval Depot Site Name:

Stone Project Number: 102305-R-C / Task 5E Client: USACE, KENAE / CENAN

BORING/WELL ID: MW-27	Date Drilled: 3/18-20/13		Location: NW of well MW-7 NW of corner of B St. and 7th St.
SOP followed:	Borehole Diam. (in)	5	
Deviations:	Well Diameter (in):	2	
Drilling Method: Mud Rotary	Screen Length (ft):	10	
Driller's name: Glenn Lansing	Screen Slot Size:	10	
Sampling method: Split Spoon	Sand Pack (ft):	10 @ 100-110	
Core Length: 2 ft	Well Seal (ft):	Bentonite	

Comments:

Depth Interval (ft bgs)	Recovery (feet)	PID Interval (ft)	PID Reading (ppm v/v)	Soil Description (color, texture, moisture, remarks)	Sample Collected (Depth, ID & Time)	Well Const. Details
0-15 ft			BKG	Gravelly Sand	Cuttings	
15-67.5			BKG	Interbedded Sand and Gravelly Sand	"	
67.5-69.5	2.0/1.7 18-17-16-19		BKG	Brown, well-sorted f-m Sand, saturated.	Split Spoon	
69.5-107.5			BKG	Medium to course Sand	Cuttings	
107.5-109.5	2.0/1.8 25-28-33-37		BKG	Brown, well sorted fine Sand, trace silt, saturated	Split Spoon	
110 ft	End of Boring					
						Φsand 98-110 ft; 10-slot well screen 2-in PVC, from 100-110 ft; Bentonite seal 94-98 ft; tremie grout to 2.5 ft bgs stick up completion

Geoscientist:	Signature:	Date:
Geoscientist: Joseph Schmidl	Signature:	Date: 3/20/13

Development

MONITORING WELL ~~SAMPLING~~ FORM

STONE ENVIRONMENTAL INC

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-24		
Sample Date	3/1/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ___ Peri Pump ___ Whale Pump___ Bailer ___ Other Waterra	Wtr Level Indicator	
Sampling Personnel	WJW / DJL	Water Quality Sonde SN	
Weather	low 40's, overcast		

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
_____ feet	_____ feet	= _____ feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= _____ liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
	~100 gal	1503		12.78	69.2	7.22	5.10	426	
		1508		12.74	38.8	7.20	3.84	495	
	~120 gal	1518		12.8	16.6	7.24	3.26	507	
	~135	1526		12.97	6.7	7.27	3.24	508	
	~150	1533		12.84	4.8	7.30	3.30	507	133.4

Total Vol. Removed: 150 gallons Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)	Comments:

Sampling Personnel Signature _____ Date 3/1/13

DEVELOPMENT

MONITORING WELL ~~SAMPLING~~ FORM

STONE ENVIRONMENTAL INC

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-25		
Sample Date	3/19/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ___ Peri Pump ___ Whale Pump___ Bailer ___ Other J	Wtr Level Indicator	
Sampling Personnel	L. Rosberg Waterra Pump	Water Quality Sonde SN	
Weather	Clear 20°F light wind		

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)		Depth to Water (btoc)		Height of Water Column			One Well Volume	
107	feet	65	feet	= 42	feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 6.72 ~~liters~~ gallons	

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged ~~(mL)~~	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
65	0 gal	10:03		Not	Recorded				
	50 gal	11:20			"				
	100 gal	11:50			"				

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)

Comments: No Headspace, pursewater clean up

Sampling Personnel Signature _____ Date 3/20/13

STONE ENVIRONMENTAL INC

MONITORING WELL SAMPLING FORM

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-26		
Sample Date	3/18/17		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ___ Peri Pump ___ Whale Pump___ Bailer ___ Other ✓	Wtr Level Indicator	
Sampling Personnel	L. Rosberg Watterson	Water Quality Sonde SN	
Weather	Clear, 20°F, light wind		

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)		Depth to Water (btoc)		Height of Water Column			One Well Volume
107	feet -	65	feet =	42	feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= 6.72 liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged ~~(mL)~~ gal	Time (Military)	Flow Rate (mL/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
65	0	12:35		Not Recorded					
	50	14:10			"				
	100	15:10			"				
	150	16:00							
	200	16:45							

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)

Comments: No headspace on analytes

Sampling Personnel Signature _____ Date 3/20/17

Development

MONITORING WELL SAMPLING FORM

STONE ENVIRONMENTAL INC

Project Name:	Defense National Stockpile Center Scotia Depot Site, Glenville, New York
SEI Project Number:	102305-R C
Client:	CENAN/CENAE
Project Manager:	Joseph Schmidl

WELL ID	MW-27		
Sample Date	4/5/13		
SOP/SSP #'s Followed			SEI Equipment ID
Sampling Method	Bladder Pump ___ Peri Pump ___ Whale Pump___ Bailer ___ Other _____	Wtr Level Indicator	
Sampling Personnel		Water Quality Sonde SN	
Weather			

Calculate Purge Volumes

Time of water level measurement (military): Depth of Pump/Intake: _____ feet

Total Well Depth (btoc)	Depth to Water (btoc)	Height of Water Column		One Well Volume
114.30 feet	_____ feet	= _____ feet	X 0.155 liters/feet (1-inch well) X 0.617 liters/feet (2-inch well)	= _____ liters

3 X One Well Volume	liters
5 X One Well Volume	liters

Water Level (ft btoc)	Cumulative Vol. Purged (mL)	Time (Military)	Flow Rate (~~mL~~/min)	Temp (°C)	ORP (mV) (+/- 10 mV)	pH (su) (+/- 0.1 su)	DO (mg/L) (+/- 10%)	Conductivity (µS) (+/- 3%)	Turbidity (NTU)
—		1024	0.15	~~13.17~~	171	7.25	12.16	673.8	51.6
—		1045		11.30	143	7.65	9.47	722.8	37.8
—		1105		11.34	191	7.79	7.83	726.0	14.0
—		1145		11.71	125	7.60	8.73	544.3	8.02
—		1205		11.22	156	7.57	9.60	702.4	3.77
—		1205		11.12	152	7.57	9.76	705.2	2.86
—	250	1215	↓	11.15	163	7.64	9.69	702.2	2.54

Total Vol. Removed: _____ Liters (√) ___Meters Calibrated (√) ___Min. 3 Well Vol. Purged (√) ___Parameters Stable for 3 consecutive measurements

Sample Number	Time Collected (Military)	Approx. Vol. (mL)	Sampled By (Initials)

Comments: WLP - Bake

Sampling Personnel Signature _____ Date _____

W

VEOLIA
ENVIRONMENTAL SERVICES

SHIPPING DOCUMENT	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Shipping Document Tracking Number
	[illegible]	1	(978) 318-8144	ZZ 00350196

5. Generator's Name and Mailing Address

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DIVISION
696 VIRGINIA RD
CONCORD, MA 01742

Generator's Phone: 978 318-8144

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

U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DIVISION
INTERSECTION OF B & FIFTH ST
GLENVILLE, NY 12302

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

VEOLIA ES TECHNICAL SOLUTIONS — N J D 0 2 0 5 3 1 7 6 9

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

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

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
4301 INFIRMARY ROAD
WEST CARROLLTON, OH 45449

Facility's Phone: 937 859-8101 — O H D 0 6 3 9 0 4 5 2 8 3

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Codes
	1. NON HAZARDOUS MATERIAL	25	D M	10,000	P	NONE
	2. NON REGULATED LIQUID	25	D M	10,000	P	NONE
	3.					
	4.					

14. Special Handling Instructions and Additional Information

ERR Service Contracted by VESTS | 1) W:443928 A:BROLEBOLID MI 2) W:443928 A:

SRRT/ELQ-NR

15. **GENERATOR S/OFFEROR S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name — Signature — Month 04 — Day 24 — Year 13

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

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

17. Transporter Acknowledgment of Receipt of Shipment

Transporter 1 Printed/Typed Name — Signature — Month 4 — Day 24 — Year 13

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

18. Discrepancy

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

Shipping Document Tracking Number:

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

Facility's Phone:

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

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

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of shipment except as noted in Item 18a

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

GENERATOR / SHIPPER'S INITIAL COPY

PACKING SUMMARY

Generator Number: 598391
U.S. ARMY CORPS OF ENGINEERS,
NEW ENGLAND DIVISION
GLENVILLE, NY 12302
Attn: DEAN BRAMMER
EPA ID: NYCESQG

Manifest Number: ZZ00350196
Field System ID: AE
Work Order Number: 1779146000
Date Shipped: 04/22/2013

Container#: AE-1779146000-002 Waste Area: Manifest Page/Line: 01 / 1

WIP: 443929 DisposalCode: SRRLFSOLID-NH PHY State: S

Date Accumulated: 04/22/2013 Gen Drum ID:

Shipping Name: NON HAZARDOUS MATERIAL

No. of Commons: 25 Outer Container: 55IA2-DM Inner Container:

Primary Waste Codes: NONE,L PCB Serial #: OOS Date: / /

Total Cmns Wt: 10000 SIC: 9999 Source: G09 Form: W301 System: H141 Cubic Ft.: 7.50

Individual Common Weights: 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400 (POUNDS)

Units	Container Size	Net Weight	Chemical Name	EPA/State Codes
1	55 GAL		NON HAZARDOUS SOIL [0-100%]	NONE, L

Container#: AE-1779146000-001 Waste Area: Manifest Page/Line: 01 / 2

WIP: 443928 DisposalCode: SRRLFLIQ-NH PHY State: L

Date Accumulated: 04/22/2013 Gen Drum ID:

Shipping Name: NON REGULATED LIQUID

No. of Commons: 25 Outer Container: 55IA1-DM (5942) Inner Container:

Primary Waste Codes: NONE,L PCB Serial #: OOS Date: / /

Total Cmns Wt: 10000 SIC: 9999 Source: G09 Form: W101 System: H141 Cubic Ft.: 7.50

Individual Common Weights: 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400, 400 (POUNDS)

Units	Container Size	Net Weight	Chemical Name	EPA/State Codes
1	55 GAL		NON HAZARDOUS WATER [0-100%]	NONE, L

Activity Report

JOB NO: 1779146000 WO NO: 1779146000
BILL DOC NO AE30417704
GENERATOR NO 595391 EPA ID: NYCESQG

BILL TO: GLOBAL REMEDIATION SERVICES
700 RICHMOND STREET
EAST TAUNTON, MA 02718
(508) 828-1885

JOB SITE: U.S. ARMY CORPS OF ENGINEERS,
NEW ENGLAND DIVISION
INTERSECTION OF B & FIFTH ST.
GLENVILLE, NY 12302
(978) 318-8144

CONTACT: PAUL MASTRODOMENICO

CONTACT: DEAN BRAMMER

MANIFEST NUMBER(S):
ZZ00350196

CUSTOMER P.O. NUMBER	PROJECT NUMBER	SHIP DATE	TERR.
		04/22/2013	B35

DESCRIPTION	# CONT.	CONT.CODE	QTY	UOM	PG/LN	WASTE AREA
Manifest # ZZ00350196 WIP 443928 / Approval SRRLFLIQ-NH NON HAZARDOUS WATER	25	551A1-DM 551A2	10,000	P	1 / 2	
Manifest # ZZ00350196 WIP 443929 / Approval SRRLFSOLID-NH NON HAZARDOUS SOIL	25	551A2-DM	10,000	P	1 / 1	
04/22/2013 Manpwr.- MOBILIZATION FEE		1246	1@1	EACH		

Total Hours: 8

Comments:

Signature:

Veolia Environmental Solutions is permitted for and has capacity to accept waste listed above in container quantities.

Veolia ES Technical Solutions L.L.C.

WASTESTREAM INFORMATION PROFILE

Disposal Code

|__| Recertification

__ Veolia ES Location MARLBORO MA BRANCH MARLBORO MA |001 | 013 |
|__| Invoice Address OFFICE CITY ST

Veolia ES TSDF requested _____ Technology requested _____ Generator No. 598391 Generator EPA ID No. NYCESQG

1. Generator Name U.S. ARMY CORPS OF ENGINEERS, Generator State No. _____
Address NEW ENGLAND DIVISION INTERSECTION OF B & FIFTH ST. State Wastestream No. _____
City GLENVILLE State NY Country US ZIP 12302 ____
NAICS(SIC) Code 9999 _____ _____ _____ Source G09 Origin 1 Form W301 System Type _____

---

2. Waste Name NON HAZARDOUS SOIL Lab or Waste Area _____

3. Process Generating Waste
soil borings and monitoring wells

4. Shipping Name NON HAZARDOUS MATERIAL _____
Hazard Class NONE UN/NA No. NONE PG ___ RQ amt ___0 lb Waste: N PIH: N IH: N DWW: N P: N

RQ Des: 1._____ 2._____

DOT Des: 1._____ 2._____

5. Waste Codes L NONE _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
Wastewater _____ Non Wastewater X Sub Category _____ Mix: N Sol: N

---

6. Physical and chemical properties:

pH	Specific Gravity	Flash Point(F)	Solids	
a ___ < 2	a ___ <.8	a ___ < 80	0 - 0% suspended	0 - 0 % ash
b ___ 2 - 5	b ___ .8 - 1.0	b ___ 80 - 100	100 - 100% settleable	0 - 0 % water solubility
c X 5 - 9	c X 1.0	c ___ 100 - 140	0 - 0% dissolved	0 - 2999 BTU/lb
d ___ 9 - 12.5	d ___ 1.0 - 1.2	d ___ 140 - 200		
e ___ > 12.5	e ___ > 1.2	e ___ > 200	Free Liquid	0 - 5 %
____-____ exact	____-____ exact	f X no flash ____-____ exact	VOC	0 - 0 %

Physical State	Hazardous Characteristics		Odor
s X solid	a ___ air reactive	r ___ radioactive or NRC regulated	a none X
m ___ semi-solid	w ___ water reactive	s ___ shock sensitive	b mild ___
l ___ liquid	c ___ cyanide reactive	t ___ temp sensitive	c strong ___
p ___ pumpable semi-solid	f ___ sulfide reactive	m ___ polymerization/monomer	describe _____
f ___ flowable powder	e ___ explosive	n ___ OSHA carcinogen	
g ___ gas	o ___ oxidizing acid	i ___ infectious	**Halogens**
a ___ aerosol	p ___ peroxide former	h ___ inhalation hazard	Br .0 - .0 % Bromine
r ___ pressurized liquid		Zone: _	Cl .0 - .0 % Chlorine
d ___ debris per 40 CFR 268.45			F .0 - .0 % Fluorine
h ___ sharps			I .0 - .0 % Iodine
q ___ pumpable liquid			

Layers: | a ____ multilayered: b ____ bi-layered: c ___X single phase |

	Top Layer	Second Layer	Bottom Layer	Color
Viscosity by Layer:	___ high(syrup)	___ high(syrup)	___ high(syrup)	CLR
	___ medium(oil)	___ medium(oil)	___ medium(oil)	___
	___ low(water)	___ low(water)	___ low(water)	_____
	X solid	___ solid	___ solid	

WIP NO. 443929

Veolia ES Technical Solutions L.L.C.

WASTESTREAM INFORMATION PROFILE

Used oil y/n _N_ **HOC < 1000 ppm** ___ **HOC > 1000 ppm** ___

---

7. Chemical Composition [M=Marine Pollutant, S=Severe Marine Pollutant, O=Ozone Depleting Substance, U=Underlying Hazardous Constituent, B=Benzene NESHAP, T=TRI Chemical, C=OSHA Carcinogen]

Constituents	Ranges		Units
NON HAZARDOUS SOIL	.00	100.00	%

Other:

8. Is the wastestream being imported into the USA? Yes __ No X
9. Does the wastestream contain PCBs regulated by 40CFR? Yes __ No X
   PCB Concentration _____.00 ppm
10. Is the wastestream subject to the Marine Pollutant Regulations? Yes __ No X
11. Is the wastestream from an industry regulated under Benzene NESHAP? Yes __ No X
   If yes:
   Is the wastestream subject to Notification/Control Requirements? Yes __ No X
   Benzene Concentration _____.00 ppm
   Does it contain >= 10% water? Yes __ NoX
   What is the TAB at your facility? ___.00 Mg/Yr
12. Is the wastestream subject to RCRA subpart CC controls? Yes __ No X
   Volatile Organic Concentration _____.00 ppmw
   CC Approved Analytical Method? Yes __ No X
   Generator Knowledge? Yes __ No X
13. Is the wastestream from a CERCLA or state mandated cleanup? Yes __ No X

---

14. **Container Information** :

Packaging: _____ Type/Size: __ _____

_____ Type/Size: __ _____

Shipping Frequency: Units _____.00 Per Day _ Per Week _ Per Month _ Per Qtr _ Per Year _ One Time _

UOM ___ DESCRIPTION: _____

---

15. **Additional Information** :

MAILING ADDRESS:

696 VIRGINIA ROAD, CONCORD, MA 01742

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16. Product Reclaim

Does Generator want material back (TOLL)? Yes _ No _

If Yes, what is the Generator's product specification?

Constituents	Range	Units

APHA Color ___ Other _____

Is the waste: grain _ or synthetic _ Ethanol? SDA Formula N o._____

Have TTB taxes been paid on the contained ethanol and eligible for rebate? ___

Transportation Provided By: _ Veolia _ Generator _ Other

Returned in: _ Bulk (_ T/T _ T/C _ ISO) _ Drums _ Other

WIP NO. 443929

Veolia ES Technical Solutions L.L.C.

WASTESTREAM INFORMATION PROFILE

Describe the application for the solvent:

Additional Information:

GENERATOR CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize sampling of any waste shipment for purposes of recertification.

DEAN D. BRAMMER	978-318-8144	4/22/13
Name(Print or Type)	Phone	Date
[signature]	ENG. TECH. LEAD	
Signature	Title	

If approved for management, Veolia ES has all the necessary permits and licenses for the waste that has been characterized and identified by this profile.

WIP NO. 443929

APPENDIX G: INVESTIGATION-DERIVED WASTE TRANSPORT AND DISPOSAL RECORDS

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/5/2013
Location:	Scotia, NY	**Date(s) Sampled:**	03/05/2013 - 03/05/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/05/2013 - 03/05/2013
SEI Project No.:	102305-07	**Test Method:**	SW8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	IDW		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth / Sample Name / Analysis Date	CAS #	000.01 MW-24-IDW 03/05/13 11:28		000.02 Collective Purge-IDW 03/05/13 15:27	
			N		N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	0.52	J	4.4	
Toluene	108-88-3	2.0	U	1.1	J
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	0.36	J
Ethylbenzene	100-41-4	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	95	%

Results met criteria for on-site disposal
Disposed of at drilling location

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/18/2013 - 03/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	MW-25-IDW		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Meet criteria, disposed of onsite

Depth	CAS #	050.00		075.00	
Sample Name		MW-25-50.0-IDW		MW-25-75.0-IDW	
Analysis Date		03/22/13 13:14	N	03/22/13 17:10	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	3.5	
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	2.2		47	
Toluene	108-88-3	0.90	J	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	0.33	J	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	98	%	106	%

Exceeds criteria

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/18/2013 - 03/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Resu**	/L
Location ID:	MW-26-IDW		

Meet criteria, liquid fraction disposed of onsite

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	050.00		110.00	
Sample Name		MW-26-50.0-IDW		MW-26-110.0-IDW	
Analysis Date		03/22/13 12:42	N	03/22/13 16:55	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	0.24	J	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	9.9		2.0	U
Toluene	108-88-3	20		0.79	J
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	1.3	J	2.0	U
Ethylbenzene	100-41-4	0.56	J	2.0	U
m,p-Xylenes	136777612	2.4		2.0	U
o-Xylene	95-47-6	1.6	J	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	3.8		2.0	U
1,3,5-Trimethylbenzene	108-67-8	1.0	J	2.0	U
Naphthalene	91-20-3	1.9	J	2.0	U
Bromofluorobenzene (SS)	460-00-4	95	%	97	%

Exceeds criteria

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/20/2013 - 03/20/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	MW-27-IDW		

Meet criteria, liquid fraction disposed of onsite

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Depth	CAS #	025.00		050.00	
Sample Name		MW-27-25.0-IDW		MW-27-50.0-IDW	
Analysis Date		03/22/13 17:25	N	03/22/13 18:09	N
Vinyl Chloride	75-01-4	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	U
Chloroform	67-66-3	2.0	U	2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U
Trichloroethene	79-01-6	2.4		20	
Toluene	108-88-3	2.0	U	2.0	U
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U
Tetrachloroethene	127-18-4	2.0	U	2.0	U
Ethylbenzene	100-41-4	2.0	U	2.0	U
m,p-Xylenes	136777612	2.0	U	2.0	U
o-Xylene	95-47-6	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	U
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	99	%	100	%

Exceeds criteria

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

Onsite Laboratory Results Mobile Laboratory 2

Client:	USACE	**Report Date:**	3/25/2013
Location:	Barre, VT	**Date(s) Sampled:**	03/19/2013 - 03/19/2013
Project ID:	Scotia Navy Depot	**Date(s) Analyzed:**	03/22/2013 - 03/22/2013
SEI Project No.:	102305-R-C	**Test Method:**	8260C
Matrix:	GW	**Results Given as:**	ug/L
Location ID:	Drums-IDW		

All of the tests results were performed in accordance with the NELAP standards and meet all NELAP requirements for parameters for which accreditation is required or available. The reports were completed according to contract specific reporting requirements. Any exceptions to the NELAP standard requirements are noted and the data has been qualified accordingly.

Meet criteria, Disposed of onsite

Sample Name / Analysis Date	CAS #	Drums 1-6-IDW 03/22/13 12:58		Drums 7-12-IDW 03/22/13 13:30		Drums 13-18-IDW 03/22/13 13:46		Drums 19-24-IDW 03/22/13 14:02		Drums 25-27-IDW 03/22/13 17:54		Drums 28-30-IDW 03/22/13 18:24	
			N		N		N		N		N		N
Vinyl Chloride	75-01-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethene	75-35-4	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,1-Dichloroethane	75-34-3	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
cis-1,2-Dichloroethene	156-59-2	2.0	U	Exceeds criteria		Exceeds criteria		Exceeds criteria		Exceeds criteria		2.0	U
Chloroform	67-66-3	2.0	U									2.0	U
Carbon Tetrachloride	56-23-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Benzene	71-43-2	2.0	U	2.0	U	0.21	J	2.0	U	2.0	U	2.0	U
1,2-Dichloroethane	107-06-2	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Trichloroethene	79-01-6	37		15		8.2		9.9		2.0	U	32	
Toluene	108-88-3	23		7.4		1.2	J	5.6		2.8		8.0	
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Tetrachloroethene	127-18-4	1.0	J	1.2	J	1.4	J	0.72	J	0.73	J	0.45	J
Ethylbenzene	100-41-4	0.56	J	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
m,p-Xylenes	136777612	3.3		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
o-Xylene	95-47-6	1.8	J	0.44	J	2.0	U	2.0	U	2.0	U	2.0	U
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
1,2,4-Trimethylbenzene	95-63-6	0.69	J	2.4		2.0	U	5.8		2.0	U	0.56	J
1,3,5-Trimethylbenzene	108-67-8	2.0	U	0.63	J	2.0	U	1.2	J	2.0	U	2.0	U
Naphthalene	91-20-3	2.0	U	0.86	J	2.0	U	23	J	2.0	U	2.0	U
Bromofluorobenzene (SS)	460-00-4	94	%	108	%	92	%	99	%	99	%	108	%

Exceeds criteria

U = Not detected above the specified reporting limit.
J = Estimated value.
E = Estimated value, marginally above the calibration levels.
D = Sample analyzed at a dilution.
N = Normal sample.
EB = Equipment Blank
B = Indicates blank contamination.

APPENDIX H: FIXED LABORATORY ANALYTICAL RESULTS SUMMARY TABLES AND ANALYTICAL REPORTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SUMMARY OF ANALYTICAL RESULTS

TestAmerica Savannah - 680-87268-2

Sample ID	MWB1-64.0-GW		MWB2-66.0-GW		MWB3-62.0-GW		MWGEP1-73.0-GW		MWGEP2-76.0-GW		GEP3-73-GW		MWGEP4-73.0-GW		MWGEP4-73.0-D	
Lab Sample Number	680-87268-23		680-87268-25		680-87268-24		680-87268-11		680-87268-12		680-87268-39		680-87268-17		680-87268-18	
Sampling Date	2/6/2013 11:57:00 AM		2/6/2013 9:53:00 AM		2/6/2013 8:35:00 AM		2/7/2013 11:50:00 AM		2/7/2013 10:37:00 AM		2/7/2013 11:00:00 AM		2/6/2013 4:15:00 PM		2/6/2013 4:15:00 PM	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water	
Dilution Factor	1		1		1		1		1		1		1		1	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
	Low		Low		Low		Low		Low		Low		Low		Low	
GC/MS VOA - 8260B																
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Benzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.80	U	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ
2-Butanone	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	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.52	U	0.50	U	0.50	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	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	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
Chloromethane	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
cis-1,2-Dichloroethene	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
cis-1,3-Dichloropropene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Cyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromochloromethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,2-Dibromo-3-Chloropropane	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
Dichlorodifluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,1-Dichloroethene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.54	U	0.14	J	0.11	U
1,2-Dichloropropane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Ethylbenzene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
2-Hexanone	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	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methyl acetate	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Methylcyclohexane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methylene Chloride	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone	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	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Styrene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
1,1,2,2-Tetrachloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetrachloroethene	0.15	U	0.15	U	0.15	U	1.0		1.4		0.67	U	0.15	U	0.42	J
Toluene	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.38	U	0.33	U	0.33	U
trans-1,2-Dichloroethene	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2,4-Trichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	7.6		0.97	U	1.1		1.0	
1,1,2-Trichloroethane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Trichloroethene	0.13	U	0.13	U	0.13	U	160		78		150	U	71		72	
Trichlorofluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Xylenes, Total	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U

TestAmerica

Sample ID	MW5-72.0-GW		MW6-71-GW		MW7-70.5-GW		MW9-110-GW		MW12-78.0-GW		MW13-78-GW		MW14-76-GW		MW15-79-GW	
Lab Sample Number	680-87268-20		680-87268-28		680-87268-19		680-87268-29		680-87268-10		680-87268-26		680-87268-38		680-87268-36	
Sampling Date	2/5/2013 10:28:00 AM		2/7/2013 2:05:00 PM		2/5/2013 1:50:00 PM		2/5/2013 10:40:00 AM		2/5/2013 3:20:00 PM		2/7/2013 12:40:00 PM		2/7/2013 9:10:00 AM		2/6/2013 4:25:00 PM	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water	
Dilution Factor	1		1		1		1		1		1		1		1	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
	Low		Low		Low		Low		Low		Low		Low		Low	
GC/MS VOA - 8260B																
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Benzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.35	J	0.25	U	0.25	U	0.25	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ
2-Butanone	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	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Carbon tetrachloride	4.1		0.50	U	0.50	U	0.50	U	6.2		0.50	U	0.65	J	0.50	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	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	0.14	U	0.14	U	0.14	U	0.14	U	0.82	J	0.14	U	0.14	J	0.14	U
Chloromethane	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
cis-1,2-Dichloroethene	0.15	U	0.90	J	0.15	U	0.15	U	0.15	U	0.15	U	1.5		0.15	U
cis-1,3-Dichloropropene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Cyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromochloromethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,2-Dibromo-3-Chloropropane	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
Dichlorodifluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.27	J	0.27	J	0.25	U
1,2-Dichloroethane	0.10	U	0.10	U	0.10	U	0.10	U	0.18	J	0.10	U	0.10	U	0.10	U
1,1-Dichloroethene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
1,2-Dichloropropane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Ethylbenzene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
2-Hexanone	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	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methyl acetate	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Methylcyclohexane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methylene Chloride	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone	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	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Styrene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
1,1,2,2-Tetrachloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetrachloroethene	0.15	U	0.91	J	0.15	U	0.15	U	0.15	U	0.53	J	4.7		0.88	J
Toluene	0.33	U	0.33	U	0.33	U	0.43	J	0.33	U	0.33	U	0.33	U	0.33	U
trans-1,2-Dichloroethene	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2,4-Trichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.50	U	3.3		0.50	U	0.50	U	0.50	U	0.50	U	3.1		0.51	J
1,1,2-Trichloroethane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Trichloroethene	0.38	J	98		0.13	U	0.13	U	2.8		150		1.1		80	
Trichlorofluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Xylenes, Total	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U

TestAmerica

Sample ID	MW15-X-EB		MW16-67-GW		MW17-75.0-GW		MW18-75-GW		MW19-75-GW		MW20-78-GW		MW21-72.0-GW		MW21-72.0-D	
Lab Sample Number	680-87268-37		680-87268-30		680-87268-21		680-87268-35		680-87268-34		680-87268-32		680-87268-14		680-87268-15	
Sampling Date	2/6/2013 5:00:00 PM		2/5/2013 2:15:00 PM		2/6/2013 2:45:00 PM		2/6/2013 3:10:00 PM		2/6/2013 1:45:00 PM		2/6/2013 9:10:00 AM		2/7/2013 9:11:00 AM		2/7/2013 9:11:00 AM	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water	
Dilution Factor	1		1		1		1		1		1		1		1	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
	Low		Low		Low		Low		Low		Low		Low		Low	
GC/MS VOA - 8260B																
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Benzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ
2-Butanone	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	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	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	0.14	U	0.14	U	0.14	U	0.14	U	0.33	J	0.14	U	0.38	J	0.45	J
Chloromethane	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
cis-1,2-Dichloroethene	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	20		20	
cis-1,3-Dichloropropene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Cyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromochloromethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,2-Dibromo-3-Chloropropane	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.65	J	0.77	J
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	7.3		7.6	
Dichlorodifluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	6.6		6.8	
1,2-Dichloroethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.17	J
1,1-Dichloroethene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
1,2-Dichloropropane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Ethylbenzene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.62	J	0.62	J
2-Hexanone	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	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	1.9		1.9	
Methyl acetate	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Methylcyclohexane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.77	J	0.77	J
Methylene Chloride	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone	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	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Styrene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
1,1,2,2-Tetrachloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetrachloroethene	0.15	U	0.15	U	0.15	U	2.9		0.15	U	1.0		1.7		2.0	
Toluene	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
trans-1,2-Dichloroethene	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2,4-Trichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.27	J	0.25	U
1,1,1-Trichloroethane	0.50	U	0.50	U	1.9		0.50	U	0.50	U	0.50	U	4.3		4.5	
1,1,2-Trichloroethane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Trichloroethene	0.13	U	0.13	U	5.0		110		28		27		0.76	J	0.71	J
Trichlorofluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Xylenes, Total	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.21	J	0.20	U

TestAmerica

Sample ID	MW-21-X-EB		MW22-73-GW		MW23-80.0-GW		PMW-3-82-GW		MW83-X-EB		TB-02071313	
Lab Sample Number	680-87268-16		680-87268-33		680-87268-22		680-87268-31		680-87268-13		680-87268-27	
Sampling Date	2/7/2013 9:30:00 AM		2/6/2013 12:05:00 PM		2/6/2013 1:31:00 PM		2/5/2013 4:20:00 PM		2/5/2013 4:40:00 PM		2/7/2013 2:00:00 PM	
Matrix	Water		Water		Water		Water		Water		Water	
Dilution Factor	1		5		1		1		1		1	
Units	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
	Low		Low		Low		Low		Low		Low	
GC/MS VOA - 8260B												
Acetone	5.0	U	25	U	5.0	U	5.0	U	5.0	U	5.0	U
Benzene	0.25	U	1.3	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromodichloromethane	0.25	U	1.3	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.50	U	2.5	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.80	UJ	4.0	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ
2-Butanone	1.0	U	5.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Carbon disulfide	0.60	U	3.0	U	0.60	U	0.60	U	0.60	U	0.60	U
Carbon tetrachloride	0.50	U	2.5	U	0.50	U	1.1		0.50	U	0.50	U
Chlorobenzene	0.25	U	1.3	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	1.0	U	5.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Chloroform	0.14	U	0.70	U	0.14	U	0.14	U	0.14	U	0.14	U
Chloromethane	0.33	U	1.7	U	0.33	U	0.33	U	0.33	U	0.33	U
cis-1,2-Dichloroethene	0.15	U	0.75	U	0.15	U	0.15	U	0.15	U	0.15	U
cis-1,3-Dichloropropene	0.11	U	0.55	U	0.11	U	0.11	U	0.11	U	0.11	U
Cyclohexane	0.25	U	1.3	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromochloromethane	0.10	U	0.50	U	0.10	U	0.10	U	0.10	U	0.10	U
1,2-Dibromo-3-Chloropropane	0.44	U	2.2	U	0.44	U	0.44	U	0.44	U	0.44	U
1,2-Dibromoethane	0.25	U	1.3	J D	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.21	U	1.1	U	0.21	U	0.21	U	0.21	U	0.21	U
1,3-Dichlorobenzene	0.25	U	1.3	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.28	U	1.6	J D	0.28	U	0.28	U	0.28	U	0.28	U
Dichlorodifluoromethane	0.25	U	1.3	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.25	U	1.3	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.10	U	0.50	U	0.10	U	0.10	U	0.10	U	0.10	U
1,1-Dichloroethene	0.11	U	0.78	J D	0.11	U	0.11	U	0.11	U	0.11	U
1,2-Dichloropropane	0.13	U	0.65	U	0.13	U	0.13	U	0.13	U	0.13	U
Ethylbenzene	0.11	U	0.55	U	0.11	U	0.11	U	0.11	U	0.11	U
2-Hexanone	1.0	U	5.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Isopropylbenzene	0.10	U	0.50	U	0.10	U	0.10	U	0.10	U	0.10	U
Methyl acetate	0.19	U	0.95	U	0.19	U	0.19	U	0.19	U	0.19	U
Methylcyclohexane	0.10	U	0.50	U	0.10	U	0.10	U	0.10	U	0.10	U
Methylene Chloride	1.0	U	5.0	U	1.0	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone	1.0	U	5.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methyl tert-butyl ether	0.20	U	1.0	U	0.20	U	0.20	U	0.20	U	0.20	U
Styrene	0.11	U	0.55	U	0.11	U	0.11	U	0.11	U	0.11	U
1,1,2,2-Tetrachloroethane	0.18	U	1.6	J D	0.18	U	0.18	U	0.18	U	0.18	U
Tetrachloroethene	0.15	U	6.7	D	0.15	U	0.15	U	0.15	U	0.15	U
Toluene	0.33	U	1.7	U	0.33	U	0.33	U	0.33	U	0.33	U
trans-1,2-Dichloroethene	0.20	U	1.0	U	0.20	U	0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropene	0.21	U	1.1	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2,4-Trichlorobenzene	0.25	U	3.8	J D	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.50	U	2.5	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.13	U	0.85	J D	0.13	U	0.13	U	0.13	U	0.13	U
Trichloroethene	0.13	U	370	D	0.13	U	0.13	U	0.13	U	0.13	U
Trichlorofluoromethane	0.25	U	1.3	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	2.5	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.18	U	0.90	U	0.18	U	0.18	U	0.18	U	0.18	U
Xylenes, Total	0.20	U	1.0	U	0.20	U	0.20	U	0.20	U	0.20	U

QUALIFIERS

GC/MS VOA

D: The reported value is from a dilution.

J: Estimated: The analyte was positively identified; the quantitation is an estimation

U: Undetected at the Limit of Detection.

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SUMMARY OF ANALYTICAL RESULTS

TestAmerica Savannah - 680-87268-1

Sample ID	WP01-70.0-GW		WP01-91.5-GW		WP01-100.0-GW		WP01-110.0-GW		WP02-75.0-GW		WP02-87.15-GW		WP02-96.4-GW		TB-020713	
Lab Sample Number	680-87268-1		680-87268-2		680-87268-3		680-87268-4		680-87268-5		680-87268-6		680-87268-7		680-87268-8	
Sampling Date	2/5/2013 2:06:00 PM		2/6/2013 10:09:00 AM		2/6/2013 2:15:00 PM		2/6/2013 5:11:00 PM		2/6/2013 10:07:00 AM		2/6/2013 1:44:00 PM		2/6/2013 5:26:00 PM		2/7/2013 10:00:00 AM	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water	
Dilution Factor	1		1		1		1		1		1		1		1	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Low		Low		Low		Low		Low		Low		Low		Low	
GC/MS VOA - 8260B																
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Benzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.80	U	0.80	U	0.80	U	0.80	U	0.80	U	0.80	U	0.80	U	0.80	U
2-Butanone	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	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	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	0.14	U	0.14	U	0.43	J	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
Chloromethane	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
cis-1,2-Dichloroethene	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
cis-1,3-Dichloropropene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Cyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromochloromethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,2-Dibromo-3-Chloropropane	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
1,2-Dichlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Dichlorodifluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,1-Dichloroethene	0.11	U	0.11	U	0.94	J	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
1,2-Dichloropropane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Ethylbenzene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
2-Hexanone	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	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methyl acetate	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Methylcyclohexane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methylene Chloride	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone	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	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Styrene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
1,1,2,2-Tetrachloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetrachloroethene	0.39	J	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Toluene	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
trans-1,2-Dichloroethene	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2,4-Trichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Trichloroethene	23		20		3.7		0.13	U	77		37		120		0.13	U
Trichlorofluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Xylenes, Total	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U

TestAmerica

Sample ID	WP-02-110.2-GW		WP03-87.5-GW		WP04-72.7-GW		WP08-95.0		WP08-113.4		WP06-72.0		WP07-82.4		WP-11-76.9	
Lab Sample Number	680-87268-9		680-87439-1		680-87439-2		680-87793-5		680-87793-4		680-87793-6		680-87793-7		680-87900-2	
Sampling Date	2/7/2013 12:50:00 PM		2/8/2013 3:01:00 PM		2/8/2013 12:44:00 PM		2/20/2013 2:48:00 PM		2/21/2013 8:52:00 AM		2/22/2013 1:19:00 PM		2/20/2013 11:04:00 AM		2/27/2013 11:42:00 AM	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water	
Dilution Factor	1		2		2		1		1		1		2		1	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Low		Low		Low		Low		Low		Low		Low		Low	
GC/MS VOA - 8260B																
Acetone	5.0	U	10	U	10	U	5.0	U	5.0	U	5.0	U	10	U	5.0	U
Benzene	0.25	U	0.50	U	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
Bromodichloromethane	0.25	U	0.50	U	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
Bromoform	0.50	U	1.0	U	1.0	U	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Bromomethane	0.80	U	1.6	UJ	1.6	UJ	0.80	UJ	0.80	U	0.80	UJ	1.6	UJ	0.80	UJ
2-Butanone	1.0	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	2.0	U	1.0	U
Carbon disulfide	0.60	U	1.2	U	1.2	U	0.60	U	0.60	U	0.60	U	1.2	U	0.60	U
Carbon tetrachloride	0.50	U	1.0	U	1.0	U	0.50	U	0.50	U	2.2		1.0	U	0.50	U
Chlorobenzene	0.25	U	0.50	U	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
Chloroethane	1.0	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	2.0	U	1.0	U
Chloroform	0.14	U	0.28	U	0.28	U	0.14	U	0.14	U	0.75	J	0.28	U	0.25	U
Chloromethane	0.33	U	0.66	U	0.66	U	0.33	U	0.33	U	0.33	U	0.66	U	0.33	U
Dibromochloromethane	0.15	U	0.20	U	0.20	U	0.10	U	0.10	U	0.10	U	0.20	U	0.25	U
1,2-Dibromo-3-Chloropropane	0.11	U	0.88	U	0.88	U	0.44	U	0.44	U	0.44	U	0.88	U	1.0	U
1,2-Dibromoethane	0.25	U	0.50	U	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
1,2-Dichlorobenzene	0.10	U	0.42	U	0.42	U	0.21	U	0.21	U	0.21	U	0.42	U	0.25	U
1,3-Dichlorobenzene	0.44	U	0.50	U	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
1,4-Dichlorobenzene	0.25	U	0.56	U	0.56	U	0.28	U	0.28	U	0.28	U	0.56	U	0.28	U
Dichlorodifluoromethane	0.25	U	0.50	U	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
1,1-Dichloroethane	0.28	U	0.50	U	1.3	J	0.25	U	0.25	U	0.54	J	0.50	U	0.25	U
1,2-Dichloroethane	0.21	U	0.20	U	0.20	U	0.10	U	0.10	U	0.10	U	0.20	U	0.25	U
cis-1,2-Dichloroethene	0.25	U	0.30	U	5.8		0.15	U	0.15	U	0.80	J	0.30	U	0.25	U
trans-1,2-Dichloroethene	0.25	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	0.40	U	0.25	U
1,1-Dichloroethene	0.10	U	0.22	U	0.77	J	0.11	U	0.11	U	0.11	U	0.22	U	0.22	J
1,2-Dichloropropane	0.11	U	0.26	U	0.26	U	0.13	U	0.13	U	0.13	U	0.26	U	0.25	U
cis-1,3-Dichloropropene	0.13	U	0.22	U	0.22	U	0.11	U	0.11	U	0.11	U	0.22	U	0.25	U
trans-1,3-Dichloropropene	0.11	U	0.42	U	0.42	U	0.21	U	0.21	U	0.21	U	0.42	U	0.25	U
Ethylbenzene	1.0	U	0.22	U	0.22	U	0.11	U	0.11	U	0.11	U	0.22	U	0.25	U
2-Hexanone	0.10	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	2.0	U	1.0	U
Isopropylbenzene	0.19	U	0.20	U	0.20	U	0.10	U	0.10	U	0.10	U	0.20	U	0.25	U
Methylene Chloride	0.10	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	2.0	U	1.0	U
4-Methyl-2-pentanone	1.0	U	2.0	U	2.0	U	1.0	U	1.0	U	1.0	U	2.0	U	1.0	U
Methyl tert-butyl ether	1.0	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	0.40	U	0.50	U
Styrene	0.20	U	0.22	U	0.22	U	0.11	U	0.11	U	0.11	U	0.22	U	0.25	U
1,1,2,2-Tetrachloroethane	0.11	U	0.36	U	0.36	U	0.18	U	0.18	U	0.18	U	0.36	U	0.25	U
Tetrachloroethene	0.18	U	0.30	U	38		0.15	U	0.15	U	20		0.30	U	0.25	U
Toluene	0.15	U	0.66	U	0.66	U	0.33	U	0.58	J	0.60	J	0.66	U	0.33	U
1,2,4-Trichlorobenzene	0.33	U	0.51	J	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
1,1,1-Trichloroethane	0.20	U	1.0	U	19		0.50	U	0.50	U	4.5		1.0	U	0.50	U
1,1,2-Trichloroethane	0.21	U	0.26	U	0.26	U	0.13	U	0.13	U	0.13	U	0.26	U	0.25	U
Trichloroethene	0.25	U	210		140		170		0.20	J	11		200		110	
Trichlorofluoromethane	0.50	U	0.50	U	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.13	U	1.0	U	1.0	U	0.50	U	0.50	U	0.50	U	1.0	U	0.50	U
Vinyl chloride	1.5		0.36	U	0.36	U	0.18	U	0.18	U	0.18	U	0.36	U	0.50	U
Xylenes, Total	0.25	U	0.40	U	0.40	U	0.20	U	0.20	U	0.20	U	0.40	U	0.75	U
Cyclohexane	0.50	U	0.50	U	0.50	U	0.25	U	0.25	U	0.25	U	0.50	U	0.25	U
Methyl acetate	0.18	U	0.38	U	0.38	U	0.19	U	0.19	U	0.19	U	0.38	U	0.25	U
Methylcyclohexane	0.20	U	0.20	U	0.20	U	0.10	U	0.10	U	0.10	U	0.20	U	0.25	U

TestAmerica

Sample ID	WP-11-81.9		WP-11-87.0		WP-12-78.0		WP-12-93.0		WP-14-98.0		WP-14-103.0		WP-15-75.4		WP-16-68.0	
Lab Sample Number	680-87900-3		680-87900-4		680-87900-5		680-87900-6		680-88114-3		680-88114-4		680-88114-5		680-88114-6	
Sampling Date	2/27/2013 12:48:00 PM		2/27/2013 1:50:00 PM		2/28/2013 9:05:00 AM		2/28/2013 11:55:00 AM		3/6/2013 8:27:00 AM		3/6/2013 9:21:00 AM		3/6/2013 10:40:00 AM		3/7/2013 9:20:00 AM	
Matrix	Water		Water		Water		Water		Water		Water		Water		Water	
Dilution Factor	1		1		1		1		1		1		1		1	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Low		Low		Low		Low		Low		Low		Low		Low	
GC/MS VOA - 8260B																
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Benzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	0.80	UJ	0.80	UJ	0.80	UJ	0.80	UJ	0.80	U	0.80	U	0.80	U	0.80	U
2-Butanone	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	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	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	0.16	J	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
Chloromethane	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
cis-1,2-Dichloroethene	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
cis-1,3-Dichloropropene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
Cyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromochloromethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,2-Dibromo-3-Chloropropane	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U	0.44	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
Dichlorodifluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
1,1-Dichloroethene	0.41	J	0.25	J	0.16	J	0.42	J	0.26	J	0.24	J	0.25	J	0.11	U
1,2-Dichloropropane	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U	0.13	U
Ethylbenzene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
2-Hexanone	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	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methyl acetate	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U
Methylcyclohexane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Methylene Chloride	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
4-Methyl-2-pentanone	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	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Styrene	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
1,1,2,2-Tetrachloroethane	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Tetrachloroethene	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
Toluene	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U
trans-1,2-Dichloroethene	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
trans-1,3-Dichloropropene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
1,2,4-Trichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	0.13	U	0.13	U	0.18	J	0.36	J	0.22	J	0.18	J	0.56	J	0.13	U
Trichloroethene	170		120		39		34		61		59		93		61	
Trichlorofluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl chloride	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Xylenes, Total	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U

TestAmerica

Sample ID	WP-16-73.0		TB-030713	
Lab Sample Number	680-88114-7		680-88114-8	
Sampling Date	3/7/2013 9:52:00 AM		3/7/2013 8:00:00 AM	
Matrix	Water		Water	
Dilution Factor	1		1	
Units	ug/L		ug/L	
	Low		Low	
GC/MS VOA - 8260B				
Acetone	5.0	U	5.0	U
Benzene	0.25	U	0.25	U
Bromodichloromethane	0.25	U	0.25	U
Bromoform	0.50	U	0.50	U
Bromomethane	0.80	U	0.80	U
2-Butanone	1.0	U	1.0	U
Carbon disulfide	0.60	U	0.60	U
Carbon tetrachloride	0.50	U	0.50	U
Chlorobenzene	0.25	U	0.25	U
Chloroethane	1.0	U	1.0	U
Chloroform	0.14	U	0.14	U
Chloromethane	0.33	U	0.33	U
cis-1,2-Dichloroethene	0.15	U	0.15	U
cis-1,3-Dichloropropene	0.11	U	0.11	U
Cyclohexane	0.25	U	0.25	U
Dibromochloromethane	0.10	U	0.10	U
1,2-Dibromo-3-Chloropropane	0.44	U	0.44	U
1,2-Dibromoethane	0.25	U	0.25	U
1,2-Dichlorobenzene	0.21	U	0.21	U
1,3-Dichlorobenzene	0.25	U	0.25	U
1,4-Dichlorobenzene	0.28	U	0.28	U
Dichlorodifluoromethane	0.25	U	0.25	U
1,1-Dichloroethane	0.25	U	0.25	U
1,2-Dichloroethane	0.10	U	0.10	U
1,1-Dichloroethene	0.11	U	0.11	U
1,2-Dichloropropane	0.13	U	0.13	U
Ethylbenzene	0.11	U	0.11	U
2-Hexanone	1.0	J Q	1.0	J Q
Isopropylbenzene	0.10	U	0.10	U
Methyl acetate	0.19	U	0.19	U
Methylcyclohexane	0.10	U	0.10	U
Methylene Chloride	1.0	U	1.0	U
4-Methyl-2-pentanone	1.0	U	1.0	U
Methyl tert-butyl ether	0.20	U	0.20	U
Styrene	0.11	U	0.11	U
1,1,2,2-Tetrachloroethane	0.18	U	0.18	U
Tetrachloroethene	0.15	U	0.15	U
Toluene	0.33	U	0.33	U
trans-1,2-Dichloroethene	0.20	U	0.20	U
trans-1,3-Dichloropropene	0.21	J Q	0.21	J Q
1,2,4-Trichlorobenzene	0.25	U	0.25	U
1,1,1-Trichloroethane	0.50	U	0.50	U
1,1,2-Trichloroethane	0.13	U	0.13	U
Trichloroethene	43		0.13	U
Trichlorofluoromethane	0.25	U	0.25	U
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U
Vinyl chloride	0.18	U	0.18	U
Xylenes, Total	0.20	U	0.20	U

QUALIFIERS

GC/MS VOA

J: Estimated: The analyte was positively identified; the quantitation is an estimation

Q: One or more quality control criteria failed.

U: Undetected at the Limit of Detection.

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SUMMARY OF ANALYTICAL RESULTS

Sample ID	WP04-76.0-GW		WP05-95.0-GW		WP03-95.0-GW		WP02-105.0-GW		WP02-105.0-GW-D		MW26-105.0-GW	
Lab Sample Number	680-87828-1		680-87900-1		680-88026-1		680-88114-1		680-88114-2		680-89687-1	
Sampling Date	2/26/2013 11:32:00 AM		2/28/2013 11:22:00 AM		3/5/2013 10:08:00 AM		3/7/2013 9:33:00 AM		3/7/2013 9:33:00 AM		4/24/2013 09:17 AM	
Matrix	Water		Water		Water		Water		Water		Water	
Dilution Factor												
Units												
	Low		Low		Low		Low		Low		Low	
General Chemistry												
HEM (Oil & Grease) - mg/L	6.7		1.9	U	1.8	U	1.9	U	1.3	U	1.8	U
Nitrite as N - mg/L	0.075	U	0.075	U	0.075	U	0.075	U	0.075	U	0.097	J
Nitrate as N - mg/L	0.43	D	1.1	U	1.1	U	0.17	J	0.18	J	0.075	U
Sulfate - mg/L	10	D	60	D	26	D	17	D	17	D	34	D
Chromium, hexavalent - mg/L	0.0030	UJ	0.0030	U	0.0030	UJ	0.0030	UJ	0.0030	UJ	0.0060	UJ
Chromium, trivalent - mg/L	0.037	J	0.049	J	0.010	UJ	0.052	J	0.36	J	0.010	UJ
pH - SU	7.87	J	8.09	J	7.84	J	7.96	J	8.04	J	8.08	J
Dissolved Organic Carbon - mg/L	1.0	U	1.7		15		1.1		1.1		2.2	
Total Organic Carbon - mg/L	0.92	J	1.7		16		0.59	J	0.60	J	2.3	
Carbonate Alkalinity as $CaCO_3$ - mg/L	5.0	U	2.0	U	2.0	U	2.0	U	1.1	U	5.0	U
Hydroxide Alkalinity - mg/L	NR		NR		NR		2.0	U	1.1	U	NR	
Phenolphthalein Alkalinity - mg/L	NR		NR		NR		2.0	U	1.1	U	NR	
Alkalinity - mg/L	NR		NR		NR		45		120		NR	
Bicarbonate Alkalinity as $CaCO_3$ - mg/L	NR		NR		NR		45		120		NR	
Hardness as calcium carbonate - mg/L	350		640		240		1,800		1,900		220	
Total Dissolved Solids - mg/L	310		360		440		330		370		NR	
Total Suspended Solids - mg/L	200		600		42		1,600		1,300		NR	
Ferric Iron - mg/L	11	J	20	J	2.7	J	49	J	170	J	0.39	J
Ferrous Iron - mg/L	0.025	J	0.033	J	0.025	UJ	0.025	J	0.025	J	0.026	J
Total Manganese - mg/L	1.50		1.02		0.115		2.34		2.37		0.0622	
Manganese, divalent - mg/L	0.110		0.0403		0.0392		0.0542		0.0536		.0465	
Manganese, tetravalent - mg/L	1.39		0.977		0.0754		2.29		2.32		0.0157	

Sample ID	WP04-76.0-GW		WP05-95.0-GW		WP03-95.0-GW		WP02-105.0-GW		WP02-105.0-GW-D		MW26-105.0-GW	
Lab Sample Number	680-87828-1		680-87900-1		680-88026-1		680-88114-1		680-88114-2		680-89687-1	
Sampling Date	2/26/2013 11:32:00 AM		2/28/2013 11:22:00 AM		3/5/2013 10:08:00 AM		3/7/2013 9:33:00 AM		3/7/2013 9:33:00 AM		4/24/2013 09:17 AM	
Matrix	Water		Water		Water		Water		Water		Water	
Dilution Factor	1		1		1		1		1		1	
Units	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
	Low		Low		Low		Low		Low		Low	
Metals												
Silicon	4,600		3,900		29,000		5,000		5,100		5,500	
Iron	11,000	J	20,000		2,700		49,000		170,000		390	
Magnesium	20,000		32,000		18,000		68,000		77,000		16,000	
Manganese	810		680		110		2400		5100		64	
Titanium	74		120		11		250		560		4.8	J
Chromium	37		49		9.3	J	52		360		2.3	J

General Chemistry

D: The reported value is from a dilution.

H: Sample was prepped or analyzed beyond the specified holding time

HF: Field parameter with a holding time of 15 minutes

J: Estimated: The analyte was positively identified; the quantitation is an estimation

U: Undetected at the Limit of Detection.

TestAmerica

Sample ID	WP04-76.0-GW		WP05-95.0-GW		WP03-95.0-GW		WP02-105.0-GW		WP02-105.0-GW-D			
Lab Sample Number	680-87828-1		680-87900-1		680-88026-1		680-88114-1		680-88114-2			
Sampling Date	2/26/2013 11:32:00 AM		2/28/2013 11:22:00 AM		3/5/2013 10:08:00 AM		3/7/2013 9:33:00 AM		3/7/2013 9:33:00 AM			
Matrix	Water		Water		Water		Water		Water			
Dilution Factor	1		1		1		1		1			
Units	ug/L		ug/L		ug/L		ug/L		ug/L			
	Low		Low		Low		Low		Low			
GC/MS VOA - 8260B												
Acetone	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U		
Benzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
Bromoform	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Bromomethane	0.80	UJ	0.80	UJ	0.80	UJ	0.80	U	0.80	U		
2-Butanone	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U		
Carbon disulfide	0.60	U	0.60	U	0.60	U	0.60	U	0.60	U		
Carbon tetrachloride	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
Chloroethane	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U		
Chloroform	0.19	J	1.0		0.25	U	0.14	U	0.14	U		
Chloromethane	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U		
cis-1,2-Dichloroethene	1.7		1.1		0.17	J	0.15	U	0.15	U		
cis-1,3-Dichloropropene	0.25	U	0.11	U	0.25	U	0.11	U	0.11	U		
Cyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
Dibromochloromethane	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U		
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	U	0.44	U	0.44	U	0.44	U		
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
1,3-Dichlorobenzene	0.25	U	0.25	U	0.21	U	0.21	U	0.21	U		
1,4-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
1,2-Dichlorobenzene	0.25	U	0.25	U	0.28	U	0.28	U	0.28	U		
Dichlorodifluoromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
1,1-Dichloroethane	0.36	J	0.25	U	0.25	U	0.25	U	0.25	U		
1,2-Dichloroethane	0.25	U	0.25	U	0.25	U	0.10	U	0.10	U		
1,1-Dichloroethene	0.36		25		2.0		0.11	U	0.11	U		
1,2-Dichloropropane	0.25	U	0.13	U	0.25	U	0.13	U	0.13	U		
Ethylbenzene	0.25	U	0.11	U	0.25	U	0.11	U	0.11	U		
2-Hexanone	1.0	U	1.0	U	1.0	U	1.0	U Q	1.0	U Q		
Isopropylbenzene	0.25	U	0.10	U	0.25	U	0.10	U	0.10	U		
Methyl acetate	0.25	U	0.19	U	0.25	U	0.19	U	0.19	U		
Methylcyclohexane	0.25	U	0.10	U	0.25	U	0.10	U	0.10	U		
Methylene Chloride	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U		
4-Methyl-2-pentanone	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U		
Methyl tert-butyl ether	0.50	U	0.20	U	0.50	U	0.20	U	0.20	U		
Styrene	0.25	U	0.11	U	0.25	U	0.11	U	0.11	U		
1,1,2,2-Tetrachloroethane	0.25	U	0.18	U	0.25	U	0.18	U	0.18	U		
Tetrachloroethene	16		0.15	U	0.25	U	0.15	U	0.15	U		
Toluene	0.33	U	0.33	U	0.33	U	0.33	U	0.33	U		
trans-1,2-Dichloroethene	0.25	U	0.26	J	3.4		0.20	U	0.20	U		
trans-1,3-Dichloropropene	0.25	U	0.21	U	0.25	U	0.21	U Q	0.21	U Q		
1,2,4-Trichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U		
1,1,1-Trichloroethane	8.9		0.50	U	0.50	U	0.50	U	0.50	U		
1,1,2-Trichloroethane	0.25	U	0.13	U	0.25	U	0.13	U	0.13	U		
Trichloroethene	31		73		29		150		150			
Trichlorofluoromethane	0.50	U	0.25	U	0.50	U	0.25	U	0.25	U		
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U		
Vinyl chloride	0.50	U	0.18	U	0.50	U	0.18	U	0.18	U		
Xylenes, Total	0.75	U	0.20	U	0.75	U	0.20	U	0.20	U		

QUALIFIERS

GC/MS VOA

J: Estimated: The analyte was positively identified; the quantitation is an estimation

U: Undetected at the Limit of Detection.

R: Result Rejected due to quality control issues.

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SUMMARY OF ANALYTICAL RESULTS
TestAmerica Savannah - 680-87793-1

SUMMARY OF ANALYTICAL RESULTS
TestAmerica Savannah - 680-87793-1

Sample ID	MW24-96-S	WP05-85-S	WP05-75-S	MW26-76.5-S	MW26-107.5-S
Lab Sample Number	680-87793-1	680-87793-2	680-87793-3	680-88345-1	680-88345-2
Sampling Date	2/20/2013 9:40:00 AM	2/22/2013 1:40:00 PM	2/22/2013 11:30:00 AM	3/14/2013 9:50:00 AM	3/14/2013 3:15:00 PM
Matrix	Solid	Solid	Solid	Solid	Solid
Dilution Factor	1	1	1	1	1
Units	g/cc	g/cc	g/cc	g/cc	g/cc
	Low	Low	Low	Low	Low
Geotechnical - D2937					
In Place Density	1.61	1.57	1.74	1.74	1.55

Sample ID	MW24-96-S	WP05-85-S	WP05-75-S	MW26-76.5-S	MW26-107.5-S
Lab Sample Number	680-87793-1	680-87793-2	680-87793-3	680-88345-1	680-88345-2
Sampling Date	2/20/2013 9:40:00 AM	2/22/2013 1:40:00 PM	2/22/2013 11:30:00 AM	3/14/2013 9:50:00 AM	3/14/2013 3:15:00 PM
Matrix	Solid	Solid	Solid	Solid	Solid
Dilution Factor	1	1	1	1	1
Units	% Passing	% Passing	% Passing	% Passing	% Passing
	Low	Low	Low	Low	Low
Geotechnical - D422					
Gravel	0.0	0.0	11.2	3.8	0.0
Hydrometer Reading 2 - Particle Size	21.7	21.1	21.1	21.2	21.8
Coarse Sand	0.3	0.2	13.0	2.6	0.9
Hydrometer Reading 4 - Particle Size	9.1	8.9	9.0	8.9	9.3
Fine Sand	84.4	84.2	15.2	41.5	81.4
Hydrometer Reading 6 - Particle Size	3.2	3.2	3.2	3.1	3.2
Clay	3.6	4.3	4.1	5.0	2.9
Sieve Size #10 - Percent Finer	99.7	99.8	75.8	93.6	99.1
Sieve Size #20 - Percent Finer	99.5	99.3	59.2	89.5	98.8
Sieve Size #40 - Percent Finer	99.2	98.9	41.9	54.1	98.7
Sieve Size #60 - Percent Finer	91.0	91.4	35.3	23.6	93.6
Sieve Size #80 - Percent Finer	64.9	64.6	31.3	17.3	73.2
Sieve Size #100 - Percent Finer	46.7	46.3	29.8	15.9	54.2
Sieve Size #200 - Percent Finer	14.8	14.7	26.7	12.6	17.3
Hydrometer Reading 1 - Percent Finer	7.7	7.6	7.1	8.6	6.3
Hydrometer Reading 2 - Percent Finer	6.2	6.4	6.5	7.7	5.8
Hydrometer Reading 3 - Percent Finer	5.1	5.2	5.3	6.3	4.4
Hydrometer Reading 4 - Percent Finer	4.0	4.6	4.7	5.4	3.4
Hydrometer Reading 5 - Percent Finer	3.6	4.3	4.1	5.0	2.9
Hydrometer Reading 6 - Percent Finer	2.4	3.1	3.1	3.5	2.8
Hydrometer Reading 7 - Percent Finer	1.6	2.5	2.2	2.6	1.8
Hydrometer Reading 1 - Particle Size	33.6	32.7	33.1	33.2	34.3
Sieve Size 3 inch - Percent Finer	100.0	100.0	100.0	100.0	100.0
Sand	85.2	85.3	62.1	83.6	82.7
Sieve Size 2 inch - Percent Finer	100.0	100.0	100.0	100.0	100.0
Hydrometer Reading 3 - Particle Size	12.7	12.5	12.5	12.4	12.8
Sieve Size 1.5 inch - Percent Finer	100.0	100.0	100.0	100.0	100.0
Medium Sand	0.5	0.9	33.9	39.5	0.4
Sieve Size 1 inch - Percent Finer	100.0	100.0	100.0	100.0	100.0
Hydrometer Reading 5 - Particle Size	6.5	6.4	6.5	6.4	6.6
Sieve Size 0.75 inch - Percent Finer	100.0	100.0	100.0	100.0	100.0
Sieve Size 0.375 inch - Percent Finer	100.0	100.0	97.6	98.5	100.0
Silt	11.2	10.4	22.6	7.7	14.4
Hydrometer Reading 7 - Particle Size	1.4	1.3	1.4	1.3	1.4
Sieve Size #4 - Percent Finer	100.0	100.0	88.8	96.2	100.0

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-87268-1
TestAmerica Sample Delivery Group: 68087268-1
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Authorized for release by:
2/11/2013 11:30:30 AM

Michele Kersey
Project Manager I
michele.kersey@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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Job ID: 680-87268-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87268-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/08/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP01-70.0-GW (680-87268-1), WP01-91.5-GW (680-87268-2), WP01-100.0-GW (680-87268-3), WP01-110.0-GW (680-87268-4), WP02-75.0-GW (680-87268-5), WP02-87.15-GW (680-87268-6), WP02-96.4-GW (680-87268-7), TB-020713 (680-87268-8) and WP-02-110.2-GW (680-87268-9) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/08/2013.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87268-1	WP01-70.0-GW	Water	02/05/13 14:06	02/08/13 08:13
680-87268-2	WP01-91.5-GW	Water	02/06/13 10:09	02/08/13 08:13
680-87268-3	WP01-100.0-GW	Water	02/06/13 14:15	02/08/13 08:13
680-87268-4	WP01-110.0-GW	Water	02/06/13 17:11	02/08/13 08:13
680-87268-5	WP02-75.0-GW	Water	02/06/13 10:07	02/08/13 08:13
680-87268-6	WP02-87.15-GW	Water	02/06/13 13:44	02/08/13 08:13
680-87268-7	WP02-96.4-GW	Water	02/06/13 17:26	02/08/13 08:13
680-87268-8	TB-020713	Water	02/07/13 10:00	02/08/13 08:13
680-87268-9	WP-02-110.2-GW	Water	02/07/13 12:50	02/08/13 08:13

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP01-70.0-GW
Date Collected: 02/05/13 14:06
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 13:27	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 13:27	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 13:27	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 13:27	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 13:27	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 13:27	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 13:27	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 13:27	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 13:27	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 13:27	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 13:27	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 13:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 13:27	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 13:27	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 13:27	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 13:27	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 13:27	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 13:27	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 13:27	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 13:27	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 13:27	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 13:27	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 13:27	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 13:27	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 13:27	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 13:27	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 13:27	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 13:27	1
Tetrachloroethene	**0.39**	**J**	1.0	0.15	ug/L			02/08/13 13:27	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 13:27	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 13:27	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 13:27	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 13:27	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 13:27	1
Trichloroethene	**23**		1.0	0.13	ug/L			02/08/13 13:27	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 13:27	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 13:27	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 13:27	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP01-70.0-GW

Lab Sample ID: 680-87268-1

Date Collected: 02/05/13 14:06

Matrix: Water

Date Received: 02/08/13 08:13

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/08/13 13:27*	*1*
4-Bromofluorobenzene	*100*		*70 - 130*		*02/08/13 13:27*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/08/13 13:27*	*1*

Client Sample ID: WP01-91.5-GW

Lab Sample ID: 680-87268-2

Date Collected: 02/06/13 10:09

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 13:56	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 13:56	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 13:56	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 13:56	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 13:56	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 13:56	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 13:56	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 13:56	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 13:56	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 13:56	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 13:56	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 13:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 13:56	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 13:56	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 13:56	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 13:56	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 13:56	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 13:56	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 13:56	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 13:56	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 13:56	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 13:56	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 13:56	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 13:56	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 13:56	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 13:56	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 13:56	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 13:56	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 13:56	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 13:56	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 13:56	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 13:56	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP01-91.5-GW

Lab Sample ID: 680-87268-2

Date Collected: 02/06/13 10:09

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 13:56	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 13:56	1
Trichloroethene	**20**		1.0	0.13	ug/L			02/08/13 13:56	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 13:56	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 13:56	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*02/08/13 13:56*	*1*
4-Bromofluorobenzene	*100*		*70 - 130*		*02/08/13 13:56*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/08/13 13:56*	*1*

Client Sample ID: WP01-100.0-GW

Lab Sample ID: 680-87268-3

Date Collected: 02/06/13 14:15

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 14:25	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 14:25	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 14:25	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 14:25	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 14:25	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 14:25	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 14:25	1
Chloroform	**0.43**	**J**	1.0	0.14	ug/L			02/08/13 14:25	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 14:25	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 14:25	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 14:25	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 14:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 14:25	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 14:25	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 14:25	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 14:25	1
1,1-Dichloroethene	**0.94**	**J**	1.0	0.11	ug/L			02/08/13 14:25	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 14:25	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 14:25	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 14:25	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 14:25	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 14:25	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP01-100.0-GW

Lab Sample ID: 680-87268-3

Date Collected: 02/06/13 14:15
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 14:25	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 14:25	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 14:25	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 14:25	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 14:25	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 14:25	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 14:25	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 14:25	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 14:25	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 14:25	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 14:25	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 14:25	1
Trichloroethene	**3.7**		1.0	0.13	ug/L			02/08/13 14:25	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 14:25	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 14:25	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*70 - 130*		*02/08/13 14:25*	*1*
4-Bromofluorobenzene	*99*		*70 - 130*		*02/08/13 14:25*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/08/13 14:25*	*1*

Client Sample ID: WP01-110.0-GW

Lab Sample ID: 680-87268-4

Date Collected: 02/06/13 17:11
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 14:53	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 14:53	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 14:53	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 14:53	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 14:53	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 14:53	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 14:53	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 14:53	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 14:53	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 14:53	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 14:53	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 14:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 14:53	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 14:53	1

Client Sample ID: WP01-110.0-GW — **Lab Sample ID: 680-87268-4**
Date Collected: 02/06/13 17:11 — **Matrix: Water**
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 14:53	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 14:53	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 14:53	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 14:53	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 14:53	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 14:53	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 14:53	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 14:53	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 14:53	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 14:53	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 14:53	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 14:53	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 14:53	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 14:53	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 14:53	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 14:53	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 14:53	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 14:53	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 14:53	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 14:53	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 14:53	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 14:53	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 14:53	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*02/08/13 14:53*	*1*
4-Bromofluorobenzene	*96*		*70 - 130*		*02/08/13 14:53*	*1*
Dibromofluoromethane	*98*		*70 - 130*		*02/08/13 14:53*	*1*

Client Sample ID: WP02-75.0-GW — **Lab Sample ID: 680-87268-5**
Date Collected: 02/06/13 10:07 — **Matrix: Water**
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 15:51	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 15:51	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 15:51	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 15:51	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 15:51	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 15:51	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 15:51	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP02-75.0-GW
Date Collected: 02/06/13 10:07
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 15:51	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 15:51	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 15:51	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 15:51	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 15:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 15:51	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 15:51	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 15:51	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 15:51	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 15:51	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 15:51	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 15:51	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 15:51	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 15:51	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 15:51	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 15:51	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 15:51	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 15:51	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 15:51	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 15:51	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 15:51	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 15:51	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 15:51	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 15:51	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 15:51	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 15:51	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 15:51	1
Trichloroethene	**77**		1.0	0.13	ug/L			02/08/13 15:51	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 15:51	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 15:51	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*70 - 130*		*02/08/13 15:51*	*1*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/08/13 15:51*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/08/13 15:51*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP02-87.15-GW
Date Collected: 02/06/13 13:44
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-6
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 15:22	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 15:22	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 15:22	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 15:22	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 15:22	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 15:22	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 15:22	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 15:22	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 15:22	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 15:22	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 15:22	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 15:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 15:22	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 15:22	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 15:22	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 15:22	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 15:22	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 15:22	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 15:22	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 15:22	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 15:22	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 15:22	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 15:22	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 15:22	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 15:22	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 15:22	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 15:22	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 15:22	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 15:22	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 15:22	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 15:22	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 15:22	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 15:22	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 15:22	1
Trichloroethene	**37**		1.0	0.13	ug/L			02/08/13 15:22	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 15:22	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 15:22	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 15:22	1

Client Sample ID: WP02-87.15-GW

Lab Sample ID: 680-87268-6

Date Collected: 02/06/13 13:44

Matrix: Water

Date Received: 02/08/13 08:13

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*103*		*70 - 130*		*02/08/13 15:22*	*1*
4-Bromofluorobenzene	*99*		*70 - 130*		*02/08/13 15:22*	*1*
Dibromofluoromethane	*97*		*70 - 130*		*02/08/13 15:22*	*1*

Client Sample ID: WP02-96.4-GW

Lab Sample ID: 680-87268-7

Date Collected: 02/06/13 17:26

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 16:20	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 16:20	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 16:20	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 16:20	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 16:20	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 16:20	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 16:20	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 16:20	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 16:20	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 16:20	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 16:20	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 16:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 16:20	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 16:20	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 16:20	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 16:20	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 16:20	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 16:20	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 16:20	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 16:20	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 16:20	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 16:20	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 16:20	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 16:20	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 16:20	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 16:20	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 16:20	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 16:20	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 16:20	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 16:20	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 16:20	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 16:20	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP02-96.4-GW

Lab Sample ID: 680-87268-7

Date Collected: 02/06/13 17:26

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 16:20	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 16:20	1
Trichloroethene	**120**		1.0	0.13	ug/L			02/08/13 16:20	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 16:20	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 16:20	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 16:20*	*1*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/08/13 16:20*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/08/13 16:20*	*1*

Client Sample ID: TB-020713

Lab Sample ID: 680-87268-8

Date Collected: 02/07/13 10:00

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 13:13	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 13:13	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 13:13	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 13:13	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 13:13	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 13:13	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 13:13	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 13:13	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 13:13	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 13:13	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 13:13	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 13:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 13:13	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 13:13	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 13:13	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 13:13	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 13:13	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 13:13	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 13:13	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 13:13	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 13:13	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 13:13	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: TB-020713

Lab Sample ID: 680-87268-8

Date Collected: 02/07/13 10:00

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 13:13	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 13:13	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 13:13	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 13:13	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 13:13	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 13:13	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 13:13	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 13:13	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 13:13	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 13:13	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 13:13	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 13:13	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 13:13	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 13:13	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 13:13	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 13:13*	*1*
4-Bromofluorobenzene	*103*		*70 - 130*		*02/08/13 13:13*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/08/13 13:13*	*1*

Client Sample ID: WP-02-110.2-GW

Lab Sample ID: 680-87268-9

Date Collected: 02/07/13 12:50

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 16:48	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 16:48	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 16:48	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 16:48	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 16:48	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 16:48	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 16:48	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 16:48	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 16:48	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 16:48	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 16:48	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 16:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 16:48	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 16:48	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP-02-110.2-GW
Date Collected: 02/07/13 12:50
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-9
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 16:48	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 16:48	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 16:48	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 16:48	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 16:48	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 16:48	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 16:48	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 16:48	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 16:48	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 16:48	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 16:48	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 16:48	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 16:48	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 16:48	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 16:48	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 16:48	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 16:48	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 16:48	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 16:48	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 16:48	1
Trichloroethene	**1.5**		1.0	0.13	ug/L			02/08/13 16:48	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 16:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 16:48	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 16:48	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/08/13 16:48*	*1*
4-Bromofluorobenzene	*97*		*70 - 130*		*02/08/13 16:48*	*1*
Dibromofluoromethane	*96*		*70 - 130*		*02/08/13 16:48*	*1*

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

Lab Sample ID: MB 680-265674/7
Matrix: Water
Analysis Batch: 265674

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 12:58	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 12:58	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 12:58	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 12:58	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 12:58	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 12:58	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 12:58	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 12:58	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 12:58	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:58	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 12:58	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 12:58	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 12:58	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 12:58	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:58	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 12:58	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 12:58	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 12:58	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 12:58	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 12:58	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 12:58	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 12:58	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 12:58	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 12:58	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 12:58	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 12:58	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 12:58	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:58	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 12:58	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 12:58	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 12:58	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:58	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 12:58	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 12:58	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:58	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 12:58	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 12:58	1

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

Lab Sample ID: MB 680-265674/7
Matrix: Water
Analysis Batch: 265674

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		70 - 130		02/08/13 12:58	1
4-Bromofluorobenzene	99		70 - 130		02/08/13 12:58	1
Dibromofluoromethane	99		70 - 130		02/08/13 12:58	1

Lab Sample ID: LCS 680-265674/4
Matrix: Water
Analysis Batch: 265674

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	97.2		ug/L		97	39 - 162
Benzene	50.0	52.3		ug/L		105	74 - 123
Bromodichloromethane	50.0	57.1		ug/L		114	72 - 129
Bromoform	50.0	48.4		ug/L		97	60 - 134
Bromomethane	50.0	29.2		ug/L		58	10 - 171
2-Butanone	100	94.0		ug/L		94	55 - 142
Carbon disulfide	50.0	54.0		ug/L		108	63 - 142
Carbon tetrachloride	50.0	54.8		ug/L		110	70 - 131
Chlorobenzene	50.0	48.6		ug/L		97	79 - 120
Chloroethane	50.0	43.5		ug/L		87	47 - 148
Chloroform	50.0	51.6		ug/L		103	76 - 128
Chloromethane	50.0	48.3		ug/L		97	47 - 151
cis-1,2-Dichloroethene	50.0	54.0		ug/L		108	78 - 127
cis-1,3-Dichloropropene	50.0	48.0		ug/L		96	73 - 128
Cyclohexane	50.0	52.0		ug/L		104	68 - 137
Dibromochloromethane	50.0	42.9		ug/L		86	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	50.1		ug/L		100	57 - 126
1,2-Dibromoethane	50.0	54.1		ug/L		108	75 - 127
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	79 - 123
1,4-Dichlorobenzene	50.0	47.8		ug/L		96	76 - 124
1,2-Dichlorobenzene	50.0	48.9		ug/L		98	77 - 124
Dichlorodifluoromethane	50.0	46.0		ug/L		92	41 - 165
1,1-Dichloroethane	50.0	54.2		ug/L		108	69 - 132
1,2-Dichloroethane	50.0	49.0		ug/L		98	75 - 120
1,1-Dichloroethene	50.0	54.0		ug/L		108	73 - 134
1,2-Dichloropropane	50.0	50.1		ug/L		100	71 - 126
Ethylbenzene	50.0	51.0		ug/L		102	78 - 125
2-Hexanone	100	102		ug/L		102	52 - 149
Isopropylbenzene	50.0	48.6		ug/L		97	72 - 129
Methyl acetate	50.0	60.7		ug/L		121	26 - 182
Methylcyclohexane	50.0	52.6		ug/L		105	72 - 133
Methylene Chloride	50.0	49.4		ug/L		99	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	104		ug/L		104	76 - 126
Styrene	50.0	50.2		ug/L		100	75 - 129
1,1,2,2-Tetrachloroethane	50.0	51.6		ug/L		103	71 - 127
Tetrachloroethene	50.0	49.3		ug/L		99	77 - 128
Toluene	50.0	51.4		ug/L		103	77 - 125
trans-1,2-Dichloroethene	50.0	54.0		ug/L		108	78 - 130

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

Lab Sample ID: LCS 680-265674/4
Matrix: Water
Analysis Batch: 265674

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	54.1		ug/L		108	72 - 127
1,2,4-Trichlorobenzene	50.0	49.3		ug/L		99	67 - 134
1,1,1-Trichloroethane	50.0	50.7		ug/L		101	76 - 126
1,1,2-Trichloroethane	50.0	48.1		ug/L		96	69 - 127
Trichloroethene	50.0	49.6		ug/L		99	80 - 120
Trichlorofluoromethane	50.0	44.5		ug/L		89	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	56.8		ug/L		114	72 - 139
Vinyl chloride	50.0	50.8		ug/L		102	58 - 141
Xylenes, Total	150	149		ug/L		99	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*

Lab Sample ID: LCSD 680-265674/5
Matrix: Water
Analysis Batch: 265674

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
Acetone	100	97.4		ug/L		97	39 - 162	0	50
Benzene	50.0	51.6		ug/L		103	74 - 123	1	30
Bromodichloromethane	50.0	56.7		ug/L		113	72 - 129	1	30
Bromoform	50.0	49.3		ug/L		99	60 - 134	2	30
Bromomethane	50.0	31.4		ug/L		63	10 - 171	7	50
2-Butanone	100	95.9		ug/L		96	55 - 142	2	30
Carbon disulfide	50.0	50.7		ug/L		101	63 - 142	6	30
Carbon tetrachloride	50.0	52.3		ug/L		105	70 - 131	5	30
Chlorobenzene	50.0	48.4		ug/L		97	79 - 120	0	30
Chloroethane	50.0	40.8		ug/L		82	47 - 148	6	40
Chloroform	50.0	50.2		ug/L		100	76 - 128	3	30
Chloromethane	50.0	46.2		ug/L		92	47 - 151	4	30
cis-1,2-Dichloroethene	50.0	52.7		ug/L		105	78 - 127	2	30
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	73 - 128	2	30
Cyclohexane	50.0	51.3		ug/L		103	68 - 137	1	30
Dibromochloromethane	50.0	42.6		ug/L		85	63 - 134	1	50
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/L		101	57 - 126	1	50
1,2-Dibromoethane	50.0	56.8		ug/L		114	75 - 127	5	30
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	79 - 123	0	30
1,4-Dichlorobenzene	50.0	49.0		ug/L		98	76 - 124	2	30
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	77 - 124	1	30
Dichlorodifluoromethane	50.0	44.5		ug/L		89	41 - 165	3	50
1,1-Dichloroethane	50.0	52.1		ug/L		104	69 - 132	4	30
1,2-Dichloroethane	50.0	49.6		ug/L		99	75 - 120	1	30
1,1-Dichloroethene	50.0	50.1		ug/L		100	73 - 134	8	30
1,2-Dichloropropane	50.0	51.4		ug/L		103	71 - 126	3	30
Ethylbenzene	50.0	49.8		ug/L		100	78 - 125	2	30

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

Lab Sample ID: LCSD 680-265674/5
Matrix: Water
Analysis Batch: 265674

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
2-Hexanone			100	105		ug/L		105	52 - 149	3	30
Isopropylbenzene			50.0	48.0		ug/L		96	72 - 129	1	30
Methyl acetate			50.0	60.0		ug/L		120	26 - 182	1	30
Methylcyclohexane			50.0	50.7		ug/L		101	72 - 133	4	30
Methylene Chloride			50.0	48.8		ug/L		98	79 - 124	1	30
4-Methyl-2-pentanone			100	106		ug/L		106	51 - 143	5	30
Methyl tert-butyl ether			100	104		ug/L		104	76 - 126	1	30
Styrene			50.0	49.0		ug/L		98	75 - 129	2	30
1,1,2,2-Tetrachloroethane			50.0	51.4		ug/L		103	71 - 127	0	30
Tetrachloroethene			50.0	47.8		ug/L		96	77 - 128	3	30
Toluene			50.0	50.5		ug/L		101	77 - 125	2	30
trans-1,2-Dichloroethene			50.0	51.4		ug/L		103	78 - 130	5	30
trans-1,3-Dichloropropene			50.0	55.4		ug/L		111	72 - 127	3	50
1,2,4-Trichlorobenzene			50.0	49.1		ug/L		98	67 - 134	0	30
1,1,1-Trichloroethane			50.0	49.4		ug/L		99	76 - 126	2	30
1,1,2-Trichloroethane			50.0	48.4		ug/L		97	69 - 127	1	30
Trichloroethene			50.0	49.2		ug/L		98	80 - 120	1	30
Trichlorofluoromethane			50.0	43.0		ug/L		86	66 - 144	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	53.4		ug/L		107	72 - 139	6	30
Vinyl chloride			50.0	47.0		ug/L		94	58 - 141	8	30
Xylenes, Total			150	147		ug/L		98	80 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*

Lab Sample ID: MB 680-265679/7
Matrix: Water
Analysis Batch: 265679

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 12:44	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 12:44	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 12:44	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 12:44	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 12:44	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 12:44	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:44	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1

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

Lab Sample ID: MB 680-265679/7
Matrix: Water
Analysis Batch: 265679

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 12:44	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 12:44	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 12:44	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 12:44	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 12:44	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 12:44	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 12:44	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:44	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 12:44	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 12:44	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 12:44	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 12:44	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 12:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/08/13 12:44*	*1*
4-Bromofluorobenzene	*104*		*70 - 130*		*02/08/13 12:44*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/08/13 12:44*	*1*

Lab Sample ID: LCS 680-265679/4
Matrix: Water
Analysis Batch: 265679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	89.4		ug/L		89	39 - 162
Benzene	50.0	52.1		ug/L		104	74 - 123
Bromodichloromethane	50.0	57.2		ug/L		114	72 - 129
Bromoform	50.0	51.5		ug/L		103	60 - 134

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

Lab Sample ID: LCS 680-265679/4
Matrix: Water
Analysis Batch: 265679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	50.0	27.8		ug/L		56	10 - 171
2-Butanone	100	93.5		ug/L		94	55 - 142
Carbon disulfide	50.0	51.4		ug/L		103	63 - 142
Carbon tetrachloride	50.0	57.5		ug/L		115	70 - 131
Chlorobenzene	50.0	48.6		ug/L		97	79 - 120
Chloroethane	50.0	50.8		ug/L		102	47 - 148
Chloroform	50.0	50.6		ug/L		101	76 - 128
Chloromethane	50.0	46.1		ug/L		92	47 - 151
cis-1,2-Dichloroethene	50.0	52.7		ug/L		105	78 - 127
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	73 - 128
Cyclohexane	50.0	52.2		ug/L		104	68 - 137
Dibromochloromethane	50.0	51.0		ug/L		102	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	50.0		ug/L		100	57 - 126
1,2-Dibromoethane	50.0	54.8		ug/L		110	75 - 127
1,3-Dichlorobenzene	50.0	48.2		ug/L		96	79 - 123
1,4-Dichlorobenzene	50.0	47.7		ug/L		95	76 - 124
1,2-Dichlorobenzene	50.0	48.6		ug/L		97	77 - 124
Dichlorodifluoromethane	50.0	29.9		ug/L		60	41 - 165
1,1-Dichloroethane	50.0	52.8		ug/L		106	69 - 132
1,2-Dichloroethane	50.0	48.6		ug/L		97	75 - 120
1,1-Dichloroethene	50.0	50.0		ug/L		100	73 - 134
1,2-Dichloropropane	50.0	50.9		ug/L		102	71 - 126
Ethylbenzene	50.0	50.8		ug/L		102	78 - 125
2-Hexanone	100	102		ug/L		102	52 - 149
Isopropylbenzene	50.0	48.6		ug/L		97	72 - 129
Methyl acetate	50.0	59.5		ug/L		119	26 - 182
Methylcyclohexane	50.0	51.0		ug/L		102	72 - 133
Methylene Chloride	50.0	49.1		ug/L		98	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	102		ug/L		102	76 - 126
Styrene	50.0	48.7		ug/L		97	75 - 129
1,1,2,2-Tetrachloroethane	50.0	49.9		ug/L		100	71 - 127
Tetrachloroethene	50.0	49.7		ug/L		99	77 - 128
Toluene	50.0	51.6		ug/L		103	77 - 125
trans-1,2-Dichloroethene	50.0	51.8		ug/L		104	78 - 130
trans-1,3-Dichloropropene	50.0	56.7		ug/L		113	72 - 127
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	67 - 134
1,1,1-Trichloroethane	50.0	49.3		ug/L		99	76 - 126
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	69 - 127
Trichloroethene	50.0	50.0		ug/L		100	80 - 120
Trichlorofluoromethane	50.0	42.6		ug/L		85	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.7		ug/L		107	72 - 139
Vinyl chloride	50.0	43.2		ug/L		86	58 - 141
Xylenes, Total	150	148		ug/L		98	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: LCS 680-265679/4
Matrix: Water
Analysis Batch: 265679

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*70 - 130*
Dibromofluoromethane	*99*		*70 - 130*

Lab Sample ID: LCSD 680-265679/5
Matrix: Water
Analysis Batch: 265679

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
Acetone			100	89.0		ug/L		89	39 - 162	1	50
Benzene			50.0	52.7		ug/L		105	74 - 123	1	30
Bromodichloromethane			50.0	56.5		ug/L		113	72 - 129	1	30
Bromoform			50.0	50.3		ug/L		101	60 - 134	2	30
Bromomethane			50.0	38.1		ug/L		76	10 - 171	31	50
2-Butanone			100	89.2		ug/L		89	55 - 142	5	30
Carbon disulfide			50.0	53.8		ug/L		108	63 - 142	5	30
Carbon tetrachloride			50.0	56.8		ug/L		114	70 - 131	1	30
Chlorobenzene			50.0	49.0		ug/L		98	79 - 120	1	30
Chloroethane			50.0	55.8		ug/L		112	47 - 148	9	40
Chloroform			50.0	52.0		ug/L		104	76 - 128	3	30
Chloromethane			50.0	49.5		ug/L		99	47 - 151	7	30
cis-1,2-Dichloroethene			50.0	54.0		ug/L		108	78 - 127	2	30
cis-1,3-Dichloropropene			50.0	48.4		ug/L		97	73 - 128	0	30
Cyclohexane			50.0	51.3		ug/L		103	68 - 137	2	30
Dibromochloromethane			50.0	49.0		ug/L		98	63 - 134	4	50
1,2-Dibromo-3-Chloropropane			50.0	49.5		ug/L		99	57 - 126	1	50
1,2-Dibromoethane			50.0	53.9		ug/L		108	75 - 127	2	30
1,3-Dichlorobenzene			50.0	48.5		ug/L		97	79 - 123	1	30
1,4-Dichlorobenzene			50.0	47.4		ug/L		95	76 - 124	0	30
1,2-Dichlorobenzene			50.0	48.7		ug/L		97	77 - 124	0	30
Dichlorodifluoromethane			50.0	31.6		ug/L		63	41 - 165	5	50
1,1-Dichloroethane			50.0	54.5		ug/L		109	69 - 132	3	30
1,2-Dichloroethane			50.0	48.1		ug/L		96	75 - 120	1	30
1,1-Dichloroethene			50.0	52.4		ug/L		105	73 - 134	5	30
1,2-Dichloropropane			50.0	51.3		ug/L		103	71 - 126	1	30
Ethylbenzene			50.0	51.3		ug/L		103	78 - 125	1	30
2-Hexanone			100	98.8		ug/L		99	52 - 149	3	30
Isopropylbenzene			50.0	48.4		ug/L		97	72 - 129	0	30
Methyl acetate			50.0	59.9		ug/L		120	26 - 182	1	30
Methylcyclohexane			50.0	50.8		ug/L		102	72 - 133	0	30
Methylene Chloride			50.0	50.0		ug/L		100	79 - 124	2	30
4-Methyl-2-pentanone			100	98.9		ug/L		99	51 - 143	2	30
Methyl tert-butyl ether			100	102		ug/L		102	76 - 126	0	30
Styrene			50.0	48.2		ug/L		96	75 - 129	1	30
1,1,2,2-Tetrachloroethane			50.0	48.4		ug/L		97	71 - 127	3	30
Tetrachloroethene			50.0	49.1		ug/L		98	77 - 128	1	30
Toluene			50.0	52.2		ug/L		104	77 - 125	1	30
trans-1,2-Dichloroethene			50.0	54.4		ug/L		109	78 - 130	5	30
trans-1,3-Dichloropropene			50.0	56.4		ug/L		113	72 - 127	1	50

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

Lab Sample ID: LCSD 680-265679/5
Matrix: Water
Analysis Batch: 265679

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
1,2,4-Trichlorobenzene			50.0	48.9		ug/L		98	67 - 134	1	30
1,1,1-Trichloroethane			50.0	48.7		ug/L		97	76 - 126	1	30
1,1,2-Trichloroethane			50.0	47.5		ug/L		95	69 - 127	2	30
Trichloroethene			50.0	50.8		ug/L		102	80 - 120	2	30
Trichlorofluoromethane			50.0	41.0		ug/L		82	66 - 144	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	54.1		ug/L		108	72 - 139	1	30
Vinyl chloride			50.0	47.4		ug/L		95	58 - 141	9	30
Xylenes, Total			150	147		ug/L		98	80 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*102*		*70 - 130*

QC Association Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

GC/MS VOA

Analysis Batch: 265674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87268-1	WP01-70.0-GW	Total/NA	Water	8260B	
680-87268-2	WP01-91.5-GW	Total/NA	Water	8260B	
680-87268-3	WP01-100.0-GW	Total/NA	Water	8260B	
680-87268-4	WP01-110.0-GW	Total/NA	Water	8260B	
680-87268-5	WP02-75.0-GW	Total/NA	Water	8260B	
680-87268-6	WP02-87.15-GW	Total/NA	Water	8260B	
680-87268-7	WP02-96.4-GW	Total/NA	Water	8260B	
680-87268-9	WP-02-110.2-GW	Total/NA	Water	8260B	
LCS 680-265674/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-265674/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-265674/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87268-8	TB-020713	Total/NA	Water	8260B	
LCS 680-265679/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-265679/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-265679/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP01-70.0-GW
Lab Sample ID: 680-87268-1
Date Collected: 02/05/13 14:06
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 13:27	JD	TAL SAV

Client Sample ID: WP01-91.5-GW
Lab Sample ID: 680-87268-2
Date Collected: 02/06/13 10:09
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 13:56	JD	TAL SAV

Client Sample ID: WP01-100.0-GW
Lab Sample ID: 680-87268-3
Date Collected: 02/06/13 14:15
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 14:25	JD	TAL SAV

Client Sample ID: WP01-110.0-GW
Lab Sample ID: 680-87268-4
Date Collected: 02/06/13 17:11
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 14:53	JD	TAL SAV

Client Sample ID: WP02-75.0-GW
Lab Sample ID: 680-87268-5
Date Collected: 02/06/13 10:07
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 15:51	JD	TAL SAV

Client Sample ID: WP02-87.15-GW
Lab Sample ID: 680-87268-6
Date Collected: 02/06/13 13:44
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 15:22	JD	TAL SAV

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Client Sample ID: WP02-96.4-GW

Lab Sample ID: 680-87268-7

Date Collected: 02/06/13 17:26
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 16:20	JD	TAL SAV

Client Sample ID: TB-020713

Lab Sample ID: 680-87268-8

Date Collected: 02/07/13 10:00
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 13:13	JD	TAL SAV

Client Sample ID: WP-02-110.2-GW

Lab Sample ID: 680-87268-9

Date Collected: 02/07/13 12:50
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 16:48	JD	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: NYSDOH

Client Contact	Project Manager: JOSEPH SCHMIDL	Site Contact: David Lindavi	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802/229-5377	Lab Contact: M. Kersey	Carrier: Fed Ex	1 of 5 COCs
535 Stone Cutters Way	**Analysis Turnaround Time**			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) W			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below (3 days)			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: SCHAGHTICOKE DEPOT	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C/TASK 5D	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	VOCs 8260B	Sample Specific Notes:
WP01-70.0-GW	2/5/13	14:06	Grab	GW	2	N	G	✓	These samples are 3-day TAT
WP01-91.5-GW	2/6/13	10:09						✓	
WP01-100.0-GW	2/6/13	14:15						✓	
WP01-~~150~~ 110.0-GW	2/6/13	17:11						✓	
WP02-75.0-GW	2/6/13	10:07						✓	
WP02-87.5-GW	2/6/13	13:44						✓	
WP02-96.4-GW	2/6/13	17:26						✓	
TB-020713	2/7/13	15:00	↓	↓	↓	↓	↓	✓	
WP-02-110.2-GW	2/7/13	12:50							

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87263
2.6°C

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	S. Tenney Environmental	2/7/13 1730			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA SAV	Date/Time: 2/8/13 0816

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

Client Contact	Project Manager: Joseph Schmidl	Site Contact: David Linaci	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 603-455-6946	Lab Contact: M. Kersey	Carrier: Fed Ex	2 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			Job / SDG No.:
Project Name: DNS Center Sceptic Depot	☒ 1 week			
Site: Sceptic Depot Site, Glenville, NY	☐ 2 days			Sampler: ESP
PO# 102305-R C	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260 - VOC	Sample Specific Notes:
MW12-78.0-GW	2/5/13	15:20	Grab	GW	3	N	G	X	
MWGEP1-73.0-GW	2/7/13	11:50							
MWGEP2-76.0-GW	2/7/13	10:37							
MWGEP2-76.0-MS	2/7/13	10:37							
MWGEP2-76.0-MSD	2/7/13	10:37							
MW33-x-EB	2/5/13	16:40							

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-37263

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:30	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company: TA SV	Date/Time: 2/8/13 0816

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

Client Contact	Project Manager: Joseph Schmidl	Site Contact:	Date:	COC No:
Stone Environmental, Inc.	Tel/Fax: 603-455-0946	Lab Contact:	Carrier:	2 of 5 COCs
535 Stone Cutters Way	**Analysis Turnaround Time**			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: DNS Center Scotia Depot	☒ 1 week			Job / SDG No.:
Site: Scotia Depot Site, Glenville, NY	☐ 2 days			
PO# 102305-RC	☐ 1 day			Sampler: JP

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260C-VOC	Sample Specific Notes:
MW21-72.0-GW	2/7/13	09:11	Grab	GW	3	N	G	X	
MW21-72.0-D	2/7/13	09:11							
MW21-X-EB	2/7/13	09:30							
MWGEP4-73.0-GW	2/6/13	16:15							
MWGEP4-73.0-D	2/6/13	16:15							
MW7-70.5-GW	2/5/13	13:50							
MW5-72.0-GW	2/5/13	10:28							
MW17-75.0-GW	2/6/13	14:45							
MW23-80.0-GW	2/6/13	13:31							
MW31-64.0-GW	2/6/13	11:57							
MW33-62.0-GW	2/6/13	08:35							
MW32-66.0-GW	2/6/13	09:53	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87268

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:32	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA BV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joseph Schmidl	Site Contact: David Linnai	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802-229-5377	Lab Contact: M. Kersey	Carrier: FedEx	1 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W)			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: Seneca Naval Depot	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C/Task 5D	☐ 1 day			Sampler: DTL

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260B - VOCs	Sample Specific Notes:
MW13-78-GW	2/7/13	1240	Grab	GW	3	N	G	X	
TB-020713B	2/7/13	1400	↓	↓	↓	↓	↓	↓	
MW6-71-GW	2/7/13	1405	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

630 97268

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Stone Environmental	2/7/13 17:30			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA SV	2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: NYSDOH

Client Contact	Project Manager: Joseph Schmid	Site Contact: David Livari	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802-229-5377	Lab Contact: M. Kersey	Carrier: FedEx	5 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			Job / SDG No.:
Project Name: Scotia Naval Depot	☒ 1 week			
Site:	☐ 2 days			Sampler:
PO# 102305-R-C / Task 5D	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260	Sample Specific Notes:
MW9-110-GW	2/5/13	1040	GRAB	GW	3	N	G		
MW16-67-GW	↓	1415	↓	↓	↓	↓	↓		
PMW-3-78-GW	↓	1620							
MW20-78-GW	2/6/13	0910							
MW22-73-GW	↓	1205							
MW19-75-GW		1345							
MW19-75-GW		1510							
MW15-79-GW		1625							
MW15-X-EB	↓	1700							
MW14-76-GW	2/7/13	0910							
MW14-76-MS	↓	0910							
MW14-76-MSD	↓	0910	↓	↓	↓	↓	↓		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87268

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:30	Received by:	Company	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA SV	Date/Time: 2/8/13 0816

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87268-1
SDG Number: 68087268-1

Login Number: 87268
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received and the COC.	False	RECEIVED -39 NOT ON COC/-31 LABEL READS "82" NOT "78"
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-1
SDG: 68087268-1

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	02-28-13
A2LA	ISO/IEC 17025		399.01	02-28-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-12
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-12
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	02-28-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-12
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	12-31-12
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-13
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-12
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-87268-2
TestAmerica Sample Delivery Group: 68087268-2
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Michele R Kersey

Authorized for release by:
2/12/2013 11:39:21 AM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

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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Job ID: 680-87268-2

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87268-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/8/2013 8:13 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW12-78.0-GW (680-87268-10), MWGEP1-73.0-GW (680-87268-11), MWGEP2-76.0-GW (680-87268-12), MW83-X-EB (680-87268-13), MW21-72.0-GW (680-87268-14), MW21-72.0-D (680-87268-15), MW-21-X-EB (680-87268-16), MWGEP4-73.0-GW (680-87268-17), MWGEP4-73.0-D (680-87268-18), MW7-70.5-GW (680-87268-19), MW5-72.0-GW (680-87268-20), MW17-75.0-GW (680-87268-21), MW23-80.0-GW (680-87268-22), MWB1-64.0-GW (680-87268-23), MWB3-62.0-GW (680-87268-24), MWB2-66.0-GW (680-87268-25), MW13-78-GW (680-87268-26) and TB-02071313 (680-87268-27) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/08/2013 and 02/09/2013.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87268-10	MW12-78.0-GW	Water	02/05/13 15:20	02/08/13 08:13
680-87268-11	MWGEP1-73.0-GW	Water	02/07/13 11:50	02/08/13 08:13
680-87268-12	MWGEP2-76.0-GW	Water	02/07/13 10:37	02/08/13 08:13
680-87268-13	MW83-X-EB	Water	02/05/13 16:40	02/08/13 08:13
680-87268-14	MW21-72.0-GW	Water	02/07/13 09:11	02/08/13 08:13
680-87268-15	MW21-72.0-D	Water	02/07/13 09:11	02/08/13 08:13
680-87268-16	MW-21-X-EB	Water	02/07/13 09:30	02/08/13 08:13
680-87268-17	MWGEP4-73.0-GW	Water	02/06/13 16:15	02/08/13 08:13
680-87268-18	MWGEP4-73.0-D	Water	02/06/13 16:15	02/08/13 08:13
680-87268-19	MW7-70.5-GW	Water	02/05/13 13:50	02/08/13 08:13
680-87268-20	MW5-72.0-GW	Water	02/05/13 10:28	02/08/13 08:13
680-87268-21	MW17-75.0-GW	Water	02/06/13 14:45	02/08/13 08:13
680-87268-22	MW23-80.0-GW	Water	02/06/13 13:31	02/08/13 08:13
680-87268-23	MWB1-64.0-GW	Water	02/06/13 11:57	02/08/13 08:13
680-87268-24	MWB3-62.0-GW	Water	02/06/13 08:35	02/08/13 08:13
680-87268-25	MWB2-66.0-GW	Water	02/06/13 09:53	02/08/13 08:13
680-87268-26	MW13-78-GW	Water	02/07/13 12:40	02/08/13 08:13
680-87268-27	TB-02071313	Water	02/07/13 14:00	02/08/13 08:13

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW12-78.0-GW
Date Collected: 02/05/13 15:20
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-10
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 17:17	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
Bromodichloromethane	**0.35**	**J**	1.0	0.25	ug/L			02/08/13 17:17	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 17:17	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 17:17	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 17:17	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 17:17	1
Carbon tetrachloride	**6.2**		1.0	0.50	ug/L			02/08/13 17:17	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 17:17	1
Chloroform	**0.82**	**J**	1.0	0.14	ug/L			02/08/13 17:17	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 17:17	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 17:17	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 17:17	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 17:17	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 17:17	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 17:17	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 17:17	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
1,2-Dichloroethane	**0.18**	**J**	1.0	0.10	ug/L			02/08/13 17:17	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 17:17	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 17:17	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 17:17	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 17:17	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 17:17	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 17:17	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 17:17	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 17:17	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 17:17	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 17:17	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 17:17	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 17:17	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 17:17	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 17:17	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 17:17	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 17:17	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 17:17	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 17:17	1
Trichloroethene	**2.8**		1.0	0.13	ug/L			02/08/13 17:17	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 17:17	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 17:17	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 17:17	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW12-78.0-GW

Lab Sample ID: 680-87268-10

Date Collected: 02/05/13 15:20
Matrix: Water
Date Received: 02/08/13 08:13

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*99*		*70 - 130*		*02/08/13 17:17*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/08/13 17:17*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*02/08/13 17:17*	*1*

Client Sample ID: MWGEP1-73.0-GW

Lab Sample ID: 680-87268-11

Date Collected: 02/07/13 11:50
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 17:46	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 17:46	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 17:46	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 17:46	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 17:46	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 17:46	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 17:46	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 17:46	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 17:46	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 17:46	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 17:46	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 17:46	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 17:46	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 17:46	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 17:46	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 17:46	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 17:46	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 17:46	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 17:46	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 17:46	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 17:46	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 17:46	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 17:46	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 17:46	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 17:46	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 17:46	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 17:46	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 17:46	1
Tetrachloroethene	**1.0**		1.0	0.15	ug/L			02/08/13 17:46	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 17:46	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 17:46	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 17:46	1

Client Sample ID: MWGEP1-73.0-GW

Lab Sample ID: 680-87268-11

Date Collected: 02/07/13 11:50

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 17:46	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 17:46	1
Trichloroethene	**160**		1.0	0.13	ug/L			02/08/13 17:46	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 17:46	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 17:46	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/08/13 17:46*	*1*
Dibromofluoromethane	*98*		*70 - 130*		*02/08/13 17:46*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*02/08/13 17:46*	*1*

Client Sample ID: MWGEP2-76.0-GW

Lab Sample ID: 680-87268-12

Date Collected: 02/07/13 10:37

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 18:15	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 18:15	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 18:15	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 18:15	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 18:15	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 18:15	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 18:15	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 18:15	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 18:15	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 18:15	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 18:15	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:15	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 18:15	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 18:15	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 18:15	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:15	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 18:15	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 18:15	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 18:15	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 18:15	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 18:15	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 18:15	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MWGEP2-76.0-GW

Lab Sample ID: 680-87268-12

Date Collected: 02/07/13 10:37
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 18:15	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 18:15	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 18:15	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 18:15	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 18:15	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 18:15	1
Tetrachloroethene	**1.4**		1.0	0.15	ug/L			02/08/13 18:15	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 18:15	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 18:15	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 18:15	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
1,1,1-Trichloroethane	**7.6**		1.0	0.50	ug/L			02/08/13 18:15	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 18:15	1
Trichloroethene	**78**		1.0	0.13	ug/L			02/08/13 18:15	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 18:15	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 18:15	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*70 - 130*		*02/08/13 18:15*	*1*
Dibromofluoromethane	*98*		*70 - 130*		*02/08/13 18:15*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 18:15*	*1*

Client Sample ID: MW83-X-EB

Lab Sample ID: 680-87268-13

Date Collected: 02/05/13 16:40
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 14:39	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 14:39	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 14:39	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 14:39	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 14:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 14:39	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 14:39	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 14:39	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 14:39	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 14:39	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 14:39	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 14:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 14:39	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 14:39	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1

Client Sample ID: MW83-X-EB — **Lab Sample ID: 680-87268-13**
Date Collected: 02/05/13 16:40 — **Matrix: Water**
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 14:39	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 14:39	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 14:39	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 14:39	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 14:39	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 14:39	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 14:39	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 14:39	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 14:39	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 14:39	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 14:39	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 14:39	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 14:39	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 14:39	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 14:39	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 14:39	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 14:39	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 14:39	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 14:39	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 14:39	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 14:39	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 14:39	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 14:39	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 130*		*02/08/13 14:39*	*1*
Dibromofluoromethane	*95*		*70 - 130*		*02/08/13 14:39*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/08/13 14:39*	*1*

Client Sample ID: MW21-72.0-GW — **Lab Sample ID: 680-87268-14**
Date Collected: 02/07/13 09:11 — **Matrix: Water**
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 18:44	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:44	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:44	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 18:44	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 18:44	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 18:44	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 18:44	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 18:44	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:44	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 18:44	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW21-72.0-GW
Date Collected: 02/07/13 09:11
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-14
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	**0.38**	**J**	1.0	0.14	ug/L			02/08/13 18:44	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 18:44	1
cis-1,2-Dichloroethene	**20**		1.0	0.15	ug/L			02/08/13 18:44	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 18:44	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 18:44	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 18:44	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:44	1
1,2-Dichlorobenzene	**0.65**	**J**	1.0	0.21	ug/L			02/08/13 18:44	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:44	1
1,4-Dichlorobenzene	**7.3**		1.0	0.28	ug/L			02/08/13 18:44	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:44	1
1,1-Dichloroethane	**6.6**		1.0	0.25	ug/L			02/08/13 18:44	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:44	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 18:44	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 18:44	1
Ethylbenzene	**0.62**	**J**	1.0	0.11	ug/L			02/08/13 18:44	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 18:44	1
Isopropylbenzene	**1.9**		1.0	0.10	ug/L			02/08/13 18:44	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 18:44	1
Methylcyclohexane	**0.77**	**J**	1.0	0.10	ug/L			02/08/13 18:44	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 18:44	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 18:44	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 18:44	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 18:44	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 18:44	1
Tetrachloroethene	**1.7**		1.0	0.15	ug/L			02/08/13 18:44	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 18:44	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 18:44	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 18:44	1
1,2,4-Trichlorobenzene	**0.27**	**J**	1.0	0.25	ug/L			02/08/13 18:44	1
1,1,1-Trichloroethane	**4.3**		1.0	0.50	ug/L			02/08/13 18:44	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 18:44	1
Trichloroethene	**0.76**	**J**	1.0	0.13	ug/L			02/08/13 18:44	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 18:44	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 18:44	1
Xylenes, Total	**0.21**	**J**	2.0	0.20	ug/L			02/08/13 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*02/08/13 18:44*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/08/13 18:44*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*02/08/13 18:44*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW21-72.0-D
Date Collected: 02/07/13 09:11
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-15
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 17:32	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 17:32	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 17:32	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 17:32	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 17:32	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 17:32	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 17:32	1
Chloroform	**0.45**	**J**	1.0	0.14	ug/L			02/08/13 17:32	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 17:32	1
cis-1,2-Dichloroethene	**20**		1.0	0.15	ug/L			02/08/13 17:32	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 17:32	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 17:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 17:32	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
1,2-Dichlorobenzene	**0.77**	**J**	1.0	0.21	ug/L			02/08/13 17:32	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
1,4-Dichlorobenzene	**7.6**		1.0	0.28	ug/L			02/08/13 17:32	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
1,1-Dichloroethane	**6.8**		1.0	0.25	ug/L			02/08/13 17:32	1
1,2-Dichloroethane	**0.17**	**J**	1.0	0.10	ug/L			02/08/13 17:32	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 17:32	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 17:32	1
Ethylbenzene	**0.62**	**J**	1.0	0.11	ug/L			02/08/13 17:32	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 17:32	1
Isopropylbenzene	**1.9**		1.0	0.10	ug/L			02/08/13 17:32	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 17:32	1
Methylcyclohexane	**0.77**	**J**	1.0	0.10	ug/L			02/08/13 17:32	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 17:32	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 17:32	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 17:32	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 17:32	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 17:32	1
Tetrachloroethene	**2.0**		1.0	0.15	ug/L			02/08/13 17:32	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 17:32	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 17:32	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 17:32	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
1,1,1-Trichloroethane	**4.5**		1.0	0.50	ug/L			02/08/13 17:32	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 17:32	1
Trichloroethene	**0.71**	**J**	1.0	0.13	ug/L			02/08/13 17:32	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 17:32	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 17:32	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 17:32	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW21-72.0-D

Lab Sample ID: 680-87268-15

Date Collected: 02/07/13 09:11
Matrix: Water
Date Received: 02/08/13 08:13

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/08/13 17:32*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/08/13 17:32*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 17:32*	*1*

Client Sample ID: MW-21-X-EB

Lab Sample ID: 680-87268-16

Date Collected: 02/07/13 09:30
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 15:08	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 15:08	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 15:08	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 15:08	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 15:08	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 15:08	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 15:08	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 15:08	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 15:08	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 15:08	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 15:08	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 15:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 15:08	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 15:08	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 15:08	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 15:08	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 15:08	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 15:08	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 15:08	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 15:08	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 15:08	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 15:08	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 15:08	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 15:08	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 15:08	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 15:08	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 15:08	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 15:08	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 15:08	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 15:08	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 15:08	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 15:08	1

Client Sample ID: MW-21-X-EB

Lab Sample ID: 680-87268-16

Date Collected: 02/07/13 09:30

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 15:08	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 15:08	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 15:08	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 15:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 15:08	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 15:08	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/08/13 15:08*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/08/13 15:08*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 15:08*	*1*

Client Sample ID: MWGEP4-73.0-GW

Lab Sample ID: 680-87268-17

Date Collected: 02/06/13 16:15

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 18:00	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 18:00	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 18:00	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 18:00	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 18:00	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 18:00	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 18:00	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 18:00	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 18:00	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 18:00	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 18:00	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 18:00	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 18:00	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 18:00	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:00	1
1,1-Dichloroethene	**0.14**	**J**	1.0	0.11	ug/L			02/08/13 18:00	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 18:00	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 18:00	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 18:00	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 18:00	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 18:00	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MWGEP4-73.0-GW

Lab Sample ID: 680-87268-17

Date Collected: 02/06/13 16:15
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 18:00	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 18:00	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 18:00	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 18:00	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 18:00	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 18:00	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 18:00	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 18:00	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 18:00	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 18:00	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
1,1,1-Trichloroethane	**1.1**		1.0	0.50	ug/L			02/08/13 18:00	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 18:00	1
Trichloroethene	**71**		1.0	0.13	ug/L			02/08/13 18:00	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 18:00	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 18:00	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 130*		*02/08/13 18:00*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/08/13 18:00*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 18:00*	*1*

Client Sample ID: MWGEP4-73.0-D

Lab Sample ID: 680-87268-18

Date Collected: 02/06/13 16:15
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 18:29	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 18:29	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 18:29	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 18:29	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 18:29	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 18:29	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 18:29	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 18:29	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 18:29	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 18:29	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 18:29	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 18:29	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 18:29	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1

Client Sample ID: MWGEP4-73.0-D — **Lab Sample ID: 680-87268-18**
Date Collected: 02/06/13 16:15 — **Matrix: Water**
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 18:29	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:29	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 18:29	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 18:29	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 18:29	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 18:29	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 18:29	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 18:29	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 18:29	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 18:29	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 18:29	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 18:29	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 18:29	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 18:29	1
Tetrachloroethene	**0.42**	**J**	1.0	0.15	ug/L			02/08/13 18:29	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 18:29	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 18:29	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 18:29	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
1,1,1-Trichloroethane	**1.0**		1.0	0.50	ug/L			02/08/13 18:29	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 18:29	1
Trichloroethene	**72**		1.0	0.13	ug/L			02/08/13 18:29	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 18:29	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 18:29	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/08/13 18:29*	*1*
Dibromofluoromethane	*98*		*70 - 130*		*02/08/13 18:29*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 18:29*	*1*

Client Sample ID: MW7-70.5-GW — **Lab Sample ID: 680-87268-19**
Date Collected: 02/05/13 13:50 — **Matrix: Water**
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 19:12	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 19:12	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 19:12	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 19:12	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 19:12	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 19:12	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 19:12	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW7-70.5-GW
Date Collected: 02/05/13 13:50
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-19
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 19:12	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 19:12	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 19:12	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 19:12	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 19:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 19:12	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 19:12	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 19:12	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 19:12	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 19:12	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 19:12	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 19:12	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 19:12	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 19:12	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 19:12	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 19:12	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 19:12	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 19:12	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 19:12	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 19:12	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 19:12	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 19:12	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 19:12	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 19:12	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 19:12	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 19:12	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 19:12	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 19:12	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 19:12	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 19:12	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*02/08/13 19:12*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/08/13 19:12*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*02/08/13 19:12*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW5-72.0-GW
Date Collected: 02/05/13 10:28
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-20
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 19:41	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 19:41	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 19:41	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 19:41	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 19:41	1
Carbon tetrachloride	**4.1**		1.0	0.50	ug/L			02/08/13 19:41	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 19:41	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 19:41	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 19:41	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 19:41	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 19:41	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 19:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 19:41	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 19:41	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 19:41	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 19:41	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 19:41	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 19:41	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 19:41	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 19:41	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 19:41	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 19:41	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 19:41	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 19:41	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 19:41	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 19:41	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 19:41	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 19:41	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 19:41	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 19:41	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 19:41	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 19:41	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 19:41	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 19:41	1
Trichloroethene	**0.38**	**J**	1.0	0.13	ug/L			02/08/13 19:41	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 19:41	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 19:41	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 19:41	1

Client Sample ID: MW5-72.0-GW

Lab Sample ID: 680-87268-20

Date Collected: 02/05/13 10:28

Matrix: Water

Date Received: 02/08/13 08:13

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*102*		*70 - 130*		*02/08/13 19:41*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/08/13 19:41*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*02/08/13 19:41*	*1*

Client Sample ID: MW17-75.0-GW

Lab Sample ID: 680-87268-21

Date Collected: 02/06/13 14:45

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 18:58	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 18:58	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 18:58	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 18:58	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 18:58	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 18:58	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 18:58	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 18:58	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 18:58	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 18:58	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 18:58	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 18:58	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 18:58	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 18:58	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 18:58	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 18:58	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 18:58	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 18:58	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 18:58	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 18:58	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 18:58	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 18:58	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 18:58	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 18:58	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 18:58	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 18:58	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 18:58	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 18:58	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 18:58	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 18:58	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 18:58	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW17-75.0-GW

Lab Sample ID: 680-87268-21

Date Collected: 02/06/13 14:45
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
1,1,1-Trichloroethane	**1.9**		1.0	0.50	ug/L			02/08/13 18:58	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 18:58	1
Trichloroethene	**5.0**		1.0	0.13	ug/L			02/08/13 18:58	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 18:58	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 18:58	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/08/13 18:58*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/08/13 18:58*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 18:58*	*1*

Client Sample ID: MW23-80.0-GW

Lab Sample ID: 680-87268-22

Date Collected: 02/06/13 13:31
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 19:27	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 19:27	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 19:27	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 19:27	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 19:27	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 19:27	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 19:27	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 19:27	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 19:27	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 19:27	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 19:27	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 19:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 19:27	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 19:27	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 19:27	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 19:27	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 19:27	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 19:27	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 19:27	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 19:27	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 19:27	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 19:27	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW23-80.0-GW

Lab Sample ID: 680-87268-22

Date Collected: 02/06/13 13:31
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 19:27	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 19:27	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 19:27	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 19:27	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 19:27	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 19:27	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 19:27	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 19:27	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 19:27	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 19:27	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 19:27	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 19:27	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 19:27	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 19:27	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 19:27	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*02/08/13 19:27*	*1*
Dibromofluoromethane	*98*		*70 - 130*		*02/08/13 19:27*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*02/08/13 19:27*	*1*

Client Sample ID: MWB1-64.0-GW

Lab Sample ID: 680-87268-23

Date Collected: 02/06/13 11:57
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 19:55	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 19:55	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 19:55	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 19:55	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 19:55	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 19:55	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 19:55	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 19:55	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 19:55	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 19:55	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 19:55	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 19:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 19:55	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 19:55	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1

Client Sample ID: MWB1-64.0-GW — **Lab Sample ID: 680-87268-23**
Date Collected: 02/06/13 11:57 — **Matrix: Water**
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 19:55	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 19:55	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 19:55	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 19:55	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 19:55	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 19:55	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 19:55	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 19:55	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 19:55	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 19:55	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 19:55	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 19:55	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 19:55	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 19:55	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 19:55	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 19:55	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 19:55	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 19:55	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 19:55	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 19:55	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 19:55	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 19:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 19:55	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 19:55	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/08/13 19:55*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/08/13 19:55*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/08/13 19:55*	*1*

Client Sample ID: MWB3-62.0-GW — **Lab Sample ID: 680-87268-24**
Date Collected: 02/06/13 08:35 — **Matrix: Water**
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 15:48	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 15:48	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 15:48	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 15:48	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 15:48	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 15:48	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 15:48	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MWB3-62.0-GW
Date Collected: 02/06/13 08:35
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-24
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 15:48	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 15:48	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 15:48	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 15:48	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 15:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 15:48	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 15:48	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 15:48	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 15:48	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 15:48	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 15:48	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 15:48	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 15:48	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 15:48	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 15:48	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 15:48	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 15:48	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 15:48	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 15:48	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 15:48	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 15:48	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 15:48	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 15:48	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 15:48	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 15:48	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 15:48	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 15:48	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/09/13 15:48	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 15:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 15:48	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 15:48	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*02/09/13 15:48*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/09/13 15:48*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/09/13 15:48*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MWB2-66.0-GW
Date Collected: 02/06/13 09:53
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-25
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 16:09	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 16:09	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 16:09	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 16:09	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 16:09	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 16:09	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 16:09	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 16:09	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 16:09	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 16:09	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 16:09	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 16:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 16:09	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 16:09	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 16:09	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 16:09	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 16:09	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 16:09	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 16:09	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 16:09	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 16:09	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 16:09	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 16:09	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 16:09	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 16:09	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 16:09	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 16:09	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 16:09	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 16:09	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 16:09	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 16:09	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 16:09	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 16:09	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 16:09	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/09/13 16:09	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 16:09	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 16:09	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 16:09	1

Client Sample ID: MWB2-66.0-GW

Lab Sample ID: 680-87268-25

Date Collected: 02/06/13 09:53

Matrix: Water

Date Received: 02/08/13 08:13

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 130*		*02/09/13 16:09*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/09/13 16:09*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*02/09/13 16:09*	*1*

Client Sample ID: MW13-78-GW

Lab Sample ID: 680-87268-26

Date Collected: 02/07/13 12:40

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 16:29	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 16:29	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 16:29	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 16:29	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 16:29	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 16:29	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 16:29	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 16:29	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 16:29	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 16:29	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 16:29	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 16:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 16:29	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 16:29	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 16:29	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
1,1-Dichloroethane	**0.27**	**J**	1.0	0.25	ug/L			02/09/13 16:29	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 16:29	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 16:29	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 16:29	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 16:29	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 16:29	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 16:29	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 16:29	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 16:29	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 16:29	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 16:29	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 16:29	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 16:29	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 16:29	1
Tetrachloroethene	**0.53**	**J**	1.0	0.15	ug/L			02/09/13 16:29	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 16:29	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 16:29	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 16:29	1

Client Sample ID: MW13-78-GW

Lab Sample ID: 680-87268-26

Date Collected: 02/07/13 12:40

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 16:29	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 16:29	1
Trichloroethene	**150**		1.0	0.13	ug/L			02/09/13 16:29	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 16:29	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 16:29	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/09/13 16:29*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/09/13 16:29*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/09/13 16:29*	*1*

Client Sample ID: TB-02071313

Lab Sample ID: 680-87268-27

Date Collected: 02/07/13 14:00

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 13:41	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 13:41	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 13:41	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 13:41	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 13:41	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 13:41	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 13:41	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 13:41	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 13:41	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 13:41	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 13:41	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 13:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 13:41	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 13:41	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 13:41	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 13:41	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 13:41	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 13:41	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 13:41	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 13:41	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 13:41	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 13:41	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: TB-02071313
Date Collected: 02/07/13 14:00
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-27
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 13:41	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 13:41	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 13:41	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 13:41	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 13:41	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 13:41	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 13:41	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 13:41	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 13:41	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 13:41	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 13:41	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 13:41	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 13:41	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 13:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 13:41	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 13:41	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/08/13 13:41*	*1*
Dibromofluoromethane	*103*		*70 - 130*		*02/08/13 13:41*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/08/13 13:41*	*1*

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

Lab Sample ID: MB 680-265674/7
Matrix: Water
Analysis Batch: 265674

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 12:58	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 12:58	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 12:58	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 12:58	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 12:58	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 12:58	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 12:58	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 12:58	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 12:58	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:58	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 12:58	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 12:58	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 12:58	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 12:58	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:58	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 12:58	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 12:58	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 12:58	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 12:58	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 12:58	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 12:58	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 12:58	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 12:58	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 12:58	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 12:58	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 12:58	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 12:58	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:58	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 12:58	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 12:58	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 12:58	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:58	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 12:58	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 12:58	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:58	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 12:58	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 12:58	1

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

Lab Sample ID: MB 680-265674/7
Matrix: Water
Analysis Batch: 265674

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		70 - 130		02/08/13 12:58	1
Dibromofluoromethane	99		70 - 130		02/08/13 12:58	1
Toluene-d8 (Surr)	103		70 - 130		02/08/13 12:58	1

Lab Sample ID: LCS 680-265674/4
Matrix: Water
Analysis Batch: 265674

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	97.2		ug/L		97	39 - 162
Benzene	50.0	52.3		ug/L		105	74 - 123
Bromodichloromethane	50.0	57.1		ug/L		114	72 - 129
Bromoform	50.0	48.4		ug/L		97	60 - 134
Bromomethane	50.0	29.2		ug/L		58	10 - 171
2-Butanone	100	94.0		ug/L		94	55 - 142
Carbon disulfide	50.0	54.0		ug/L		108	63 - 142
Carbon tetrachloride	50.0	54.8		ug/L		110	70 - 131
Chlorobenzene	50.0	48.6		ug/L		97	79 - 120
Chloroethane	50.0	43.5		ug/L		87	47 - 148
Chloroform	50.0	51.6		ug/L		103	76 - 128
Chloromethane	50.0	48.3		ug/L		97	47 - 151
cis-1,2-Dichloroethene	50.0	54.0		ug/L		108	78 - 127
cis-1,3-Dichloropropene	50.0	48.0		ug/L		96	73 - 128
Cyclohexane	50.0	52.0		ug/L		104	68 - 137
Dibromochloromethane	50.0	42.9		ug/L		86	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	50.1		ug/L		100	57 - 126
1,2-Dibromoethane	50.0	54.1		ug/L		108	75 - 127
1,2-Dichlorobenzene	50.0	48.9		ug/L		98	77 - 124
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	79 - 123
1,4-Dichlorobenzene	50.0	47.8		ug/L		96	76 - 124
Dichlorodifluoromethane	50.0	46.0		ug/L		92	41 - 165
1,1-Dichloroethane	50.0	54.2		ug/L		108	69 - 132
1,2-Dichloroethane	50.0	49.0		ug/L		98	75 - 120
1,1-Dichloroethene	50.0	54.0		ug/L		108	73 - 134
1,2-Dichloropropane	50.0	50.1		ug/L		100	71 - 126
Ethylbenzene	50.0	51.0		ug/L		102	78 - 125
2-Hexanone	100	102		ug/L		102	52 - 149
Isopropylbenzene	50.0	48.6		ug/L		97	72 - 129
Methyl acetate	50.0	60.7		ug/L		121	26 - 182
Methylcyclohexane	50.0	52.6		ug/L		105	72 - 133
Methylene Chloride	50.0	49.4		ug/L		99	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	104		ug/L		104	76 - 126
Styrene	50.0	50.2		ug/L		100	75 - 129
1,1,2,2-Tetrachloroethane	50.0	51.6		ug/L		103	71 - 127
Tetrachloroethene	50.0	49.3		ug/L		99	77 - 128
Toluene	50.0	51.4		ug/L		103	77 - 125
trans-1,2-Dichloroethene	50.0	54.0		ug/L		108	78 - 130

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

Lab Sample ID: LCS 680-265674/4
Matrix: Water
Analysis Batch: 265674

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	54.1		ug/L		108	72 - 127
1,2,4-Trichlorobenzene	50.0	49.3		ug/L		99	67 - 134
1,1,1-Trichloroethane	50.0	50.7		ug/L		101	76 - 126
1,1,2-Trichloroethane	50.0	48.1		ug/L		96	69 - 127
Trichloroethene	50.0	49.6		ug/L		99	80 - 120
Trichlorofluoromethane	50.0	44.5		ug/L		89	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	56.8		ug/L		114	72 - 139
Vinyl chloride	50.0	50.8		ug/L		102	58 - 141
Xylenes, Total	150	149		ug/L		99	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 680-265674/5
Matrix: Water
Analysis Batch: 265674

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
Acetone	100	97.4		ug/L		97	39 - 162	0	50
Benzene	50.0	51.6		ug/L		103	74 - 123	1	30
Bromodichloromethane	50.0	56.7		ug/L		113	72 - 129	1	30
Bromoform	50.0	49.3		ug/L		99	60 - 134	2	30
Bromomethane	50.0	31.4		ug/L		63	10 - 171	7	50
2-Butanone	100	95.9		ug/L		96	55 - 142	2	30
Carbon disulfide	50.0	50.7		ug/L		101	63 - 142	6	30
Carbon tetrachloride	50.0	52.3		ug/L		105	70 - 131	5	30
Chlorobenzene	50.0	48.4		ug/L		97	79 - 120	0	30
Chloroethane	50.0	40.8		ug/L		82	47 - 148	6	40
Chloroform	50.0	50.2		ug/L		100	76 - 128	3	30
Chloromethane	50.0	46.2		ug/L		92	47 - 151	4	30
cis-1,2-Dichloroethene	50.0	52.7		ug/L		105	78 - 127	2	30
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	73 - 128	2	30
Cyclohexane	50.0	51.3		ug/L		103	68 - 137	1	30
Dibromochloromethane	50.0	42.6		ug/L		85	63 - 134	1	50
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/L		101	57 - 126	1	50
1,2-Dibromoethane	50.0	56.8		ug/L		114	75 - 127	5	30
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	77 - 124	1	30
1,3-Dichlorobenzene	50.0	49.2		ug/L		98	79 - 123	0	30
1,4-Dichlorobenzene	50.0	49.0		ug/L		98	76 - 124	2	30
Dichlorodifluoromethane	50.0	44.5		ug/L		89	41 - 165	3	50
1,1-Dichloroethane	50.0	52.1		ug/L		104	69 - 132	4	30
1,2-Dichloroethane	50.0	49.6		ug/L		99	75 - 120	1	30
1,1-Dichloroethene	50.0	50.1		ug/L		100	73 - 134	8	30
1,2-Dichloropropane	50.0	51.4		ug/L		103	71 - 126	3	30
Ethylbenzene	50.0	49.8		ug/L		100	78 - 125	2	30

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

Lab Sample ID: LCSD 680-265674/5
Matrix: Water
Analysis Batch: 265674

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
2-Hexanone			100	105		ug/L		105	52 - 149	3	30
Isopropylbenzene			50.0	48.0		ug/L		96	72 - 129	1	30
Methyl acetate			50.0	60.0		ug/L		120	26 - 182	1	30
Methylcyclohexane			50.0	50.7		ug/L		101	72 - 133	4	30
Methylene Chloride			50.0	48.8		ug/L		98	79 - 124	1	30
4-Methyl-2-pentanone			100	106		ug/L		106	51 - 143	5	30
Methyl tert-butyl ether			100	104		ug/L		104	76 - 126	1	30
Styrene			50.0	49.0		ug/L		98	75 - 129	2	30
1,1,2,2-Tetrachloroethane			50.0	51.4		ug/L		103	71 - 127	0	30
Tetrachloroethene			50.0	47.8		ug/L		96	77 - 128	3	30
Toluene			50.0	50.5		ug/L		101	77 - 125	2	30
trans-1,2-Dichloroethene			50.0	51.4		ug/L		103	78 - 130	5	30
trans-1,3-Dichloropropene			50.0	55.4		ug/L		111	72 - 127	3	50
1,2,4-Trichlorobenzene			50.0	49.1		ug/L		98	67 - 134	0	30
1,1,1-Trichloroethane			50.0	49.4		ug/L		99	76 - 126	2	30
1,1,2-Trichloroethane			50.0	48.4		ug/L		97	69 - 127	1	30
Trichloroethene			50.0	49.2		ug/L		98	80 - 120	1	30
Trichlorofluoromethane			50.0	43.0		ug/L		86	66 - 144	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	53.4		ug/L		107	72 - 139	6	30
Vinyl chloride			50.0	47.0		ug/L		94	58 - 141	8	30
Xylenes, Total			150	147		ug/L		98	80 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: 680-87268-12 MS
Matrix: Water
Analysis Batch: 265674

Client Sample ID: MWGEP2-76.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	5.0	U	100	89.1		ug/L		89	39 - 162
Benzene	0.25	U	50.0	51.7		ug/L		103	74 - 123
Bromodichloromethane	0.25	U	50.0	54.8		ug/L		110	72 - 129
Bromoform	0.50	U	50.0	45.9		ug/L		92	60 - 134
Bromomethane	0.80	U	50.0	29.6		ug/L		59	10 - 171
2-Butanone	1.0	U	100	91.9		ug/L		92	55 - 142
Carbon disulfide	0.60	U	50.0	49.4		ug/L		99	63 - 142
Carbon tetrachloride	0.50	U	50.0	54.5		ug/L		109	70 - 131
Chlorobenzene	0.25	U	50.0	47.6		ug/L		95	79 - 120
Chloroethane	1.0	U	50.0	48.0		ug/L		96	47 - 148
Chloroform	0.25	U	50.0	48.4		ug/L		97	76 - 128
Chloromethane	0.33	U	50.0	49.0		ug/L		98	47 - 151
cis-1,2-Dichloroethene	0.25	U	50.0	49.8		ug/L		100	78 - 127
cis-1,3-Dichloropropene	0.25	U	50.0	44.7		ug/L		89	73 - 128
Cyclohexane	0.25	U	50.0	56.1		ug/L		112	68 - 137

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

Lab Sample ID: 680-87268-12 MS
Matrix: Water
Analysis Batch: 265674

Client Sample ID: MWGEP2-76.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	0.25	U	50.0	40.3		ug/L		81	63 - 134
1,2-Dibromo-3-Chloropropane	1.0	U	50.0	45.3		ug/L		91	57 - 126
1,2-Dibromoethane	0.25	U	50.0	53.0		ug/L		106	75 - 127
1,2-Dichlorobenzene	0.25	U	50.0	49.3		ug/L		99	77 - 124
1,3-Dichlorobenzene	0.25	U	50.0	50.2		ug/L		100	79 - 123
1,4-Dichlorobenzene	0.28	U	50.0	48.9		ug/L		98	76 - 124
Dichlorodifluoromethane	0.25	U	50.0	45.5		ug/L		91	41 - 165
1,1-Dichloroethane	0.25	U	50.0	52.2		ug/L		104	69 - 132
1,2-Dichloroethane	0.25	U	50.0	49.8		ug/L		100	75 - 120
1,1-Dichloroethene	0.25	U	50.0	51.0		ug/L		102	73 - 134
1,2-Dichloropropane	0.25	U	50.0	50.4		ug/L		101	71 - 126
Ethylbenzene	0.25	U	50.0	50.8		ug/L		102	78 - 125
2-Hexanone	1.0	U	100	103		ug/L		103	52 - 149
Isopropylbenzene	0.25	U	50.0	49.0		ug/L		98	72 - 129
Methyl acetate	0.25	U	50.0	55.9		ug/L		112	26 - 182
Methylcyclohexane	0.25	U	50.0	52.9		ug/L		106	72 - 133
Methylene Chloride	1.0	U	50.0	46.0		ug/L		92	79 - 124
4-Methyl-2-pentanone	1.0	U	100	103		ug/L		103	51 - 143
Methyl tert-butyl ether	0.50	U	100	94.4		ug/L		94	76 - 126
Styrene	0.25	U	50.0	50.0		ug/L		100	75 - 129
1,1,2,2-Tetrachloroethane	0.25	U	50.0	50.9		ug/L		102	71 - 127
Tetrachloroethene	1.4		50.0	51.3		ug/L		100	77 - 128
Toluene	0.33	U	50.0	50.9		ug/L		102	77 - 125
trans-1,2-Dichloroethene	0.25	U	50.0	51.3		ug/L		103	78 - 130
trans-1,3-Dichloropropene	0.25	U	50.0	49.1		ug/L		98	72 - 127
1,2,4-Trichlorobenzene	0.25	U	50.0	46.4		ug/L		93	67 - 134
1,1,1-Trichloroethane	7.6		50.0	58.1		ug/L		101	76 - 126
1,1,2-Trichloroethane	0.25	U	50.0	46.5		ug/L		93	69 - 127
Trichloroethene	78		50.0	129		ug/L		103	80 - 120
Trichlorofluoromethane	0.25	U	50.0	48.7		ug/L		97	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	50.0	54.2		ug/L		108	72 - 139
Vinyl chloride	0.50	U	50.0	51.4		ug/L		103	58 - 141
Xylenes, Total	0.75	U	150	149		ug/L		99	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*70 - 130*
Dibromofluoromethane	*95*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: 680-87268-12 MSD
Matrix: Water
Analysis Batch: 265674

Client Sample ID: MWGEP2-76.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	5.0	U	100	92.8		ug/L		93	39 - 162	4	50
Benzene	0.25	U	50.0	53.2		ug/L		106	74 - 123	3	30
Bromodichloromethane	0.25	U	50.0	57.7		ug/L		115	72 - 129	5	30

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

Lab Sample ID: 680-87268-12 MSD
Matrix: Water
Analysis Batch: 265674

Client Sample ID: MWGEP2-76.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	0.50	U	50.0	48.9		ug/L		98	60 - 134	6	30
Bromomethane	0.80	U	50.0	39.7		ug/L		79	10 - 171	29	50
2-Butanone	1.0	U	100	98.0		ug/L		98	55 - 142	6	30
Carbon disulfide	0.60	U	50.0	53.0		ug/L		106	63 - 142	7	30
Carbon tetrachloride	0.50	U	50.0	56.6		ug/L		113	70 - 131	4	30
Chlorobenzene	0.25	U	50.0	49.0		ug/L		98	79 - 120	3	30
Chloroethane	1.0	U	50.0	48.9		ug/L		98	47 - 148	2	40
Chloroform	0.25	U	50.0	51.8		ug/L		104	76 - 128	7	30
Chloromethane	0.33	U	50.0	50.0		ug/L		100	47 - 151	2	30
cis-1,2-Dichloroethene	0.25	U	50.0	53.3		ug/L		107	78 - 127	7	30
cis-1,3-Dichloropropene	0.25	U	50.0	46.1		ug/L		92	73 - 128	3	30
Cyclohexane	0.25	U	50.0	57.1		ug/L		114	68 - 137	2	30
Dibromochloromethane	0.25	U	50.0	41.9		ug/L		84	63 - 134	4	50
1,2-Dibromo-3-Chloropropane	1.0	U	50.0	46.1		ug/L		92	57 - 126	2	50
1,2-Dibromoethane	0.25	U	50.0	54.1		ug/L		108	75 - 127	2	30
1,2-Dichlorobenzene	0.25	U	50.0	48.9		ug/L		98	77 - 124	1	30
1,3-Dichlorobenzene	0.25	U	50.0	50.1		ug/L		100	79 - 123	0	30
1,4-Dichlorobenzene	0.28	U	50.0	48.8		ug/L		98	76 - 124	0	30
Dichlorodifluoromethane	0.25	U	50.0	48.2		ug/L		96	41 - 165	6	50
1,1-Dichloroethane	0.25	U	50.0	54.6		ug/L		109	69 - 132	4	30
1,2-Dichloroethane	0.25	U	50.0	50.5		ug/L		101	75 - 120	1	30
1,1-Dichloroethene	0.25	U	50.0	55.2		ug/L		110	73 - 134	8	30
1,2-Dichloropropane	0.25	U	50.0	51.2		ug/L		102	71 - 126	1	30
Ethylbenzene	0.25	U	50.0	52.9		ug/L		106	78 - 125	4	30
2-Hexanone	1.0	U	100	108		ug/L		108	52 - 149	5	30
Isopropylbenzene	0.25	U	50.0	50.9		ug/L		102	72 - 129	4	30
Methyl acetate	0.25	U	50.0	59.3		ug/L		119	26 - 182	6	30
Methylcyclohexane	0.25	U	50.0	53.3		ug/L		107	72 - 133	1	30
Methylene Chloride	1.0	U	50.0	49.4		ug/L		99	79 - 124	7	30
4-Methyl-2-pentanone	1.0	U	100	106		ug/L		106	51 - 143	3	30
Methyl tert-butyl ether	0.50	U	100	102		ug/L		102	76 - 126	8	30
Styrene	0.25	U	50.0	50.0		ug/L		100	75 - 129	0	30
1,1,2,2-Tetrachloroethane	0.25	U	50.0	52.3		ug/L		105	71 - 127	3	30
Tetrachloroethene	1.4		50.0	53.1		ug/L		103	77 - 128	3	30
Toluene	0.33	U	50.0	52.2		ug/L		104	77 - 125	3	30
trans-1,2-Dichloroethene	0.25	U	50.0	54.2		ug/L		108	78 - 130	6	30
trans-1,3-Dichloropropene	0.25	U	50.0	51.7		ug/L		103	72 - 127	5	50
1,2,4-Trichlorobenzene	0.25	U	50.0	47.8		ug/L		96	67 - 134	3	30
1,1,1-Trichloroethane	7.6		50.0	61.3		ug/L		107	76 - 126	5	30
1,1,2-Trichloroethane	0.25	U	50.0	47.0		ug/L		94	69 - 127	1	30
Trichloroethene	78		50.0	137		ug/L		119	80 - 120	6	30
Trichlorofluoromethane	0.25	U	50.0	49.7		ug/L		99	66 - 144	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	50.0	57.7		ug/L		115	72 - 139	6	30
Vinyl chloride	0.50	U	50.0	53.3		ug/L		107	58 - 141	4	30
Xylenes, Total	0.75	U	150	151		ug/L		101	80 - 124	2	30

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

Lab Sample ID: 680-87268-12 MSD
Matrix: Water
Analysis Batch: 265674

Client Sample ID: MWGEP2-76.0-GW
Prep Type: Total/NA

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: MB 680-265679/7
Matrix: Water
Analysis Batch: 265679

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 12:44	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 12:44	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 12:44	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 12:44	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 12:44	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 12:44	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:44	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 12:44	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 12:44	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 12:44	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 12:44	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 12:44	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 12:44	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 12:44	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:44	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 12:44	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 12:44	1

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

Lab Sample ID: MB 680-265679/7
Matrix: Water
Analysis Batch: 265679

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 12:44	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 12:44	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 12:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 130*		*02/08/13 12:44*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/08/13 12:44*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/08/13 12:44*	*1*

Lab Sample ID: LCS 680-265679/4
Matrix: Water
Analysis Batch: 265679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	89.4		ug/L		89	39 - 162
Benzene	50.0	52.1		ug/L		104	74 - 123
Bromodichloromethane	50.0	57.2		ug/L		114	72 - 129
Bromoform	50.0	51.5		ug/L		103	60 - 134
Bromomethane	50.0	27.8		ug/L		56	10 - 171
2-Butanone	100	93.5		ug/L		94	55 - 142
Carbon disulfide	50.0	51.4		ug/L		103	63 - 142
Carbon tetrachloride	50.0	57.5		ug/L		115	70 - 131
Chlorobenzene	50.0	48.6		ug/L		97	79 - 120
Chloroethane	50.0	50.8		ug/L		102	47 - 148
Chloroform	50.0	50.6		ug/L		101	76 - 128
Chloromethane	50.0	46.1		ug/L		92	47 - 151
cis-1,2-Dichloroethene	50.0	52.7		ug/L		105	78 - 127
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	73 - 128
Cyclohexane	50.0	52.2		ug/L		104	68 - 137
Dibromochloromethane	50.0	51.0		ug/L		102	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	50.0		ug/L		100	57 - 126
1,2-Dibromoethane	50.0	54.8		ug/L		110	75 - 127
1,2-Dichlorobenzene	50.0	48.6		ug/L		97	77 - 124
1,3-Dichlorobenzene	50.0	48.2		ug/L		96	79 - 123
1,4-Dichlorobenzene	50.0	47.7		ug/L		95	76 - 124
Dichlorodifluoromethane	50.0	29.9		ug/L		60	41 - 165
1,1-Dichloroethane	50.0	52.8		ug/L		106	69 - 132
1,2-Dichloroethane	50.0	48.6		ug/L		97	75 - 120
1,1-Dichloroethene	50.0	50.0		ug/L		100	73 - 134
1,2-Dichloropropane	50.0	50.9		ug/L		102	71 - 126
Ethylbenzene	50.0	50.8		ug/L		102	78 - 125
2-Hexanone	100	102		ug/L		102	52 - 149

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

Lab Sample ID: LCS 680-265679/4
Matrix: Water
Analysis Batch: 265679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	50.0	48.6		ug/L		97	72 - 129
Methyl acetate	50.0	59.5		ug/L		119	26 - 182
Methylcyclohexane	50.0	51.0		ug/L		102	72 - 133
Methylene Chloride	50.0	49.1		ug/L		98	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	102		ug/L		102	76 - 126
Styrene	50.0	48.7		ug/L		97	75 - 129
1,1,2,2-Tetrachloroethane	50.0	49.9		ug/L		100	71 - 127
Tetrachloroethene	50.0	49.7		ug/L		99	77 - 128
Toluene	50.0	51.6		ug/L		103	77 - 125
trans-1,2-Dichloroethene	50.0	51.8		ug/L		104	78 - 130
trans-1,3-Dichloropropene	50.0	56.7		ug/L		113	72 - 127
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	67 - 134
1,1,1-Trichloroethane	50.0	49.3		ug/L		99	76 - 126
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	69 - 127
Trichloroethene	50.0	50.0		ug/L		100	80 - 120
Trichlorofluoromethane	50.0	42.6		ug/L		85	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.7		ug/L		107	72 - 139
Vinyl chloride	50.0	43.2		ug/L		86	58 - 141
Xylenes, Total	150	148		ug/L		98	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*70 - 130*
Dibromofluoromethane	*99*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 680-265679/5
Matrix: Water
Analysis Batch: 265679

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
Acetone	100	89.0		ug/L		89	39 - 162	1	50
Benzene	50.0	52.7		ug/L		105	74 - 123	1	30
Bromodichloromethane	50.0	56.5		ug/L		113	72 - 129	1	30
Bromoform	50.0	50.3		ug/L		101	60 - 134	2	30
Bromomethane	50.0	38.1		ug/L		76	10 - 171	31	50
2-Butanone	100	89.2		ug/L		89	55 - 142	5	30
Carbon disulfide	50.0	53.8		ug/L		108	63 - 142	5	30
Carbon tetrachloride	50.0	56.8		ug/L		114	70 - 131	1	30
Chlorobenzene	50.0	49.0		ug/L		98	79 - 120	1	30
Chloroethane	50.0	55.8		ug/L		112	47 - 148	9	40
Chloroform	50.0	52.0		ug/L		104	76 - 128	3	30
Chloromethane	50.0	49.5		ug/L		99	47 - 151	7	30
cis-1,2-Dichloroethene	50.0	54.0		ug/L		108	78 - 127	2	30
cis-1,3-Dichloropropene	50.0	48.4		ug/L		97	73 - 128	0	30
Cyclohexane	50.0	51.3		ug/L		103	68 - 137	2	30
Dibromochloromethane	50.0	49.0		ug/L		98	63 - 134	4	50

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

Lab Sample ID: LCSD 680-265679/5
Matrix: Water
Analysis Batch: 265679

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
1,2-Dibromo-3-Chloropropane	50.0	49.5		ug/L		99	57 - 126	1	50
1,2-Dibromoethane	50.0	53.9		ug/L		108	75 - 127	2	30
1,2-Dichlorobenzene	50.0	48.7		ug/L		97	77 - 124	0	30
1,3-Dichlorobenzene	50.0	48.5		ug/L		97	79 - 123	1	30
1,4-Dichlorobenzene	50.0	47.4		ug/L		95	76 - 124	0	30
Dichlorodifluoromethane	50.0	31.6		ug/L		63	41 - 165	5	50
1,1-Dichloroethane	50.0	54.5		ug/L		109	69 - 132	3	30
1,2-Dichloroethane	50.0	48.1		ug/L		96	75 - 120	1	30
1,1-Dichloroethene	50.0	52.4		ug/L		105	73 - 134	5	30
1,2-Dichloropropane	50.0	51.3		ug/L		103	71 - 126	1	30
Ethylbenzene	50.0	51.3		ug/L		103	78 - 125	1	30
2-Hexanone	100	98.8		ug/L		99	52 - 149	3	30
Isopropylbenzene	50.0	48.4		ug/L		97	72 - 129	0	30
Methyl acetate	50.0	59.9		ug/L		120	26 - 182	1	30
Methylcyclohexane	50.0	50.8		ug/L		102	72 - 133	0	30
Methylene Chloride	50.0	50.0		ug/L		100	79 - 124	2	30
4-Methyl-2-pentanone	100	98.9		ug/L		99	51 - 143	2	30
Methyl tert-butyl ether	100	102		ug/L		102	76 - 126	0	30
Styrene	50.0	48.2		ug/L		96	75 - 129	1	30
1,1,2,2-Tetrachloroethane	50.0	48.4		ug/L		97	71 - 127	3	30
Tetrachloroethene	50.0	49.1		ug/L		98	77 - 128	1	30
Toluene	50.0	52.2		ug/L		104	77 - 125	1	30
trans-1,2-Dichloroethene	50.0	54.4		ug/L		109	78 - 130	5	30
trans-1,3-Dichloropropene	50.0	56.4		ug/L		113	72 - 127	1	50
1,2,4-Trichlorobenzene	50.0	48.9		ug/L		98	67 - 134	1	30
1,1,1-Trichloroethane	50.0	48.7		ug/L		97	76 - 126	1	30
1,1,2-Trichloroethane	50.0	47.5		ug/L		95	69 - 127	2	30
Trichloroethene	50.0	50.8		ug/L		102	80 - 120	2	30
Trichlorofluoromethane	50.0	41.0		ug/L		82	66 - 144	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	54.1		ug/L		108	72 - 139	1	30
Vinyl chloride	50.0	47.4		ug/L		95	58 - 141	9	30
Xylenes, Total	150	147		ug/L		98	80 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*102*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 680-265725/7
Matrix: Water
Analysis Batch: 265725

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 14:26	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 14:26	1

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

Lab Sample ID: MB 680-265725/7
Matrix: Water
Analysis Batch: 265725

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 14:26	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 14:26	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 14:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 14:26	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 14:26	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 14:26	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 14:26	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 14:26	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 14:26	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 14:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 14:26	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 14:26	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 14:26	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 14:26	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 14:26	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 14:26	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 14:26	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 14:26	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 14:26	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 14:26	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 14:26	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 14:26	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 14:26	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 14:26	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 14:26	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 14:26	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 14:26	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 14:26	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 14:26	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 14:26	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 14:26	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 14:26	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/09/13 14:26	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 14:26	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 14:26	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 14:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/09/13 14:26*	*1*
Dibromofluoromethane	*103*		*70 - 130*		*02/09/13 14:26*	*1*

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

Lab Sample ID: MB 680-265725/7
Matrix: Water
Analysis Batch: 265725

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		70 - 130		02/09/13 14:26	1

Lab Sample ID: LCS 680-265725/4
Matrix: Water
Analysis Batch: 265725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	87.0		ug/L		87	39 - 162
Benzene	50.0	51.7		ug/L		103	74 - 123
Bromodichloromethane	50.0	57.8		ug/L		116	72 - 129
Bromoform	50.0	53.7		ug/L		107	60 - 134
Bromomethane	50.0	26.1		ug/L		52	10 - 171
2-Butanone	100	92.6		ug/L		93	55 - 142
Carbon disulfide	50.0	51.5		ug/L		103	63 - 142
Carbon tetrachloride	50.0	58.4		ug/L		117	70 - 131
Chlorobenzene	50.0	50.6		ug/L		101	79 - 120
Chloroethane	50.0	52.6		ug/L		105	47 - 148
Chloroform	50.0	50.5		ug/L		101	76 - 128
Chloromethane	50.0	49.2		ug/L		98	47 - 151
cis-1,2-Dichloroethene	50.0	52.9		ug/L		106	78 - 127
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	73 - 128
Cyclohexane	50.0	52.9		ug/L		106	68 - 137
Dibromochloromethane	50.0	51.4		ug/L		103	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	52.3		ug/L		105	57 - 126
1,2-Dibromoethane	50.0	54.7		ug/L		109	75 - 127
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	77 - 124
1,3-Dichlorobenzene	50.0	49.4		ug/L		99	79 - 123
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	76 - 124
Dichlorodifluoromethane	50.0	45.9		ug/L		92	41 - 165
1,1-Dichloroethane	50.0	53.0		ug/L		106	69 - 132
1,2-Dichloroethane	50.0	48.3		ug/L		97	75 - 120
1,1-Dichloroethene	50.0	52.6		ug/L		105	73 - 134
1,2-Dichloropropane	50.0	50.4		ug/L		101	71 - 126
Ethylbenzene	50.0	52.1		ug/L		104	78 - 125
2-Hexanone	100	103		ug/L		103	52 - 149
Isopropylbenzene	50.0	49.4		ug/L		99	72 - 129
Methyl acetate	50.0	59.9		ug/L		120	26 - 182
Methylcyclohexane	50.0	51.2		ug/L		102	72 - 133
Methylene Chloride	50.0	49.8		ug/L		100	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	101		ug/L		101	76 - 126
Styrene	50.0	50.7		ug/L		101	75 - 129
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	71 - 127
Tetrachloroethene	50.0	49.5		ug/L		99	77 - 128
Toluene	50.0	51.0		ug/L		102	77 - 125
trans-1,2-Dichloroethene	50.0	52.2		ug/L		104	78 - 130
trans-1,3-Dichloropropene	50.0	56.3		ug/L		113	72 - 127
1,2,4-Trichlorobenzene	50.0	48.7		ug/L		97	67 - 134

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

Lab Sample ID: LCS 680-265725/4
Matrix: Water
Analysis Batch: 265725

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	50.0	49.2		ug/L		98	76 - 126
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	69 - 127
Trichloroethene	50.0	50.3		ug/L		101	80 - 120
Trichlorofluoromethane	50.0	45.2		ug/L		90	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	54.4		ug/L		109	72 - 139
Vinyl chloride	50.0	47.7		ug/L		95	58 - 141
Xylenes, Total	150	152		ug/L		101	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 680-265725/5
Matrix: Water
Analysis Batch: 265725

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
Acetone	100	88.2		ug/L		88	39 - 162	1	50
Benzene	50.0	53.3		ug/L		107	74 - 123	3	30
Bromodichloromethane	50.0	58.3		ug/L		117	72 - 129	1	30
Bromoform	50.0	53.2		ug/L		106	60 - 134	1	30
Bromomethane	50.0	29.4		ug/L		59	10 - 171	12	50
2-Butanone	100	93.6		ug/L		94	55 - 142	1	30
Carbon disulfide	50.0	52.0		ug/L		104	63 - 142	1	30
Carbon tetrachloride	50.0	57.7		ug/L		115	70 - 131	1	30
Chlorobenzene	50.0	50.3		ug/L		101	79 - 120	1	30
Chloroethane	50.0	54.4		ug/L		109	47 - 148	3	40
Chloroform	50.0	52.0		ug/L		104	76 - 128	3	30
Chloromethane	50.0	48.3		ug/L		97	47 - 151	2	30
cis-1,2-Dichloroethene	50.0	53.6		ug/L		107	78 - 127	1	30
cis-1,3-Dichloropropene	50.0	49.0		ug/L		98	73 - 128	1	30
Cyclohexane	50.0	52.5		ug/L		105	68 - 137	1	30
Dibromochloromethane	50.0	51.8		ug/L		104	63 - 134	1	50
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/L		101	57 - 126	4	50
1,2-Dibromoethane	50.0	55.6		ug/L		111	75 - 127	2	30
1,2-Dichlorobenzene	50.0	50.7		ug/L		101	77 - 124	1	30
1,3-Dichlorobenzene	50.0	49.6		ug/L		99	79 - 123	0	30
1,4-Dichlorobenzene	50.0	50.1		ug/L		100	76 - 124	0	30
Dichlorodifluoromethane	50.0	34.3		ug/L		69	41 - 165	29	50
1,1-Dichloroethane	50.0	53.3		ug/L		107	69 - 132	1	30
1,2-Dichloroethane	50.0	49.7		ug/L		99	75 - 120	3	30
1,1-Dichloroethene	50.0	52.1		ug/L		104	73 - 134	1	30
1,2-Dichloropropane	50.0	52.7		ug/L		105	71 - 126	5	30
Ethylbenzene	50.0	52.7		ug/L		105	78 - 125	1	30
2-Hexanone	100	108		ug/L		108	52 - 149	4	30
Isopropylbenzene	50.0	50.1		ug/L		100	72 - 129	1	30

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

Lab Sample ID: LCSD 680-265725/5
Matrix: Water
Analysis Batch: 265725

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
Methyl acetate			50.0	61.8		ug/L		124	26 - 182	3	30
Methylcyclohexane			50.0	52.6		ug/L		105	72 - 133	3	30
Methylene Chloride			50.0	50.1		ug/L		100	79 - 124	1	30
4-Methyl-2-pentanone			100	105		ug/L		105	51 - 143	4	30
Methyl tert-butyl ether			100	103		ug/L		103	76 - 126	2	30
Styrene			50.0	50.9		ug/L		102	75 - 129	0	30
1,1,2,2-Tetrachloroethane			50.0	52.7		ug/L		105	71 - 127	0	30
Tetrachloroethene			50.0	50.1		ug/L		100	77 - 128	1	30
Toluene			50.0	51.9		ug/L		104	77 - 125	2	30
trans-1,2-Dichloroethene			50.0	52.9		ug/L		106	78 - 130	1	30
trans-1,3-Dichloropropene			50.0	57.1		ug/L		114	72 - 127	1	50
1,2,4-Trichlorobenzene			50.0	50.1		ug/L		100	67 - 134	3	30
1,1,1-Trichloroethane			50.0	49.7		ug/L		99	76 - 126	1	30
1,1,2-Trichloroethane			50.0	49.0		ug/L		98	69 - 127	1	30
Trichloroethene			50.0	50.2		ug/L		100	80 - 120	0	30
Trichlorofluoromethane			50.0	41.8		ug/L		84	66 - 144	8	30
1,1,2-Trichloro-1,2,2-trifluoroetha ne			50.0	54.6		ug/L		109	72 - 139	1	30
Vinyl chloride			50.0	46.1		ug/L		92	58 - 141	3	30
Xylenes, Total			150	152		ug/L		101	80 - 124	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

GC/MS VOA

Analysis Batch: 265674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87268-10	MW12-78.0-GW	Total/NA	Water	8260B	
680-87268-11	MWGEP1-73.0-GW	Total/NA	Water	8260B	
680-87268-12	MWGEP2-76.0-GW	Total/NA	Water	8260B	
680-87268-12 MS	MWGEP2-76.0-GW	Total/NA	Water	8260B	
680-87268-12 MSD	MWGEP2-76.0-GW	Total/NA	Water	8260B	
680-87268-14	MW21-72.0-GW	Total/NA	Water	8260B	
680-87268-19	MW7-70.5-GW	Total/NA	Water	8260B	
680-87268-20	MW5-72.0-GW	Total/NA	Water	8260B	
LCS 680-265674/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-265674/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-265674/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87268-13	MW83-X-EB	Total/NA	Water	8260B	
680-87268-15	MW21-72.0-D	Total/NA	Water	8260B	
680-87268-16	MW-21-X-EB	Total/NA	Water	8260B	
680-87268-17	MWGEP4-73.0-GW	Total/NA	Water	8260B	
680-87268-18	MWGEP4-73.0-D	Total/NA	Water	8260B	
680-87268-21	MW17-75.0-GW	Total/NA	Water	8260B	
680-87268-22	MW23-80.0-GW	Total/NA	Water	8260B	
680-87268-23	MWB1-64.0-GW	Total/NA	Water	8260B	
680-87268-27	TB-02071313	Total/NA	Water	8260B	
LCS 680-265679/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-265679/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-265679/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87268-24	MWB3-62.0-GW	Total/NA	Water	8260B	
680-87268-25	MWB2-66.0-GW	Total/NA	Water	8260B	
680-87268-26	MW13-78-GW	Total/NA	Water	8260B	
LCS 680-265725/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-265725/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-265725/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW12-78.0-GW — Lab Sample ID: 680-87268-10

Date Collected: 02/05/13 15:20 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 17:17	JD	TAL SAV

Client Sample ID: MWGEP1-73.0-GW — Lab Sample ID: 680-87268-11

Date Collected: 02/07/13 11:50 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 17:46	JD	TAL SAV

Client Sample ID: MWGEP2-76.0-GW — Lab Sample ID: 680-87268-12

Date Collected: 02/07/13 10:37 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 18:15	JD	TAL SAV

Client Sample ID: MW83-X-EB — Lab Sample ID: 680-87268-13

Date Collected: 02/05/13 16:40 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 14:39	JD	TAL SAV

Client Sample ID: MW21-72.0-GW — Lab Sample ID: 680-87268-14

Date Collected: 02/07/13 09:11 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 18:44	JD	TAL SAV

Client Sample ID: MW21-72.0-D — Lab Sample ID: 680-87268-15

Date Collected: 02/07/13 09:11 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 17:32	JD	TAL SAV

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW-21-X-EB — Lab Sample ID: 680-87268-16

Date Collected: 02/07/13 09:30 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 15:08	JD	TAL SAV

Client Sample ID: MWGEP4-73.0-GW — Lab Sample ID: 680-87268-17

Date Collected: 02/06/13 16:15 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 18:00	JD	TAL SAV

Client Sample ID: MWGEP4-73.0-D — Lab Sample ID: 680-87268-18

Date Collected: 02/06/13 16:15 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 18:29	JD	TAL SAV

Client Sample ID: MW7-70.5-GW — Lab Sample ID: 680-87268-19

Date Collected: 02/05/13 13:50 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 19:12	JD	TAL SAV

Client Sample ID: MW5-72.0-GW — Lab Sample ID: 680-87268-20

Date Collected: 02/05/13 10:28 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265674	02/08/13 19:41	JD	TAL SAV

Client Sample ID: MW17-75.0-GW — Lab Sample ID: 680-87268-21

Date Collected: 02/06/13 14:45 — **Matrix: Water**
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 18:58	JD	TAL SAV

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Client Sample ID: MW23-80.0-GW
Lab Sample ID: 680-87268-22
Date Collected: 02/06/13 13:31
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 19:27	JD	TAL SAV

Client Sample ID: MWB1-64.0-GW
Lab Sample ID: 680-87268-23
Date Collected: 02/06/13 11:57
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 19:55	JD	TAL SAV

Client Sample ID: MWB3-62.0-GW
Lab Sample ID: 680-87268-24
Date Collected: 02/06/13 08:35
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 15:48	JD	TAL SAV

Client Sample ID: MWB2-66.0-GW
Lab Sample ID: 680-87268-25
Date Collected: 02/06/13 09:53
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 16:09	JD	TAL SAV

Client Sample ID: MW13-78-GW
Lab Sample ID: 680-87268-26
Date Collected: 02/07/13 12:40
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 16:29	JD	TAL SAV

Client Sample ID: TB-02071313
Lab Sample ID: 680-87268-27
Date Collected: 02/07/13 14:00
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 13:41	JD	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: NYSDOH

Client Contact	Project Manager: JOSEPH SCHMIDL	Site Contact: David Lindavi	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802/229-5377	Lab Contact: M. Kersey	Carrier: Fed Ex	1 of 5 COCs
535 Stone Cutters Way	**Analysis Turnaround Time**			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) W			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below (3 days)			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: SCOTTSMANAC DEPOT	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C/TASK 5D	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	VOCs 8260B	Sample Specific Notes:
WP01-70.0-GW	2/5/13	14:06	Grab	GW	2	N	G	✓	these samples are 3-day TAT
WP01-91.5-GW	2/6/13	10:09						✓	
WP01-100.0-GW	2/6/13	14:15						✓	
WP01-~~150~~ 110.0-GW	2/6/13	17:11						✓	
WP02-75.0-GW	2/6/13	10:07						✓	
WP02-87.5-GW	2/6/13	13:44						✓	
WP02-96.4-GW	2/6/13	17:26						✓	
TB-020713	2/7/13	15:00	↓	↓	↓	↓	↓	✓	
WP-02-110.2-GW	2/7/13	12:50							

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87263
2.6°C

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Stone Environmental	2/7/13 1730			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA SBW	Date/Time: 2/8/13 0816

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

Client Contact	Project Manager: Joseph Schmidl	Site Contact: David Linaci	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 603-455-6946	Lab Contact: M. Kersey	Carrier: Fed Ex	2 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			Job / SDG No.:
Project Name: DNS Center Scatia Depot	☒ 1 week			
Site: Scatia Depot Site, Glenville, NY	☐ 2 days			Sampler: ESP
PO# 102305-R C	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	8260 - VOC	Sample Specific Notes:
MW12-78.0-GW	2/5/13	15:20	Grab	GW	3	N	G	X	
MWGEP1-73.0-GW	2/7/13	11:50							
MWGEP2-76.0-GW	2/7/13	10:37							
MWGEP2-76.0-MS	2/7/13	10:37							
MWGEP2-76.0-MSD	2/7/13	10:37							
MW33-x-EB	2/5/13	16:40	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-37263

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:30	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company: TA SV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

Client Contact	Project Manager: Joseph Schmidl	Site Contact:	Date:	COC No:
Stone Environmental, Inc.	Tel/Fax: 603-455-0946	Lab Contact:	Carrier:	2 of 5 COCs
535 Stone Cutters Way	**Analysis Turnaround Time**			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: DNS Center: Scotia Depot	☒ 1 week			Job / SDG No.:
Site: Scotia Depot Site, Glenville, NY	☐ 2 days			
PO# 102305-RC	☐ 1 day			Sampler: JP

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260C-VOC	Sample Specific Notes:
MW21-72.0-GW	2/7/13	09:11	Grab	GW	3	N	G	X	
MW21-72.0-D	2/7/13	09:11							
MW21-X-EB	2/7/13	09:30							
MWGEP4-73.0-GW	2/6/13	16:15							
MWGEP4-73.0-D	2/6/13	16:15							
MW7-70.5-GW	2/5/13	13:50							
MW5-72.0-GW	2/5/13	10:28							
MW17-75.0-GW	2/6/13	14:45							
MW23-80.0-GW	2/6/13	13:31							
MW31-64.0-GW	2/6/13	11:57							
MW33-62.0-GW	2/6/13	08:35							
MW32-66.0-GW	2/6/13	09:53	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87268

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:32	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA BV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joseph Schmidl	Site Contact: David Linnai	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802-229-5377	Lab Contact: M. Kersey	Carrier: FedEx	1 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W)			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: Gaeta Naval Depot	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C/Task 5D	☐ 1 day			Sampler: DTL

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260B - VOCs	Sample Specific Notes:
MW13-78-GW	2/7/13	1240	Grab	GW	3	N	G	X	
TB-020713B	2/7/13	1400	↓	↓	↓	↓	↓	↓	
MW6-71-GW	2/7/13	1405	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

630 97268

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Stone Environmental	2/7/13 17:30			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA SV	2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: NYSDOH

Client Contact	Project Manager: Joseph Schmid	Site Contact: David Livari	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802-229-5377	Lab Contact: M. Kersey	Carrier: FedEx	5 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: Scotia Naval Depot	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C / Task 5D	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260	Sample Specific Notes:
MW9-110-GW	2/5/13	1040	GRAB	GW	3	N	G		
MW16-67-GW	↓	1415	↓	↓	↓	↓	↓		
PMW-3-78-GW	↓	1620							
MW20-78-GW	2/6/13	0910							
MW22-73-GW	↓	1205							
MW19-75-GW		1345							
MW19-75-GW		1510							
MW15-79-GW		1625							
MW15-X-EB	↓	1700							
MW14-76-GW	2/7/13	0910							
MW14-76-MS	↓	0910							
MW14-76-MSD	↓	0910	↓	↓	↓	↓	↓		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87268

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:30	Received by:	Company	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA SV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87268-2
SDG Number: 68087268-2

Login Number: 87268
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received and the COC.	False	RECEIVED -39 NOT ON COC/-31 LABEL READS "82" NOT "78"
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	02-28-13
A2LA	ISO/IEC 17025		399.01	02-28-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-12
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-12
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	02-28-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-12
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	12-31-12
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-13
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-12
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-2
SDG: 68087268-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87268-10	MW12-78.0-GW	Water	02/05/13 15:20	02/08/13 08:13
680-87268-11	MWGEP1-73.0-GW	Water	02/07/13 11:50	02/08/13 08:13
680-87268-12	MWGEP2-76.0-GW	Water	02/07/13 10:37	02/08/13 08:13
680-87268-13	MW83-X-EB	Water	02/05/13 16:40	02/08/13 08:13
680-87268-14	MW21-72.0-GW	Water	02/07/13 09:11	02/08/13 08:13
680-87268-15	MW21-72.0-D	Water	02/07/13 09:11	02/08/13 08:13
680-87268-16	MW-21-X-EB	Water	02/07/13 09:30	02/08/13 08:13
680-87268-17	MWGEP4-73.0-GW	Water	02/06/13 16:15	02/08/13 08:13
680-87268-18	MWGEP4-73.0-D	Water	02/06/13 16:15	02/08/13 08:13
680-87268-19	MW7-70.5-GW	Water	02/05/13 13:50	02/08/13 08:13
680-87268-20	MW5-72.0-GW	Water	02/05/13 10:28	02/08/13 08:13
680-87268-21	MW17-75.0-GW	Water	02/06/13 14:45	02/08/13 08:13
680-87268-22	MW23-80.0-GW	Water	02/06/13 13:31	02/08/13 08:13
680-87268-23	MWB1-64.0-GW	Water	02/06/13 11:57	02/08/13 08:13
680-87268-24	MWB3-62.0-GW	Water	02/06/13 08:35	02/08/13 08:13
680-87268-25	MWB2-66.0-GW	Water	02/06/13 09:53	02/08/13 08:13
680-87268-26	MW13-78-GW	Water	02/07/13 12:40	02/08/13 08:13
680-87268-27	TB-02071313	Water	02/07/13 14:00	02/08/13 08:13

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-87268-3
TestAmerica Sample Delivery Group: 68087268-3
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Michele R Kersey

Authorized for release by:
2/12/2013 11:41:21 AM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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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Job ID: 680-87268-3

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87268-3

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/8/2013 8:13 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW6-71-GW (680-87268-28), MW9-110-GW (680-87268-29), MW16-67-GW (680-87268-30), PMW-3-82-GW (680-87268-31), MW20-78-GW (680-87268-32), MW22-73-GW (680-87268-33), MW19-75-GW (680-87268-34), MW18-75-GW (680-87268-35), MW15-79-GW (680-87268-36), MW15-X-EB (680-87268-37), MW14-76-GW (680-87268-38) and GEP3-73-GW (680-87268-39) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/08/2013 and 02/09/2013.

Sample MW22-73-GW (680-87268-33)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87268-28	MW6-71-GW	Water	02/07/13 14:05	02/08/13 08:13
680-87268-29	MW9-110-GW	Water	02/05/13 10:40	02/08/13 08:13
680-87268-30	MW16-67-GW	Water	02/05/13 14:15	02/08/13 08:13
680-87268-31	PMW-3-82-GW	Water	02/05/13 16:20	02/08/13 08:13
680-87268-32	MW20-78-GW	Water	02/06/13 09:10	02/08/13 08:13
680-87268-33	MW22-73-GW	Water	02/06/13 12:05	02/08/13 08:13
680-87268-34	MW19-75-GW	Water	02/06/13 13:45	02/08/13 08:13
680-87268-35	MW18-75-GW	Water	02/06/13 15:10	02/08/13 08:13
680-87268-36	MW15-79-GW	Water	02/06/13 16:25	02/08/13 08:13
680-87268-37	MW15-X-EB	Water	02/06/13 17:00	02/08/13 08:13
680-87268-38	MW14-76-GW	Water	02/07/13 09:10	02/08/13 08:13
680-87268-39	GEP3-73-GW	Water	02/07/13 11:00	02/08/13 08:13

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
D	The reported value is from a dilution.

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW6-71-GW
Date Collected: 02/07/13 14:05
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-28
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 16:50	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 16:50	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 16:50	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 16:50	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 16:50	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 16:50	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 16:50	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 16:50	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 16:50	1
cis-1,2-Dichloroethene	**0.90**	**J**	1.0	0.15	ug/L			02/09/13 16:50	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 16:50	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 16:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 16:50	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 16:50	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 16:50	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 16:50	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 16:50	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 16:50	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 16:50	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 16:50	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 16:50	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 16:50	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 16:50	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 16:50	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 16:50	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 16:50	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 16:50	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 16:50	1
Tetrachloroethene	**0.91**	**J**	1.0	0.15	ug/L			02/09/13 16:50	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 16:50	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 16:50	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 16:50	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
1,1,1-Trichloroethane	**3.3**		1.0	0.50	ug/L			02/09/13 16:50	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 16:50	1
Trichloroethene	**98**		1.0	0.13	ug/L			02/09/13 16:50	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 16:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 16:50	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 16:50	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 16:50	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW6-71-GW

Lab Sample ID: 680-87268-28

Date Collected: 02/07/13 14:05
Matrix: Water
Date Received: 02/08/13 08:13

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/09/13 16:50*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/09/13 16:50*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*02/09/13 16:50*	*1*

Client Sample ID: MW9-110-GW

Lab Sample ID: 680-87268-29

Date Collected: 02/05/13 10:40
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 17:10	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 17:10	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 17:10	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 17:10	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 17:10	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 17:10	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 17:10	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 17:10	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 17:10	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 17:10	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 17:10	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 17:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 17:10	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 17:10	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 17:10	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 17:10	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 17:10	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 17:10	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 17:10	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 17:10	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 17:10	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 17:10	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 17:10	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 17:10	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 17:10	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 17:10	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 17:10	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 17:10	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 17:10	1
Toluene	**0.43**	**J**	1.0	0.33	ug/L			02/09/13 17:10	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 17:10	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 17:10	1

Client Sample ID: MW9-110-GW

Lab Sample ID: 680-87268-29

Date Collected: 02/05/13 10:40

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 17:10	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 17:10	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/09/13 17:10	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 17:10	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 17:10	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*70 - 130*		*02/09/13 17:10*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/09/13 17:10*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/09/13 17:10*	*1*

Client Sample ID: MW16-67-GW

Lab Sample ID: 680-87268-30

Date Collected: 02/05/13 14:15

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 17:31	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 17:31	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 17:31	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 17:31	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 17:31	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 17:31	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 17:31	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 17:31	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 17:31	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 17:31	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 17:31	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 17:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 17:31	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 17:31	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 17:31	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 17:31	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 17:31	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 17:31	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 17:31	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 17:31	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 17:31	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 17:31	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW16-67-GW

Lab Sample ID: 680-87268-30

Date Collected: 02/05/13 14:15
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 17:31	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 17:31	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 17:31	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 17:31	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 17:31	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 17:31	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 17:31	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 17:31	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 17:31	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 17:31	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 17:31	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 17:31	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/09/13 17:31	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 17:31	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 17:31	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/09/13 17:31*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/09/13 17:31*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/09/13 17:31*	*1*

Client Sample ID: PMW-3-82-GW

Lab Sample ID: 680-87268-31

Date Collected: 02/05/13 16:20
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 17:51	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 17:51	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 17:51	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 17:51	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 17:51	1
Carbon tetrachloride	**1.1**		1.0	0.50	ug/L			02/09/13 17:51	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 17:51	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 17:51	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 17:51	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 17:51	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 17:51	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 17:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 17:51	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 17:51	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1

Client Sample ID: PMW-3-82-GW

Lab Sample ID: 680-87268-31

Date Collected: 02/05/13 16:20

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 17:51	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 17:51	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 17:51	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 17:51	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 17:51	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 17:51	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 17:51	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 17:51	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 17:51	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 17:51	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 17:51	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 17:51	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 17:51	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 17:51	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 17:51	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 17:51	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 17:51	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 17:51	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 17:51	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 17:51	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/09/13 17:51	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 17:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 17:51	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 17:51	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/09/13 17:51*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*02/09/13 17:51*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/09/13 17:51*	*1*

Client Sample ID: MW20-78-GW

Lab Sample ID: 680-87268-32

Date Collected: 02/06/13 09:10

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 18:12	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 18:12	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 18:12	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 18:12	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 18:12	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 18:12	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 18:12	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW20-78-GW
Date Collected: 02/06/13 09:10
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-32
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 18:12	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 18:12	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 18:12	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 18:12	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 18:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 18:12	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 18:12	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 18:12	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 18:12	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 18:12	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 18:12	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 18:12	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 18:12	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 18:12	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 18:12	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 18:12	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 18:12	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 18:12	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 18:12	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 18:12	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 18:12	1
Tetrachloroethene	**1.0**		1.0	0.15	ug/L			02/09/13 18:12	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 18:12	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 18:12	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 18:12	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 18:12	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 18:12	1
Trichloroethene	**27**		1.0	0.13	ug/L			02/09/13 18:12	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 18:12	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 18:12	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/09/13 18:12*	*1*
Dibromofluoromethane	*103*		*70 - 130*		*02/09/13 18:12*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*02/09/13 18:12*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW22-73-GW
Date Collected: 02/06/13 12:05
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-33
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	130	25	ug/L			02/09/13 15:28	5
Benzene	1.3	U	5.0	1.3	ug/L			02/09/13 15:28	5
Bromodichloromethane	1.3	U	5.0	1.3	ug/L			02/09/13 15:28	5
Bromoform	2.5	U	5.0	2.5	ug/L			02/09/13 15:28	5
Bromomethane	4.0	U	5.0	4.0	ug/L			02/09/13 15:28	5
2-Butanone	5.0	U	50	5.0	ug/L			02/09/13 15:28	5
Carbon disulfide	3.0	U	10	3.0	ug/L			02/09/13 15:28	5
Carbon tetrachloride	2.5	U	5.0	2.5	ug/L			02/09/13 15:28	5
Chlorobenzene	1.3	U	5.0	1.3	ug/L			02/09/13 15:28	5
Chloroethane	5.0	U	5.0	5.0	ug/L			02/09/13 15:28	5
Chloroform	1.3	U	5.0	0.70	ug/L			02/09/13 15:28	5
Chloromethane	1.7	U	5.0	1.7	ug/L			02/09/13 15:28	5
cis-1,2-Dichloroethene	1.3	U	5.0	0.75	ug/L			02/09/13 15:28	5
cis-1,3-Dichloropropene	1.3	U	5.0	0.55	ug/L			02/09/13 15:28	5
Cyclohexane	1.3	U	5.0	1.3	ug/L			02/09/13 15:28	5
Dibromochloromethane	1.3	U	5.0	0.50	ug/L			02/09/13 15:28	5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	2.2	ug/L			02/09/13 15:28	5
1,2-Dibromoethane	**1.3**	**J D**	5.0	1.3	ug/L			02/09/13 15:28	5
1,2-Dichlorobenzene	1.3	U	5.0	1.1	ug/L			02/09/13 15:28	5
1,3-Dichlorobenzene	1.3	U	5.0	1.3	ug/L			02/09/13 15:28	5
1,4-Dichlorobenzene	**1.6**	**J D**	5.0	1.4	ug/L			02/09/13 15:28	5
Dichlorodifluoromethane	1.3	U	5.0	1.3	ug/L			02/09/13 15:28	5
1,1-Dichloroethane	1.3	U	5.0	1.3	ug/L			02/09/13 15:28	5
1,2-Dichloroethane	1.3	U	5.0	0.50	ug/L			02/09/13 15:28	5
1,1-Dichloroethene	**0.78**	**J D**	5.0	0.55	ug/L			02/09/13 15:28	5
1,2-Dichloropropane	1.3	U	5.0	0.65	ug/L			02/09/13 15:28	5
Ethylbenzene	1.3	U	5.0	0.55	ug/L			02/09/13 15:28	5
2-Hexanone	5.0	U	50	5.0	ug/L			02/09/13 15:28	5
Isopropylbenzene	1.3	U	5.0	0.50	ug/L			02/09/13 15:28	5
Methyl acetate	1.3	U	5.0	0.95	ug/L			02/09/13 15:28	5
Methylcyclohexane	1.3	U	5.0	0.50	ug/L			02/09/13 15:28	5
Methylene Chloride	5.0	U	25	5.0	ug/L			02/09/13 15:28	5
4-Methyl-2-pentanone	5.0	U	50	5.0	ug/L			02/09/13 15:28	5
Methyl tert-butyl ether	2.5	U	50	1.0	ug/L			02/09/13 15:28	5
Styrene	1.3	U	5.0	0.55	ug/L			02/09/13 15:28	5
1,1,2,2-Tetrachloroethane	**1.6**	**J D**	5.0	0.90	ug/L			02/09/13 15:28	5
Tetrachloroethene	**6.7**	**D**	5.0	0.75	ug/L			02/09/13 15:28	5
Toluene	1.7	U	5.0	1.7	ug/L			02/09/13 15:28	5
trans-1,2-Dichloroethene	1.3	U	5.0	1.0	ug/L			02/09/13 15:28	5
trans-1,3-Dichloropropene	1.3	U	5.0	1.1	ug/L			02/09/13 15:28	5
1,2,4-Trichlorobenzene	**3.8**	**J D**	5.0	1.3	ug/L			02/09/13 15:28	5
1,1,1-Trichloroethane	2.5	U	5.0	2.5	ug/L			02/09/13 15:28	5
1,1,2-Trichloroethane	**0.85**	**J D**	5.0	0.65	ug/L			02/09/13 15:28	5
Trichloroethene	**370**	**D**	5.0	0.65	ug/L			02/09/13 15:28	5
Trichlorofluoromethane	1.3	U	5.0	1.3	ug/L			02/09/13 15:28	5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	5.0	2.5	ug/L			02/09/13 15:28	5
Vinyl chloride	2.5	U	5.0	0.90	ug/L			02/09/13 15:28	5
Xylenes, Total	3.8	U	10	1.0	ug/L			02/09/13 15:28	5

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW22-73-GW

Lab Sample ID: 680-87268-33

Date Collected: 02/06/13 12:05
Matrix: Water
Date Received: 02/08/13 08:13

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*70 - 130*		*02/09/13 15:28*	*5*
Dibromofluoromethane	*101*		*70 - 130*		*02/09/13 15:28*	*5*
Toluene-d8 (Surr)	*105*		*70 - 130*		*02/09/13 15:28*	*5*

Client Sample ID: MW19-75-GW

Lab Sample ID: 680-87268-34

Date Collected: 02/06/13 13:45
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 18:32	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 18:32	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 18:32	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 18:32	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 18:32	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 18:32	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 18:32	1
Chloroform	**0.33**	**J**	1.0	0.14	ug/L			02/09/13 18:32	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 18:32	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 18:32	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 18:32	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 18:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 18:32	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 18:32	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 18:32	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 18:32	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 18:32	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 18:32	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 18:32	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 18:32	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 18:32	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 18:32	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 18:32	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 18:32	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 18:32	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 18:32	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 18:32	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 18:32	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 18:32	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 18:32	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 18:32	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 18:32	1

Client Sample ID: MW19-75-GW

Lab Sample ID: 680-87268-34

Date Collected: 02/06/13 13:45

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 18:32	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 18:32	1
Trichloroethene	**28**		1.0	0.13	ug/L			02/09/13 18:32	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 18:32	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 18:32	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/09/13 18:32*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/09/13 18:32*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*02/09/13 18:32*	*1*

Client Sample ID: MW18-75-GW

Lab Sample ID: 680-87268-35

Date Collected: 02/06/13 15:10

Matrix: Water

Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 18:52	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 18:52	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 18:52	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 18:52	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 18:52	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 18:52	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 18:52	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 18:52	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 18:52	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 18:52	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 18:52	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 18:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 18:52	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 18:52	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 18:52	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 18:52	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 18:52	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 18:52	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 18:52	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 18:52	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 18:52	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 18:52	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW18-75-GW

Lab Sample ID: 680-87268-35

Date Collected: 02/06/13 15:10
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 18:52	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 18:52	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 18:52	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 18:52	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 18:52	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 18:52	1
Tetrachloroethene	**2.9**		1.0	0.15	ug/L			02/09/13 18:52	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 18:52	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 18:52	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 18:52	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 18:52	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 18:52	1
Trichloroethene	**110**		1.0	0.13	ug/L			02/09/13 18:52	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 18:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 18:52	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 18:52	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*70 - 130*		*02/09/13 18:52*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*02/09/13 18:52*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/09/13 18:52*	*1*

Client Sample ID: MW15-79-GW

Lab Sample ID: 680-87268-36

Date Collected: 02/06/13 16:25
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 19:13	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 19:13	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 19:13	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 19:13	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 19:13	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 19:13	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 19:13	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 19:13	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 19:13	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 19:13	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 19:13	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 19:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 19:13	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 19:13	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1

Client Sample ID: MW15-79-GW

Lab Sample ID: 680-87268-36

Date Collected: 02/06/13 16:25
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 19:13	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 19:13	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 19:13	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 19:13	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 19:13	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 19:13	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 19:13	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 19:13	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 19:13	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 19:13	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 19:13	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 19:13	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 19:13	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 19:13	1
Tetrachloroethene	**0.88**	**J**	1.0	0.15	ug/L			02/09/13 19:13	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 19:13	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 19:13	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 19:13	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
1,1,1-Trichloroethane	**0.51**	**J**	1.0	0.50	ug/L			02/09/13 19:13	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 19:13	1
Trichloroethene	**80**		1.0	0.13	ug/L			02/09/13 19:13	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 19:13	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 19:13	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*70 - 130*		*02/09/13 19:13*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/09/13 19:13*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*02/09/13 19:13*	*1*

Client Sample ID: MW15-X-EB

Lab Sample ID: 680-87268-37

Date Collected: 02/06/13 17:00
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 14:10	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 14:10	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 14:10	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 14:10	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 14:10	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 14:10	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 14:10	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW15-X-EB
Date Collected: 02/06/13 17:00
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-37
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 14:10	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 14:10	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 14:10	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 14:10	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 14:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 14:10	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 14:10	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 14:10	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 14:10	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 14:10	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 14:10	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 14:10	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 14:10	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 14:10	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 14:10	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 14:10	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 14:10	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 14:10	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 14:10	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 14:10	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 14:10	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 14:10	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 14:10	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 14:10	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 14:10	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 14:10	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 14:10	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 14:10	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 14:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 14:10	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 14:10	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/08/13 14:10*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/08/13 14:10*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/08/13 14:10*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW14-76-GW
Date Collected: 02/07/13 09:10
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-38
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 19:33	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 19:33	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 19:33	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 19:33	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 19:33	1
Carbon tetrachloride	**0.65**	**J**	1.0	0.50	ug/L			02/09/13 19:33	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 19:33	1
Chloroform	**0.14**	**J**	1.0	0.14	ug/L			02/09/13 19:33	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 19:33	1
cis-1,2-Dichloroethene	**1.5**		1.0	0.15	ug/L			02/09/13 19:33	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 19:33	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 19:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 19:33	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 19:33	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 19:33	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
1,1-Dichloroethane	**0.27**	**J**	1.0	0.25	ug/L			02/09/13 19:33	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 19:33	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 19:33	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 19:33	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 19:33	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 19:33	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 19:33	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 19:33	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 19:33	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 19:33	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 19:33	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 19:33	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 19:33	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 19:33	1
Tetrachloroethene	**4.7**		1.0	0.15	ug/L			02/09/13 19:33	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 19:33	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 19:33	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 19:33	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
1,1,1-Trichloroethane	**3.1**		1.0	0.50	ug/L			02/09/13 19:33	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 19:33	1
Trichloroethene	**1.1**		1.0	0.13	ug/L			02/09/13 19:33	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 19:33	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 19:33	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 19:33	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW14-76-GW

Lab Sample ID: 680-87268-38

Date Collected: 02/07/13 09:10
Matrix: Water
Date Received: 02/08/13 08:13

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*70 - 130*		*02/09/13 19:33*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*02/09/13 19:33*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*02/09/13 19:33*	*1*

Client Sample ID: GEP3-73-GW

Lab Sample ID: 680-87268-39

Date Collected: 02/07/13 11:00
Matrix: Water
Date Received: 02/08/13 08:13

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 19:54	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 19:54	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 19:54	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 19:54	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 19:54	1
Carbon tetrachloride	**0.52**	**J**	1.0	0.50	ug/L			02/09/13 19:54	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 19:54	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 19:54	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 19:54	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 19:54	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 19:54	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 19:54	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 19:54	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 19:54	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 19:54	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 19:54	1
1,1-Dichloroethene	**0.54**	**J**	1.0	0.11	ug/L			02/09/13 19:54	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 19:54	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 19:54	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 19:54	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 19:54	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 19:54	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 19:54	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 19:54	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 19:54	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 19:54	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 19:54	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 19:54	1
Tetrachloroethene	**0.67**	**J**	1.0	0.15	ug/L			02/09/13 19:54	1
Toluene	**0.38**	**J**	1.0	0.33	ug/L			02/09/13 19:54	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 19:54	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 19:54	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: GEP3-73-GW
Date Collected: 02/07/13 11:00
Date Received: 02/08/13 08:13

Lab Sample ID: 680-87268-39
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
1,1,1-Trichloroethane	**0.97**	**J**	1.0	0.50	ug/L			02/09/13 19:54	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 19:54	1
Trichloroethene	**150**		1.0	0.13	ug/L			02/09/13 19:54	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 19:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 19:54	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 19:54	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/09/13 19:54*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*02/09/13 19:54*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/09/13 19:54*	*1*

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

Lab Sample ID: MB 680-265679/7
Matrix: Water
Analysis Batch: 265679

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/08/13 12:44	1
Benzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/08/13 12:44	1
2-Butanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/08/13 12:44	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/08/13 12:44	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/08/13 12:44	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/08/13 12:44	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:44	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/08/13 12:44	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/08/13 12:44	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/08/13 12:44	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/08/13 12:44	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/08/13 12:44	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/08/13 12:44	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/08/13 12:44	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/08/13 12:44	1
Styrene	0.25	U	1.0	0.11	ug/L			02/08/13 12:44	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/08/13 12:44	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/08/13 12:44	1
Toluene	0.33	U	1.0	0.33	ug/L			02/08/13 12:44	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/08/13 12:44	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/08/13 12:44	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/08/13 12:44	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/08/13 12:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/08/13 12:44	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/08/13 12:44	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/08/13 12:44	1

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

Lab Sample ID: MB 680-265679/7
Matrix: Water
Analysis Batch: 265679

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		70 - 130		02/08/13 12:44	1
Dibromofluoromethane	101		70 - 130		02/08/13 12:44	1
Toluene-d8 (Surr)	101		70 - 130		02/08/13 12:44	1

Lab Sample ID: LCS 680-265679/4
Matrix: Water
Analysis Batch: 265679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	89.4		ug/L		89	39 - 162
Benzene	50.0	52.1		ug/L		104	74 - 123
Bromodichloromethane	50.0	57.2		ug/L		114	72 - 129
Bromoform	50.0	51.5		ug/L		103	60 - 134
Bromomethane	50.0	27.8		ug/L		56	10 - 171
2-Butanone	100	93.5		ug/L		94	55 - 142
Carbon disulfide	50.0	51.4		ug/L		103	63 - 142
Carbon tetrachloride	50.0	57.5		ug/L		115	70 - 131
Chlorobenzene	50.0	48.6		ug/L		97	79 - 120
Chloroethane	50.0	50.8		ug/L		102	47 - 148
Chloroform	50.0	50.6		ug/L		101	76 - 128
Chloromethane	50.0	46.1		ug/L		92	47 - 151
cis-1,2-Dichloroethene	50.0	52.7		ug/L		105	78 - 127
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	73 - 128
Cyclohexane	50.0	52.2		ug/L		104	68 - 137
Dibromochloromethane	50.0	51.0		ug/L		102	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	50.0		ug/L		100	57 - 126
1,2-Dibromoethane	50.0	54.8		ug/L		110	75 - 127
1,2-Dichlorobenzene	50.0	48.6		ug/L		97	77 - 124
1,3-Dichlorobenzene	50.0	48.2		ug/L		96	79 - 123
1,4-Dichlorobenzene	50.0	47.7		ug/L		95	76 - 124
Dichlorodifluoromethane	50.0	29.9		ug/L		60	41 - 165
1,1-Dichloroethane	50.0	52.8		ug/L		106	69 - 132
1,2-Dichloroethane	50.0	48.6		ug/L		97	75 - 120
1,1-Dichloroethene	50.0	50.0		ug/L		100	73 - 134
1,2-Dichloropropane	50.0	50.9		ug/L		102	71 - 126
Ethylbenzene	50.0	50.8		ug/L		102	78 - 125
2-Hexanone	100	102		ug/L		102	52 - 149
Isopropylbenzene	50.0	48.6		ug/L		97	72 - 129
Methyl acetate	50.0	59.5		ug/L		119	26 - 182
Methylcyclohexane	50.0	51.0		ug/L		102	72 - 133
Methylene Chloride	50.0	49.1		ug/L		98	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	102		ug/L		102	76 - 126
Styrene	50.0	48.7		ug/L		97	75 - 129
1,1,2,2-Tetrachloroethane	50.0	49.9		ug/L		100	71 - 127
Tetrachloroethene	50.0	49.7		ug/L		99	77 - 128
Toluene	50.0	51.6		ug/L		103	77 - 125
trans-1,2-Dichloroethene	50.0	51.8		ug/L		104	78 - 130

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

Lab Sample ID: LCS 680-265679/4
Matrix: Water
Analysis Batch: 265679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	56.7		ug/L		113	72 - 127
1,2,4-Trichlorobenzene	50.0	49.5		ug/L		99	67 - 134
1,1,1-Trichloroethane	50.0	49.3		ug/L		99	76 - 126
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	69 - 127
Trichloroethene	50.0	50.0		ug/L		100	80 - 120
Trichlorofluoromethane	50.0	42.6		ug/L		85	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.7		ug/L		107	72 - 139
Vinyl chloride	50.0	43.2		ug/L		86	58 - 141
Xylenes, Total	150	148		ug/L		98	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*70 - 130*
Dibromofluoromethane	*99*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 680-265679/5
Matrix: Water
Analysis Batch: 265679

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
Acetone	100	89.0		ug/L		89	39 - 162	1	50
Benzene	50.0	52.7		ug/L		105	74 - 123	1	30
Bromodichloromethane	50.0	56.5		ug/L		113	72 - 129	1	30
Bromoform	50.0	50.3		ug/L		101	60 - 134	2	30
Bromomethane	50.0	38.1		ug/L		76	10 - 171	31	50
2-Butanone	100	89.2		ug/L		89	55 - 142	5	30
Carbon disulfide	50.0	53.8		ug/L		108	63 - 142	5	30
Carbon tetrachloride	50.0	56.8		ug/L		114	70 - 131	1	30
Chlorobenzene	50.0	49.0		ug/L		98	79 - 120	1	30
Chloroethane	50.0	55.8		ug/L		112	47 - 148	9	40
Chloroform	50.0	52.0		ug/L		104	76 - 128	3	30
Chloromethane	50.0	49.5		ug/L		99	47 - 151	7	30
cis-1,2-Dichloroethene	50.0	54.0		ug/L		108	78 - 127	2	30
cis-1,3-Dichloropropene	50.0	48.4		ug/L		97	73 - 128	0	30
Cyclohexane	50.0	51.3		ug/L		103	68 - 137	2	30
Dibromochloromethane	50.0	49.0		ug/L		98	63 - 134	4	50
1,2-Dibromo-3-Chloropropane	50.0	49.5		ug/L		99	57 - 126	1	50
1,2-Dibromoethane	50.0	53.9		ug/L		108	75 - 127	2	30
1,2-Dichlorobenzene	50.0	48.7		ug/L		97	77 - 124	0	30
1,3-Dichlorobenzene	50.0	48.5		ug/L		97	79 - 123	1	30
1,4-Dichlorobenzene	50.0	47.4		ug/L		95	76 - 124	0	30
Dichlorodifluoromethane	50.0	31.6		ug/L		63	41 - 165	5	50
1,1-Dichloroethane	50.0	54.5		ug/L		109	69 - 132	3	30
1,2-Dichloroethane	50.0	48.1		ug/L		96	75 - 120	1	30
1,1-Dichloroethene	50.0	52.4		ug/L		105	73 - 134	5	30
1,2-Dichloropropane	50.0	51.3		ug/L		103	71 - 126	1	30
Ethylbenzene	50.0	51.3		ug/L		103	78 - 125	1	30

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

Lab Sample ID: LCSD 680-265679/5
Matrix: Water
Analysis Batch: 265679

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
2-Hexanone			100	98.8		ug/L		99	52 - 149	3	30
Isopropylbenzene			50.0	48.4		ug/L		97	72 - 129	0	30
Methyl acetate			50.0	59.9		ug/L		120	26 - 182	1	30
Methylcyclohexane			50.0	50.8		ug/L		102	72 - 133	0	30
Methylene Chloride			50.0	50.0		ug/L		100	79 - 124	2	30
4-Methyl-2-pentanone			100	98.9		ug/L		99	51 - 143	2	30
Methyl tert-butyl ether			100	102		ug/L		102	76 - 126	0	30
Styrene			50.0	48.2		ug/L		96	75 - 129	1	30
1,1,2,2-Tetrachloroethane			50.0	48.4		ug/L		97	71 - 127	3	30
Tetrachloroethene			50.0	49.1		ug/L		98	77 - 128	1	30
Toluene			50.0	52.2		ug/L		104	77 - 125	1	30
trans-1,2-Dichloroethene			50.0	54.4		ug/L		109	78 - 130	5	30
trans-1,3-Dichloropropene			50.0	56.4		ug/L		113	72 - 127	1	50
1,2,4-Trichlorobenzene			50.0	48.9		ug/L		98	67 - 134	1	30
1,1,1-Trichloroethane			50.0	48.7		ug/L		97	76 - 126	1	30
1,1,2-Trichloroethane			50.0	47.5		ug/L		95	69 - 127	2	30
Trichloroethene			50.0	50.8		ug/L		102	80 - 120	2	30
Trichlorofluoromethane			50.0	41.0		ug/L		82	66 - 144	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	54.1		ug/L		108	72 - 139	1	30
Vinyl chloride			50.0	47.4		ug/L		95	58 - 141	9	30
Xylenes, Total			150	147		ug/L		98	80 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*102*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 680-265725/7
Matrix: Water
Analysis Batch: 265725

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/09/13 14:26	1
Benzene	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/09/13 14:26	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/09/13 14:26	1
2-Butanone	1.0	U	10	1.0	ug/L			02/09/13 14:26	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/09/13 14:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/09/13 14:26	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/09/13 14:26	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/09/13 14:26	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/09/13 14:26	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 14:26	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/09/13 14:26	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1

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

Lab Sample ID: MB 680-265725/7
Matrix: Water
Analysis Batch: 265725

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/09/13 14:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/09/13 14:26	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/09/13 14:26	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/09/13 14:26	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/09/13 14:26	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/09/13 14:26	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/09/13 14:26	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/09/13 14:26	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/09/13 14:26	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/09/13 14:26	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/09/13 14:26	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/09/13 14:26	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/09/13 14:26	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/09/13 14:26	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/09/13 14:26	1
Styrene	0.25	U	1.0	0.11	ug/L			02/09/13 14:26	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/09/13 14:26	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/09/13 14:26	1
Toluene	0.33	U	1.0	0.33	ug/L			02/09/13 14:26	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/09/13 14:26	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/09/13 14:26	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/09/13 14:26	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/09/13 14:26	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/09/13 14:26	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/09/13 14:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/09/13 14:26	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/09/13 14:26	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/09/13 14:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*02/09/13 14:26*	*1*
Dibromofluoromethane	*103*		*70 - 130*		*02/09/13 14:26*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*02/09/13 14:26*	*1*

Lab Sample ID: LCS 680-265725/4
Matrix: Water
Analysis Batch: 265725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	87.0		ug/L		87	39 - 162
Benzene	50.0	51.7		ug/L		103	74 - 123
Bromodichloromethane	50.0	57.8		ug/L		116	72 - 129
Bromoform	50.0	53.7		ug/L		107	60 - 134

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

Lab Sample ID: LCS 680-265725/4
Matrix: Water
Analysis Batch: 265725

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	50.0	26.1		ug/L		52	10 - 171
2-Butanone	100	92.6		ug/L		93	55 - 142
Carbon disulfide	50.0	51.5		ug/L		103	63 - 142
Carbon tetrachloride	50.0	58.4		ug/L		117	70 - 131
Chlorobenzene	50.0	50.6		ug/L		101	79 - 120
Chloroethane	50.0	52.6		ug/L		105	47 - 148
Chloroform	50.0	50.5		ug/L		101	76 - 128
Chloromethane	50.0	49.2		ug/L		98	47 - 151
cis-1,2-Dichloroethene	50.0	52.9		ug/L		106	78 - 127
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	73 - 128
Cyclohexane	50.0	52.9		ug/L		106	68 - 137
Dibromochloromethane	50.0	51.4		ug/L		103	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	52.3		ug/L		105	57 - 126
1,2-Dibromoethane	50.0	54.7		ug/L		109	75 - 127
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	77 - 124
1,3-Dichlorobenzene	50.0	49.4		ug/L		99	79 - 123
1,4-Dichlorobenzene	50.0	49.8		ug/L		100	76 - 124
Dichlorodifluoromethane	50.0	45.9		ug/L		92	41 - 165
1,1-Dichloroethane	50.0	53.0		ug/L		106	69 - 132
1,2-Dichloroethane	50.0	48.3		ug/L		97	75 - 120
1,1-Dichloroethene	50.0	52.6		ug/L		105	73 - 134
1,2-Dichloropropane	50.0	50.4		ug/L		101	71 - 126
Ethylbenzene	50.0	52.1		ug/L		104	78 - 125
2-Hexanone	100	103		ug/L		103	52 - 149
Isopropylbenzene	50.0	49.4		ug/L		99	72 - 129
Methyl acetate	50.0	59.9		ug/L		120	26 - 182
Methylcyclohexane	50.0	51.2		ug/L		102	72 - 133
Methylene Chloride	50.0	49.8		ug/L		100	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	101		ug/L		101	76 - 126
Styrene	50.0	50.7		ug/L		101	75 - 129
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	71 - 127
Tetrachloroethene	50.0	49.5		ug/L		99	77 - 128
Toluene	50.0	51.0		ug/L		102	77 - 125
trans-1,2-Dichloroethene	50.0	52.2		ug/L		104	78 - 130
trans-1,3-Dichloropropene	50.0	56.3		ug/L		113	72 - 127
1,2,4-Trichlorobenzene	50.0	48.7		ug/L		97	67 - 134
1,1,1-Trichloroethane	50.0	49.2		ug/L		98	76 - 126
1,1,2-Trichloroethane	50.0	48.6		ug/L		97	69 - 127
Trichloroethene	50.0	50.3		ug/L		101	80 - 120
Trichlorofluoromethane	50.0	45.2		ug/L		90	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	54.4		ug/L		109	72 - 139
Vinyl chloride	50.0	47.7		ug/L		95	58 - 141
Xylenes, Total	150	152		ug/L		101	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*70 - 130*

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

Lab Sample ID: LCS 680-265725/4
Matrix: Water
Analysis Batch: 265725

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 680-265725/5
Matrix: Water
Analysis Batch: 265725

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
Acetone			100	88.2		ug/L		88	39 - 162	1	50
Benzene			50.0	53.3		ug/L		107	74 - 123	3	30
Bromodichloromethane			50.0	58.3		ug/L		117	72 - 129	1	30
Bromoform			50.0	53.2		ug/L		106	60 - 134	1	30
Bromomethane			50.0	29.4		ug/L		59	10 - 171	12	50
2-Butanone			100	93.6		ug/L		94	55 - 142	1	30
Carbon disulfide			50.0	52.0		ug/L		104	63 - 142	1	30
Carbon tetrachloride			50.0	57.7		ug/L		115	70 - 131	1	30
Chlorobenzene			50.0	50.3		ug/L		101	79 - 120	1	30
Chloroethane			50.0	54.4		ug/L		109	47 - 148	3	40
Chloroform			50.0	52.0		ug/L		104	76 - 128	3	30
Chloromethane			50.0	48.3		ug/L		97	47 - 151	2	30
cis-1,2-Dichloroethene			50.0	53.6		ug/L		107	78 - 127	1	30
cis-1,3-Dichloropropene			50.0	49.0		ug/L		98	73 - 128	1	30
Cyclohexane			50.0	52.5		ug/L		105	68 - 137	1	30
Dibromochloromethane			50.0	51.8		ug/L		104	63 - 134	1	50
1,2-Dibromo-3-Chloropropane			50.0	50.5		ug/L		101	57 - 126	4	50
1,2-Dibromoethane			50.0	55.6		ug/L		111	75 - 127	2	30
1,2-Dichlorobenzene			50.0	50.7		ug/L		101	77 - 124	1	30
1,3-Dichlorobenzene			50.0	49.6		ug/L		99	79 - 123	0	30
1,4-Dichlorobenzene			50.0	50.1		ug/L		100	76 - 124	0	30
Dichlorodifluoromethane			50.0	34.3		ug/L		69	41 - 165	29	50
1,1-Dichloroethane			50.0	53.3		ug/L		107	69 - 132	1	30
1,2-Dichloroethane			50.0	49.7		ug/L		99	75 - 120	3	30
1,1-Dichloroethene			50.0	52.1		ug/L		104	73 - 134	1	30
1,2-Dichloropropane			50.0	52.7		ug/L		105	71 - 126	5	30
Ethylbenzene			50.0	52.7		ug/L		105	78 - 125	1	30
2-Hexanone			100	108		ug/L		108	52 - 149	4	30
Isopropylbenzene			50.0	50.1		ug/L		100	72 - 129	1	30
Methyl acetate			50.0	61.8		ug/L		124	26 - 182	3	30
Methylcyclohexane			50.0	52.6		ug/L		105	72 - 133	3	30
Methylene Chloride			50.0	50.1		ug/L		100	79 - 124	1	30
4-Methyl-2-pentanone			100	105		ug/L		105	51 - 143	4	30
Methyl tert-butyl ether			100	103		ug/L		103	76 - 126	2	30
Styrene			50.0	50.9		ug/L		102	75 - 129	0	30
1,1,2,2-Tetrachloroethane			50.0	52.7		ug/L		105	71 - 127	0	30
Tetrachloroethene			50.0	50.1		ug/L		100	77 - 128	1	30
Toluene			50.0	51.9		ug/L		104	77 - 125	2	30
trans-1,2-Dichloroethene			50.0	52.9		ug/L		106	78 - 130	1	30
trans-1,3-Dichloropropene			50.0	57.1		ug/L		114	72 - 127	1	50

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

Lab Sample ID: LCSD 680-265725/5
Matrix: Water
Analysis Batch: 265725

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
1,2,4-Trichlorobenzene			50.0	50.1		ug/L		100	67 - 134	3	30
1,1,1-Trichloroethane			50.0	49.7		ug/L		99	76 - 126	1	30
1,1,2-Trichloroethane			50.0	49.0		ug/L		98	69 - 127	1	30
Trichloroethene			50.0	50.2		ug/L		100	80 - 120	0	30
Trichlorofluoromethane			50.0	41.8		ug/L		84	66 - 144	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	54.6		ug/L		109	72 - 139	1	30
Vinyl chloride			50.0	46.1		ug/L		92	58 - 141	3	30
Xylenes, Total			150	152		ug/L		101	80 - 124	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*
Dibromofluoromethane	*101*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: 680-87268-38 MS
Matrix: Water
Analysis Batch: 265725

Client Sample ID: MW14-76-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	5.0	U	100	89.9		ug/L		90	39 - 162
Benzene	0.25	U	50.0	53.5		ug/L		107	74 - 123
Bromodichloromethane	0.25	U	50.0	57.1		ug/L		114	72 - 129
Bromoform	0.50	U	50.0	52.2		ug/L		104	60 - 134
Bromomethane	0.80	U	50.0	38.2		ug/L		76	10 - 171
2-Butanone	1.0	U	100	91.6		ug/L		92	55 - 142
Carbon disulfide	0.60	U	50.0	52.3		ug/L		105	63 - 142
Carbon tetrachloride	0.65	J	50.0	59.4		ug/L		117	70 - 131
Chlorobenzene	0.25	U	50.0	50.4		ug/L		101	79 - 120
Chloroethane	1.0	U	50.0	59.5		ug/L		119	47 - 148
Chloroform	0.14	J	50.0	52.0		ug/L		104	76 - 128
Chloromethane	0.33	U	50.0	52.1		ug/L		104	47 - 151
cis-1,2-Dichloroethene	1.5		50.0	54.1		ug/L		105	78 - 127
cis-1,3-Dichloropropene	0.25	U	50.0	45.7		ug/L		91	73 - 128
Cyclohexane	0.25	U	50.0	56.2		ug/L		112	68 - 137
Dibromochloromethane	0.25	U	50.0	50.0		ug/L		100	63 - 134
1,2-Dibromo-3-Chloropropane	1.0	U	50.0	47.5		ug/L		95	57 - 126
1,2-Dibromoethane	0.25	U	50.0	53.0		ug/L		106	75 - 127
1,2-Dichlorobenzene	0.25	U	50.0	50.8		ug/L		102	77 - 124
1,3-Dichlorobenzene	0.25	U	50.0	51.4		ug/L		103	79 - 123
1,4-Dichlorobenzene	0.28	U	50.0	50.1		ug/L		100	76 - 124
Dichlorodifluoromethane	0.25	U	50.0	29.0		ug/L		58	41 - 165
1,1-Dichloroethane	0.27	J	50.0	55.2		ug/L		110	69 - 132
1,2-Dichloroethane	0.25	U	50.0	49.4		ug/L		99	75 - 120
1,1-Dichloroethene	0.25	U	50.0	51.9		ug/L		104	73 - 134
1,2-Dichloropropane	0.25	U	50.0	51.2		ug/L		102	71 - 126
Ethylbenzene	0.25	U	50.0	53.2		ug/L		106	78 - 125
2-Hexanone	1.0	U	100	104		ug/L		104	52 - 149

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

Lab Sample ID: 680-87268-38 MS
Matrix: Water
Analysis Batch: 265725

Client Sample ID: MW14-76-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	0.25	U	50.0	50.9		ug/L		102	72 - 129
Methyl acetate	0.25	U	50.0	53.5		ug/L		107	26 - 182
Methylcyclohexane	0.25	U	50.0	51.9		ug/L		104	72 - 133
Methylene Chloride	1.0	U	50.0	48.9		ug/L		98	79 - 124
4-Methyl-2-pentanone	1.0	U	100	102		ug/L		102	51 - 143
Methyl tert-butyl ether	0.50	U	100	96.1		ug/L		96	76 - 126
Styrene	0.25	U	50.0	50.7		ug/L		101	75 - 129
1,1,2,2-Tetrachloroethane	0.25	U	50.0	50.7		ug/L		101	71 - 127
Tetrachloroethene	4.7		50.0	56.7		ug/L		104	77 - 128
Toluene	0.33	U	50.0	52.3		ug/L		105	77 - 125
trans-1,2-Dichloroethene	0.25	U	50.0	52.3		ug/L		105	78 - 130
trans-1,3-Dichloropropene	0.25	U	50.0	52.0		ug/L		104	72 - 127
1,2,4-Trichlorobenzene	0.25	U	50.0	46.4		ug/L		93	67 - 134
1,1,1-Trichloroethane	3.1		50.0	54.3		ug/L		102	76 - 126
1,1,2-Trichloroethane	0.25	U	50.0	48.9		ug/L		98	69 - 127
Trichloroethene	1.1		50.0	51.9		ug/L		102	80 - 120
Trichlorofluoromethane	0.25	U	50.0	48.2		ug/L		96	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	50.0	55.3		ug/L		111	72 - 139
Vinyl chloride	0.50	U	50.0	53.2		ug/L		106	58 - 141
Xylenes, Total	0.75	U	150	154		ug/L		103	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: 680-87268-38 MSD
Matrix: Water
Analysis Batch: 265725

Client Sample ID: MW14-76-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	5.0	U	100	94.9		ug/L		95	39 - 162	5	50
Benzene	0.25	U	50.0	51.4		ug/L		103	74 - 123	4	30
Bromodichloromethane	0.25	U	50.0	56.1		ug/L		112	72 - 129	2	30
Bromoform	0.50	U	50.0	50.2		ug/L		100	60 - 134	4	30
Bromomethane	0.80	U	50.0	45.7		ug/L		91	10 - 171	18	50
2-Butanone	1.0	U	100	93.6		ug/L		94	55 - 142	2	30
Carbon disulfide	0.60	U	50.0	55.3		ug/L		111	63 - 142	5	30
Carbon tetrachloride	0.65	J	50.0	58.4		ug/L		115	70 - 131	2	30
Chlorobenzene	0.25	U	50.0	49.5		ug/L		99	79 - 120	2	30
Chloroethane	1.0	U	50.0	59.3		ug/L		119	47 - 148	0	40
Chloroform	0.14	J	50.0	52.1		ug/L		104	76 - 128	0	30
Chloromethane	0.33	U	50.0	53.6		ug/L		107	47 - 151	3	30
cis-1,2-Dichloroethene	1.5		50.0	56.3		ug/L		109	78 - 127	4	30
cis-1,3-Dichloropropene	0.25	U	50.0	44.9		ug/L		90	73 - 128	2	30
Cyclohexane	0.25	U	50.0	54.2		ug/L		108	68 - 137	4	30
Dibromochloromethane	0.25	U	50.0	48.7		ug/L		97	63 - 134	3	50

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

Lab Sample ID: 680-87268-38 MSD
Matrix: Water
Analysis Batch: 265725

Client Sample ID: MW14-76-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	1.0	U	50.0	46.6		ug/L		93	57 - 126	2	50
1,2-Dibromoethane	0.25	U	50.0	50.8		ug/L		102	75 - 127	4	30
1,2-Dichlorobenzene	0.25	U	50.0	48.9		ug/L		98	77 - 124	4	30
1,3-Dichlorobenzene	0.25	U	50.0	49.2		ug/L		98	79 - 123	4	30
1,4-Dichlorobenzene	0.28	U	50.0	48.5		ug/L		97	76 - 124	3	30
Dichlorodifluoromethane	0.25	U	50.0	32.6		ug/L		65	41 - 165	12	50
1,1-Dichloroethane	0.27	J	50.0	57.0		ug/L		114	69 - 132	3	30
1,2-Dichloroethane	0.25	U	50.0	48.5		ug/L		97	75 - 120	2	30
1,1-Dichloroethene	0.25	U	50.0	56.5		ug/L		113	73 - 134	8	30
1,2-Dichloropropane	0.25	U	50.0	49.9		ug/L		100	71 - 126	2	30
Ethylbenzene	0.25	U	50.0	52.8		ug/L		106	78 - 125	1	30
2-Hexanone	1.0	U	100	101		ug/L		101	52 - 149	3	30
Isopropylbenzene	0.25	U	50.0	49.8		ug/L		100	72 - 129	2	30
Methyl acetate	0.25	U	50.0	54.5		ug/L		109	26 - 182	2	30
Methylcyclohexane	0.25	U	50.0	49.7		ug/L		99	72 - 133	4	30
Methylene Chloride	1.0	U	50.0	51.5		ug/L		103	79 - 124	5	30
4-Methyl-2-pentanone	1.0	U	100	99.2		ug/L		99	51 - 143	3	30
Methyl tert-butyl ether	0.50	U	100	99.6		ug/L		100	76 - 126	4	30
Styrene	0.25	U	50.0	49.6		ug/L		99	75 - 129	2	30
1,1,2,2-Tetrachloroethane	0.25	U	50.0	48.9		ug/L		98	71 - 127	4	30
Tetrachloroethene	4.7		50.0	55.2		ug/L		101	77 - 128	3	30
Toluene	0.33	U	50.0	51.5		ug/L		103	77 - 125	2	30
trans-1,2-Dichloroethene	0.25	U	50.0	54.5		ug/L		109	78 - 130	4	30
trans-1,3-Dichloropropene	0.25	U	50.0	52.9		ug/L		106	72 - 127	2	50
1,2,4-Trichlorobenzene	0.25	U	50.0	44.6		ug/L		89	67 - 134	4	30
1,1,1-Trichloroethane	3.1		50.0	53.2		ug/L		100	76 - 126	2	30
1,1,2-Trichloroethane	0.25	U	50.0	45.6		ug/L		91	69 - 127	7	30
Trichloroethene	1.1		50.0	50.8		ug/L		99	80 - 120	2	30
Trichlorofluoromethane	0.25	U	50.0	50.7		ug/L		101	66 - 144	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	50.0	57.3		ug/L		115	72 - 139	4	30
Vinyl chloride	0.50	U	50.0	53.4		ug/L		107	58 - 141	0	30
Xylenes, Total	0.75	U	150	152		ug/L		101	80 - 124	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*70 - 130*
Dibromofluoromethane	*104*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

GC/MS VOA

Analysis Batch: 265679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87268-37	MW15-X-EB	Total/NA	Water	8260B	
LCS 680-265679/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-265679/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-265679/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87268-28	MW6-71-GW	Total/NA	Water	8260B	
680-87268-29	MW9-110-GW	Total/NA	Water	8260B	
680-87268-30	MW16-67-GW	Total/NA	Water	8260B	
680-87268-31	PMW-3-82-GW	Total/NA	Water	8260B	
680-87268-32	MW20-78-GW	Total/NA	Water	8260B	
680-87268-33	MW22-73-GW	Total/NA	Water	8260B	
680-87268-34	MW19-75-GW	Total/NA	Water	8260B	
680-87268-35	MW18-75-GW	Total/NA	Water	8260B	
680-87268-36	MW15-79-GW	Total/NA	Water	8260B	
680-87268-38	MW14-76-GW	Total/NA	Water	8260B	
680-87268-38 MS	MW14-76-GW	Total/NA	Water	8260B	
680-87268-38 MSD	MW14-76-GW	Total/NA	Water	8260B	
680-87268-39	GEP3-73-GW	Total/NA	Water	8260B	
LCS 680-265725/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-265725/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-265725/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW6-71-GW
Lab Sample ID: 680-87268-28
Date Collected: 02/07/13 14:05
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 16:50	JD	TAL SAV

Client Sample ID: MW9-110-GW
Lab Sample ID: 680-87268-29
Date Collected: 02/05/13 10:40
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 17:10	JD	TAL SAV

Client Sample ID: MW16-67-GW
Lab Sample ID: 680-87268-30
Date Collected: 02/05/13 14:15
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 17:31	JD	TAL SAV

Client Sample ID: PMW-3-82-GW
Lab Sample ID: 680-87268-31
Date Collected: 02/05/13 16:20
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 17:51	JD	TAL SAV

Client Sample ID: MW20-78-GW
Lab Sample ID: 680-87268-32
Date Collected: 02/06/13 09:10
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 18:12	JD	TAL SAV

Client Sample ID: MW22-73-GW
Lab Sample ID: 680-87268-33
Date Collected: 02/06/13 12:05
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	265725	02/09/13 15:28	JD	TAL SAV

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Client Sample ID: MW19-75-GW
Lab Sample ID: 680-87268-34
Date Collected: 02/06/13 13:45
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 18:32	JD	TAL SAV

Client Sample ID: MW18-75-GW
Lab Sample ID: 680-87268-35
Date Collected: 02/06/13 15:10
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 18:52	JD	TAL SAV

Client Sample ID: MW15-79-GW
Lab Sample ID: 680-87268-36
Date Collected: 02/06/13 16:25
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 19:13	JD	TAL SAV

Client Sample ID: MW15-X-EB
Lab Sample ID: 680-87268-37
Date Collected: 02/06/13 17:00
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265679	02/08/13 14:10	JD	TAL SAV

Client Sample ID: MW14-76-GW
Lab Sample ID: 680-87268-38
Date Collected: 02/07/13 09:10
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 19:33	JD	TAL SAV

Client Sample ID: GEP3-73-GW
Lab Sample ID: 680-87268-39
Date Collected: 02/07/13 11:00
Matrix: Water
Date Received: 02/08/13 08:13

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265725	02/09/13 19:54	JD	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: NYSDOH

Client Contact	Project Manager: JOSEPH SCHMIDL	Site Contact: David Lidavi	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802/229-5377	Lab Contact: M. Kersey	Carrier: Fed Ex	1 of 5 COCs
535 Stone Cutters Way	**Analysis Turnaround Time**			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) W			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below (3 days)			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: SCHAGHTICOKE DEPOT	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C/TASK 5D	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	VOCs 8260B	Sample Specific Notes:
WP01-70.0-GW	2/5/13	14:06	Grab	GW	2	N	G	✓	these samples are 3-day TAT
WP01-91.5-GW	2/6/13	10:09						✓	
WP01-100.0-GW	2/6/13	14:15						✓	
WP01-1750-1100-GW	2/6/13	17:11						✓	
WP02-75.0-GW	2/6/13	10:07						✓	
WP02-87.5-GW	2/6/13	13:44						✓	
WP02-96.4-GW	2/6/13	17:26						✓	
TB-020713	2/7/13	15:00	↓	↓	↓	↓	↓	✓	
WP-02-110.2-GW	2/7/13	12:50							
GEP3-73-GW	2/7/13	11:00	Grab	GW	2	Y	G	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87263
2.6°C

Relinquished by:	Company: STONE ENVIRONMENTAL	Date/Time: 2/7/13 1730	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA SAV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

Client Contact	Project Manager: Joseph Schmidl	Site Contact: David Linaci	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 603-455-6946	Lab Contact: M. Kersey	Carrier: Fed Ex	2 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			Job / SDG No.:
Project Name: DNS Center Sceptic Depot	☒ 1 week			
Site: Sceptic Depot Site, Glenville, NY	☐ 2 days			Sampler: ESP
PO# 102305-R C	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	8260 - VOC	Sample Specific Notes:
MW12-78.0-GW	2/5/13	15:20	Grab	GW	3	N	G	X	
MWGEP1-73.0-GW	2/7/13	11:50							
MWGEP2-76.0-GW	2/7/13	10:37							
MWGEP2-76.0-MS	2/7/13	10:37							
MWGEP2-76.0-MSD	2/7/13	10:37							
MW33-x-EB	2/5/13	16:40	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-37263

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:30	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company: TA SV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

Client Contact	Project Manager: Joseph Schmidl	Site Contact:	Date:	COC No:
Stone Environmental, Inc.	Tel/Fax: 603-455-0946	Lab Contact:	Carrier:	2 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W)			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: DNS Center Scotia Depot	☒ 1 week			Job / SDG No.:
Site: Scotia Depot Site, Glenville, NY	☐ 2 days			
PO# 102305-RC	☐ 1 day			Sampler: JP

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260C-VOC	Sample Specific Notes:
MW21-72.0-GW	2/7/13	09:11	Grab	GW	3	N	G	X	
MW21-72.0-D	2/7/13	09:11							
MW21-X-EB	2/7/13	09:30							
MWGEP4-73.0-GW	2/6/13	16:15							
MWGEP4-73.0-D	2/6/13	16:15							
MW7-70.5-GW	2/5/13	13:50							
MW5-72.0-GW	2/5/13	10:28							
MW17-75.0-GW	2/6/13	14:45							
MW23-80.0-GW	2/6/13	13:31							
MW31-64.0-GW	2/6/13	11:57							
MW33-62.0-GW	2/6/13	08:35							
MW32-66.0-GW	2/6/13	09:53	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87268

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:32	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA BV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joseph Schmidl	Site Contact: David Linnai	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802-229-5377	Lab Contact: M. Kersey	Carrier: FedEx	1 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W)			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: Seneca Naval Depot	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C/Task 5D	☐ 1 day			Sampler: DTL

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260B - VOCs	Sample Specific Notes:
MW13-78-GW	2/7/13	1240	Grab	GW	3	N	G	X	
TB-020713B	2/7/13	1400	↓	↓	↓	↓	↓	↓	
MW6-71-GW	2/7/13	1405	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

630 97268

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Stone Environmental	2/7/13 17:30			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA SV	2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: NYSDOH

Client Contact	Project Manager: Joseph Schmid	Site Contact: David Livari	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802-229-5377	Lab Contact: M. Kersey	Carrier: FedEx	5 of 5 COCs
535 Stone Cutters Way	**Analysis Turnaround Time**			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: Scotia Naval Depot	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C / Task 5D	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260	Sample Specific Notes:
MW9-110-GW	2/5/13	1040	GRAB	GW	3	N	G		
MW16-67-GW	↓	1415	↓	↓	↓	↓	↓		
PMW-3-78-GW	↓	1620							
MW20-78-GW	2/6/13	0910							
MW22-73-GW	↓	1205							
MW19-75-GW		1345							
MW19-75-GW		1510							
MW15-79-GW		1625							
MW15-X-EB	↓	1700							
MW14-76-GW	2/7/13	0910							
MW14-76-MS	↓	0910							
MW14-76-MSD	↓	0910	↓	↓	↓	↓	↓		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-87268

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:30	Received by:	Company	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA SV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87268-3
SDG Number: 68087268-3

Login Number: 87268
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received and the COC.	False	RECEIVED -39 NOT ON COC/-31 LABEL READS "82" NOT "78"
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	02-28-13
A2LA	ISO/IEC 17025		399.01	02-28-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-12
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-12
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	02-28-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-12
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	12-31-12
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-13
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-12
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87268-3
SDG: 68087268-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87268-28	MW6-71-GW	Water	02/07/13 14:05	02/08/13 08:13
680-87268-29	MW9-110-GW	Water	02/05/13 10:40	02/08/13 08:13
680-87268-30	MW16-67-GW	Water	02/05/13 14:15	02/08/13 08:13
680-87268-31	PMW-3-82-GW	Water	02/05/13 16:20	02/08/13 08:13
680-87268-32	MW20-78-GW	Water	02/06/13 09:10	02/08/13 08:13
680-87268-33	MW22-73-GW	Water	02/06/13 12:05	02/08/13 08:13
680-87268-34	MW19-75-GW	Water	02/06/13 13:45	02/08/13 08:13
680-87268-35	MW18-75-GW	Water	02/06/13 15:10	02/08/13 08:13
680-87268-36	MW15-79-GW	Water	02/06/13 16:25	02/08/13 08:13
680-87268-37	MW15-X-EB	Water	02/06/13 17:00	02/08/13 08:13
680-87268-38	MW14-76-GW	Water	02/07/13 09:10	02/08/13 08:13
680-87268-39	GEP3-73-GW	Water	02/07/13 11:00	02/08/13 08:13

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-87439-1
TestAmerica Sample Delivery Group: 68087439
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Michele R Kersey

Authorized for release by:
2/25/2013 2:15:21 PM

Michele Kersey
Project Manager I
michele.kersey@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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Job ID: 680-87439-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87439-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/14/2013 8:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP03-87.5-GW (680-87439-1) and WP04-72.7-GW (680-87439-2) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/14/2013.

Samples WP03-87.5-GW (680-87439-1)[2X] and WP04-72.7-GW (680-87439-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87439-1	WP03-87.5-GW	Water	02/08/13 15:01	02/14/13 08:46
680-87439-2	WP04-72.7-GW	Water	02/08/13 12:44	02/14/13 08:46

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Client Sample ID: WP03-87.5-GW
Date Collected: 02/08/13 15:01
Date Received: 02/14/13 08:46

Lab Sample ID: 680-87439-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	50	10	ug/L			02/14/13 13:25	2
Benzene	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
Bromodichloromethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
Bromoform	1.0	U	2.0	1.0	ug/L			02/14/13 13:25	2
Bromomethane	1.6	U	2.0	1.6	ug/L			02/14/13 13:25	2
2-Butanone	2.0	U	20	2.0	ug/L			02/14/13 13:25	2
Carbon disulfide	1.2	U	4.0	1.2	ug/L			02/14/13 13:25	2
Carbon tetrachloride	1.0	U	2.0	1.0	ug/L			02/14/13 13:25	2
Chlorobenzene	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
Chloroethane	2.0	U	2.0	2.0	ug/L			02/14/13 13:25	2
Chloroform	0.50	U	2.0	0.28	ug/L			02/14/13 13:25	2
Chloromethane	0.66	U	2.0	0.66	ug/L			02/14/13 13:25	2
Dibromochloromethane	0.50	U	2.0	0.20	ug/L			02/14/13 13:25	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.88	ug/L			02/14/13 13:25	2
1,2-Dibromoethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
1,2-Dichlorobenzene	0.50	U	2.0	0.42	ug/L			02/14/13 13:25	2
1,3-Dichlorobenzene	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
1,4-Dichlorobenzene	0.56	U	2.0	0.56	ug/L			02/14/13 13:25	2
Dichlorodifluoromethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
1,1-Dichloroethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
1,2-Dichloroethane	0.50	U	2.0	0.20	ug/L			02/14/13 13:25	2
cis-1,2-Dichloroethene	0.50	U	2.0	0.30	ug/L			02/14/13 13:25	2
trans-1,2-Dichloroethene	0.50	U	2.0	0.40	ug/L			02/14/13 13:25	2
1,1-Dichloroethene	0.50	U	2.0	0.22	ug/L			02/14/13 13:25	2
1,2-Dichloropropane	0.50	U	2.0	0.26	ug/L			02/14/13 13:25	2
cis-1,3-Dichloropropene	0.50	U	2.0	0.22	ug/L			02/14/13 13:25	2
trans-1,3-Dichloropropene	0.50	U	2.0	0.42	ug/L			02/14/13 13:25	2
Ethylbenzene	0.50	U	2.0	0.22	ug/L			02/14/13 13:25	2
2-Hexanone	2.0	U	20	2.0	ug/L			02/14/13 13:25	2
Isopropylbenzene	0.50	U	2.0	0.20	ug/L			02/14/13 13:25	2
Methylene Chloride	2.0	U	10	2.0	ug/L			02/14/13 13:25	2
4-Methyl-2-pentanone	2.0	U	20	2.0	ug/L			02/14/13 13:25	2
Methyl tert-butyl ether	1.0	U	20	0.40	ug/L			02/14/13 13:25	2
Styrene	0.50	U	2.0	0.22	ug/L			02/14/13 13:25	2
1,1,2,2-Tetrachloroethane	0.50	U	2.0	0.36	ug/L			02/14/13 13:25	2
Tetrachloroethene	0.50	U	2.0	0.30	ug/L			02/14/13 13:25	2
Toluene	0.66	U	2.0	0.66	ug/L			02/14/13 13:25	2
1,2,4-Trichlorobenzene	**0.51**	**J**	2.0	0.50	ug/L			02/14/13 13:25	2
1,1,1-Trichloroethane	1.0	U	2.0	1.0	ug/L			02/14/13 13:25	2
1,1,2-Trichloroethane	0.50	U	2.0	0.26	ug/L			02/14/13 13:25	2
Trichloroethene	**210**		2.0	0.26	ug/L			02/14/13 13:25	2
Trichlorofluoromethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	2.0	1.0	ug/L			02/14/13 13:25	2
Vinyl chloride	1.0	U	2.0	0.36	ug/L			02/14/13 13:25	2
Xylenes, Total	1.5	U	4.0	0.40	ug/L			02/14/13 13:25	2
Cyclohexane	0.50	U	2.0	0.50	ug/L			02/14/13 13:25	2
Methyl acetate	0.50	U	2.0	0.38	ug/L			02/14/13 13:25	2
Methylcyclohexane	0.50	U	2.0	0.20	ug/L			02/14/13 13:25	2

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Client Sample ID: WP03-87.5-GW

Lab Sample ID: 680-87439-1

Date Collected: 02/08/13 15:01
Matrix: Water
Date Received: 02/14/13 08:46

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*105*		*70 - 130*		*02/14/13 13:25*	*2*
Dibromofluoromethane	*91*		*70 - 130*		*02/14/13 13:25*	*2*
Toluene-d8 (Surr)	*106*		*70 - 130*		*02/14/13 13:25*	*2*

Client Sample ID: WP04-72.7-GW

Lab Sample ID: 680-87439-2

Date Collected: 02/08/13 12:44
Matrix: Water
Date Received: 02/14/13 08:46

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	50	10	ug/L			02/14/13 13:54	2
Benzene	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
Bromodichloromethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
Bromoform	1.0	U	2.0	1.0	ug/L			02/14/13 13:54	2
Bromomethane	1.6	U	2.0	1.6	ug/L			02/14/13 13:54	2
2-Butanone	2.0	U	20	2.0	ug/L			02/14/13 13:54	2
Carbon disulfide	1.2	U	4.0	1.2	ug/L			02/14/13 13:54	2
Carbon tetrachloride	1.0	U	2.0	1.0	ug/L			02/14/13 13:54	2
Chlorobenzene	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
Chloroethane	2.0	U	2.0	2.0	ug/L			02/14/13 13:54	2
Chloroform	0.50	U	2.0	0.28	ug/L			02/14/13 13:54	2
Chloromethane	0.66	U	2.0	0.66	ug/L			02/14/13 13:54	2
Dibromochloromethane	0.50	U	2.0	0.20	ug/L			02/14/13 13:54	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.88	ug/L			02/14/13 13:54	2
1,2-Dibromoethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
1,2-Dichlorobenzene	0.50	U	2.0	0.42	ug/L			02/14/13 13:54	2
1,3-Dichlorobenzene	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
1,4-Dichlorobenzene	0.56	U	2.0	0.56	ug/L			02/14/13 13:54	2
Dichlorodifluoromethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
1,1-Dichloroethane	**1.3**	**J**	2.0	0.50	ug/L			02/14/13 13:54	2
1,2-Dichloroethane	0.50	U	2.0	0.20	ug/L			02/14/13 13:54	2
cis-1,2-Dichloroethene	**5.8**		2.0	0.30	ug/L			02/14/13 13:54	2
trans-1,2-Dichloroethene	0.50	U	2.0	0.40	ug/L			02/14/13 13:54	2
1,1-Dichloroethene	**0.77**	**J**	2.0	0.22	ug/L			02/14/13 13:54	2
1,2-Dichloropropane	0.50	U	2.0	0.26	ug/L			02/14/13 13:54	2
cis-1,3-Dichloropropene	0.50	U	2.0	0.22	ug/L			02/14/13 13:54	2
trans-1,3-Dichloropropene	0.50	U	2.0	0.42	ug/L			02/14/13 13:54	2
Ethylbenzene	0.50	U	2.0	0.22	ug/L			02/14/13 13:54	2
2-Hexanone	2.0	U	20	2.0	ug/L			02/14/13 13:54	2
Isopropylbenzene	0.50	U	2.0	0.20	ug/L			02/14/13 13:54	2
Methylene Chloride	2.0	U	10	2.0	ug/L			02/14/13 13:54	2
4-Methyl-2-pentanone	2.0	U	20	2.0	ug/L			02/14/13 13:54	2
Methyl tert-butyl ether	1.0	U	20	0.40	ug/L			02/14/13 13:54	2
Styrene	0.50	U	2.0	0.22	ug/L			02/14/13 13:54	2
1,1,2,2-Tetrachloroethane	0.50	U	2.0	0.36	ug/L			02/14/13 13:54	2
Tetrachloroethene	**38**		2.0	0.30	ug/L			02/14/13 13:54	2
Toluene	0.66	U	2.0	0.66	ug/L			02/14/13 13:54	2
1,2,4-Trichlorobenzene	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
1,1,1-Trichloroethane	**19**		2.0	1.0	ug/L			02/14/13 13:54	2
1,1,2-Trichloroethane	0.50	U	2.0	0.26	ug/L			02/14/13 13:54	2

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Client Sample ID: WP04-72.7-GW
Date Collected: 02/08/13 12:44
Date Received: 02/14/13 08:46

Lab Sample ID: 680-87439-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**140**		2.0	0.26	ug/L			02/14/13 13:54	2
Trichlorofluoromethane	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	2.0	1.0	ug/L			02/14/13 13:54	2
Vinyl chloride	1.0	U	2.0	0.36	ug/L			02/14/13 13:54	2
Xylenes, Total	1.5	U	4.0	0.40	ug/L			02/14/13 13:54	2
Cyclohexane	0.50	U	2.0	0.50	ug/L			02/14/13 13:54	2
Methyl acetate	0.50	U	2.0	0.38	ug/L			02/14/13 13:54	2
Methylcyclohexane	0.50	U	2.0	0.20	ug/L			02/14/13 13:54	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*02/14/13 13:54*	*2*
Dibromofluoromethane	*91*		*70 - 130*		*02/14/13 13:54*	*2*
Toluene-d8 (Surr)	*104*		*70 - 130*		*02/14/13 13:54*	*2*

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

Lab Sample ID: MB 680-266233/6
Matrix: Water
Analysis Batch: 266233

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/14/13 12:39	1
Benzene	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/14/13 12:39	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/14/13 12:39	1
2-Butanone	1.0	U	10	1.0	ug/L			02/14/13 12:39	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/14/13 12:39	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/14/13 12:39	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/14/13 12:39	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/14/13 12:39	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/14/13 12:39	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/14/13 12:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/14/13 12:39	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/14/13 12:39	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/14/13 12:39	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/14/13 12:39	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/14/13 12:39	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/14/13 12:39	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/14/13 12:39	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/14/13 12:39	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/14/13 12:39	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/14/13 12:39	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/14/13 12:39	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/14/13 12:39	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/14/13 12:39	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/14/13 12:39	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/14/13 12:39	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/14/13 12:39	1
Styrene	0.25	U	1.0	0.11	ug/L			02/14/13 12:39	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/14/13 12:39	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/14/13 12:39	1
Toluene	0.33	U	1.0	0.33	ug/L			02/14/13 12:39	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/14/13 12:39	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/14/13 12:39	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/14/13 12:39	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/14/13 12:39	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/14/13 12:39	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/14/13 12:39	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/14/13 12:39	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/14/13 12:39	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/14/13 12:39	1

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

Lab Sample ID: MB 680-266233/6
Matrix: Water
Analysis Batch: 266233

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		70 - 130		02/14/13 12:39	1
Dibromofluoromethane	104		70 - 130		02/14/13 12:39	1
Toluene-d8 (Surr)	103		70 - 130		02/14/13 12:39	1

Lab Sample ID: LCS 680-266233/4
Matrix: Water
Analysis Batch: 266233

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	96.4		ug/L		96	39 - 162
Benzene	50.0	50.5		ug/L		101	74 - 123
Bromodichloromethane	50.0	58.8		ug/L		118	72 - 129
Bromoform	50.0	55.1		ug/L		110	60 - 134
Bromomethane	50.0	20.9		ug/L		42	10 - 171
2-Butanone	100	98.6		ug/L		99	55 - 142
Carbon disulfide	50.0	53.0		ug/L		106	63 - 142
Carbon tetrachloride	50.0	56.5		ug/L		113	70 - 131
Chlorobenzene	50.0	50.4		ug/L		101	79 - 120
Chloroethane	50.0	38.4		ug/L		77	47 - 148
Chloroform	50.0	50.1		ug/L		100	76 - 128
Chloromethane	50.0	44.8		ug/L		90	47 - 151
Dibromochloromethane	50.0	46.8		ug/L		94	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	53.3		ug/L		107	57 - 126
1,2-Dibromoethane	50.0	57.5		ug/L		115	75 - 127
1,2-Dichlorobenzene	50.0	52.4		ug/L		105	77 - 124
1,3-Dichlorobenzene	50.0	51.9		ug/L		104	79 - 123
1,4-Dichlorobenzene	50.0	52.2		ug/L		104	76 - 124
Dichlorodifluoromethane	50.0	41.4		ug/L		83	41 - 165
1,1-Dichloroethane	50.0	49.8		ug/L		100	69 - 132
1,2-Dichloroethane	50.0	52.1		ug/L		104	75 - 120
cis-1,2-Dichloroethene	50.0	51.8		ug/L		104	78 - 127
trans-1,2-Dichloroethene	50.0	51.7		ug/L		103	78 - 130
1,1-Dichloroethene	50.0	49.6		ug/L		99	73 - 134
1,2-Dichloropropane	50.0	51.9		ug/L		104	71 - 126
cis-1,3-Dichloropropene	50.0	49.6		ug/L		99	73 - 128
trans-1,3-Dichloropropene	50.0	57.4		ug/L		115	72 - 127
Ethylbenzene	50.0	51.5		ug/L		103	78 - 125
2-Hexanone	100	109		ug/L		109	52 - 149
Isopropylbenzene	50.0	52.1		ug/L		104	72 - 129
Methylene Chloride	50.0	49.5		ug/L		99	79 - 124
4-Methyl-2-pentanone	100	108		ug/L		108	51 - 143
Methyl tert-butyl ether	100	105		ug/L		105	76 - 126
Styrene	50.0	51.5		ug/L		103	75 - 129
1,1,2,2-Tetrachloroethane	50.0	54.8		ug/L		110	71 - 127
Tetrachloroethene	50.0	49.7		ug/L		99	77 - 128
Toluene	50.0	51.9		ug/L		104	77 - 125
1,2,4-Trichlorobenzene	50.0	52.9		ug/L		106	67 - 134
1,1,1-Trichloroethane	50.0	49.8		ug/L		100	76 - 126

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

Lab Sample ID: LCS 680-266233/4
Matrix: Water
Analysis Batch: 266233

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	50.0	52.4		ug/L		105	69 - 127
Trichloroethene	50.0	51.5		ug/L		103	80 - 120
Trichlorofluoromethane	50.0	50.2		ug/L		100	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	54.4		ug/L		109	72 - 139
Vinyl chloride	50.0	48.9		ug/L		98	58 - 141
Xylenes, Total	150	153		ug/L		102	80 - 124
Cyclohexane	50.0	53.7		ug/L		107	68 - 137
Methyl acetate	50.0	42.9		ug/L		86	26 - 182
Methylcyclohexane	50.0	53.2		ug/L		106	72 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*70 - 130*
Dibromofluoromethane	*103*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 680-266233/5
Matrix: Water
Analysis Batch: 266233

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
Acetone	100	102		ug/L		102	39 - 162	6	50
Benzene	50.0	51.1		ug/L		102	74 - 123	1	30
Bromodichloromethane	50.0	59.0		ug/L		118	72 - 129	0	30
Bromoform	50.0	53.8		ug/L		108	60 - 134	2	30
Bromomethane	50.0	23.1		ug/L		46	10 - 171	10	50
2-Butanone	100	98.3		ug/L		98	55 - 142	0	30
Carbon disulfide	50.0	53.4		ug/L		107	63 - 142	1	30
Carbon tetrachloride	50.0	54.5		ug/L		109	70 - 131	4	30
Chlorobenzene	50.0	50.6		ug/L		101	79 - 120	0	30
Chloroethane	50.0	39.1		ug/L		78	47 - 148	2	40
Chloroform	50.0	51.0		ug/L		102	76 - 128	2	30
Chloromethane	50.0	44.5		ug/L		89	47 - 151	1	30
Dibromochloromethane	50.0	46.3		ug/L		93	63 - 134	1	50
1,2-Dibromo-3-Chloropropane	50.0	53.3		ug/L		107	57 - 126	0	50
1,2-Dibromoethane	50.0	58.2		ug/L		116	75 - 127	1	30
1,2-Dichlorobenzene	50.0	52.3		ug/L		105	77 - 124	0	30
1,3-Dichlorobenzene	50.0	52.1		ug/L		104	79 - 123	0	30
1,4-Dichlorobenzene	50.0	52.4		ug/L		105	76 - 124	0	30
Dichlorodifluoromethane	50.0	41.7		ug/L		83	41 - 165	1	50
1,1-Dichloroethane	50.0	50.8		ug/L		102	69 - 132	2	30
1,2-Dichloroethane	50.0	52.0		ug/L		104	75 - 120	0	30
cis-1,2-Dichloroethene	50.0	51.9		ug/L		104	78 - 127	0	30
trans-1,2-Dichloroethene	50.0	51.9		ug/L		104	78 - 130	0	30
1,1-Dichloroethene	50.0	48.4		ug/L		97	73 - 134	2	30
1,2-Dichloropropane	50.0	52.3		ug/L		105	71 - 126	1	30
cis-1,3-Dichloropropene	50.0	49.0		ug/L		98	73 - 128	1	30
trans-1,3-Dichloropropene	50.0	57.0		ug/L		114	72 - 127	1	50

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

Lab Sample ID: LCSD 680-266233/5
Matrix: Water
Analysis Batch: 266233

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
Ethylbenzene			50.0	51.6		ug/L		103	78 - 125	0	30
2-Hexanone			100	109		ug/L		109	52 - 149	0	30
Isopropylbenzene			50.0	51.9		ug/L		104	72 - 129	0	30
Methylene Chloride			50.0	50.2		ug/L		100	79 - 124	2	30
4-Methyl-2-pentanone			100	110		ug/L		110	51 - 143	2	30
Methyl tert-butyl ether			100	107		ug/L		107	76 - 126	2	30
Styrene			50.0	53.9		ug/L		108	75 - 129	5	30
1,1,2,2-Tetrachloroethane			50.0	55.3		ug/L		111	71 - 127	1	30
Tetrachloroethene			50.0	49.7		ug/L		99	77 - 128	0	30
Toluene			50.0	52.9		ug/L		106	77 - 125	2	30
1,2,4-Trichlorobenzene			50.0	51.5		ug/L		103	67 - 134	3	30
1,1,1-Trichloroethane			50.0	49.2		ug/L		98	76 - 126	1	30
1,1,2-Trichloroethane			50.0	53.5		ug/L		107	69 - 127	2	30
Trichloroethene			50.0	50.6		ug/L		101	80 - 120	2	30
Trichlorofluoromethane			50.0	48.3		ug/L		97	66 - 144	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	54.4		ug/L		109	72 - 139	0	30
Vinyl chloride			50.0	49.0		ug/L		98	58 - 141	0	30
Xylenes, Total			150	153		ug/L		102	80 - 124	0	30
Cyclohexane			50.0	51.8		ug/L		104	68 - 137	4	30
Methyl acetate			50.0	45.3		ug/L		91	26 - 182	6	30
Methylcyclohexane			50.0	51.5		ug/L		103	72 - 133	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*70 - 130*
Dibromofluoromethane	*106*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

QC Association Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

GC/MS VOA

Analysis Batch: 266233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87439-1	WP03-87.5-GW	Total/NA	Water	8260B	
680-87439-2	WP04-72.7-GW	Total/NA	Water	8260B	
LCS 680-266233/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-266233/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-266233/6	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Client Sample ID: WP03-87.5-GW

Lab Sample ID: 680-87439-1

Date Collected: 02/08/13 15:01

Matrix: Water

Date Received: 02/14/13 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	266233	02/14/13 13:25	JD	TAL SAV

Client Sample ID: WP04-72.7-GW

Lab Sample ID: 680-87439-2

Date Collected: 02/08/13 12:44

Matrix: Water

Date Received: 02/14/13 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	266233	02/14/13 13:54	JD	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number 000084

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
22 SOCTA NAVAL DEPOT	102305-R-C	NY

TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
M. Kersey		

CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Joseph Schmidl	802/229-5377	802/229-5417

CLIENT NAME	CLIENT E-MAIL
Stone Environmental	JSchmidl@Stone-Env.com

CLIENT ADDRESS: 535 Stone Cutters Way, Montpelier VT 05602

COMPANY CONTRACTING THIS WORK (if applicable)

MATRIX TYPE: COMPOSITE (C) OR GRAB (G) INDICATE; AQUEOUS (WATER); SOLID OR SEMISOLID; AIR; NONAQUEOUS LIQUID (OIL, SOLVENT, ...)

REQUIRED ANALYSIS: 8260B

PRESERVATIVE

PAGE 1 OF 1

STANDARD REPORT DELIVERY ⊘ DATE DUE 2/20/13

EXPEDITED REPORT DELIVERY (SURCHARGE) ○ DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX TYPE	NUMBER OF CONTAINERS SUBMITTED	REMARKS
2/8/13	15:01	WP03-87.5-GW	G	A	3	
2/8/13	12:44	WP04-72.7-GW	G	A	3	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	2/13/13	17:20						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE only

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	2/14/13	0946	YES ○ NO ○		87439	1.8°C

TAL8240-680 (1207)

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87439-1
SDG Number: 68087439

Login Number: 87439
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	02-28-13
A2LA	ISO/IEC 17025		399.01	02-28-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-12
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-12
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	02-28-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-12
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	12-31-12
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-13
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-12
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87439-1
SDG: 68087439

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87439-1	WP03-87.5-GW	Water	02/08/13 15:01	02/14/13 08:46
680-87439-2	WP04-72.7-GW	Water	02/08/13 12:44	02/14/13 08:46

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-87793-1
TestAmerica Sample Delivery Group: 68087793
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Michele R Kersey

Authorized for release by:
3/13/2013 2:59:32 PM

Michele Kersey
Project Manager I
michele.kersey@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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Job ID: 680-87793-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87793-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/26/2013 9:54 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP08-113.4 (680-87793-4), WP08-95.0 (680-87793-5), WP06-72.0 (680-87793-6) and WP07-82.4 (680-87793-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/27/2013.

Sample WP07-82.4 (680-87793-7)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

GRAIN SIZE

Samples MW24-96-S (680-87793-1), WP05-85-S (680-87793-2) and WP05-75-S (680-87793-3) were analyzed for grain size in accordance with ASTM D422. The samples were analyzed on 02/28/2013.

DENSITY OF SOIL IN PLACE BY THE DRIVE CYLINDER METHOD

Samples MW24-96-S (680-87793-1), WP05-85-S (680-87793-2) and WP05-75-S (680-87793-3) were analyzed for Density of Soil in Place by the Drive Cylinder Method in accordance with ASTM D2937. The samples were analyzed on 02/28/2013.

The density results for the following sample(s) do not represent the in-place density of the soil: MW24-96-S (680-87793-1), WP05-75-S (680-87793-3), WP05-85-S (680-87793-2). The soils were received in a disturbed state and were subsequently molded in the laboratory to an approximation of the field environment.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87793-1	MW24-96-S	Solid	02/20/13 09:40	02/26/13 09:54
680-87793-2	WP05-85-S	Solid	02/22/13 13:40	02/26/13 09:54
680-87793-3	WP05-75-S	Solid	02/22/13 11:30	02/26/13 09:54
680-87793-4	WP08-113.4	Water	02/21/13 08:52	02/26/13 09:54
680-87793-5	WP08-95.0	Water	02/20/13 14:48	02/26/13 09:54
680-87793-6	WP06-72.0	Water	02/22/13 13:19	02/26/13 09:54
680-87793-7	WP07-82.4	Water	02/20/13 11:04	02/26/13 09:54

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
D2937	Density of Soil in Place by the Drive-Cylinder Method	ASTM	TAL BUR
D422	Grain Size	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International

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

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: MW24-96-S
Date Collected: 02/20/13 09:40
Date Received: 02/26/13 09:54

Lab Sample ID: 680-87793-1
Matrix: Solid

Method: D2937 - Density of Soil in Place by the Drive-Cylinder Method

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
In Place Density	1.61				g/cc			02/28/13 00:08	1

Method: D422 - Grain Size

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			02/28/13 00:17	1
Hydrometer Reading 1 - Particle Size	33.6				um			02/28/13 00:17	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			02/28/13 00:17	1
Hydrometer Reading 2 - Particle Size	21.7				um			02/28/13 00:17	1
Sand	85.2				%			02/28/13 00:17	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			02/28/13 00:17	1
Coarse Sand	0.3				%			02/28/13 00:17	1
Hydrometer Reading 3 - Particle Size	12.7				um			02/28/13 00:17	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			02/28/13 00:17	1
Hydrometer Reading 4 - Particle Size	9.1				um			02/28/13 00:17	1
Medium Sand	0.5				%			02/28/13 00:17	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			02/28/13 00:17	1
Fine Sand	84.4				%			02/28/13 00:17	1
Hydrometer Reading 5 - Particle Size	6.5				um			02/28/13 00:17	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			02/28/13 00:17	1
Hydrometer Reading 6 - Particle Size	3.2				um			02/28/13 00:17	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			02/28/13 00:17	1
Silt	11.2				%			02/28/13 00:17	1
Clay	3.6				%			02/28/13 00:17	1
Hydrometer Reading 7 - Particle Size	1.4				um			02/28/13 00:17	1
Sieve Size #4 - Percent Finer	100.0				% Passing			02/28/13 00:17	1
Sieve Size #10 - Percent Finer	99.7				% Passing			02/28/13 00:17	1
Sieve Size #20 - Percent Finer	99.5				% Passing			02/28/13 00:17	1
Sieve Size #40 - Percent Finer	99.2				% Passing			02/28/13 00:17	1
Sieve Size #60 - Percent Finer	91.0				% Passing			02/28/13 00:17	1
Sieve Size #80 - Percent Finer	64.9				% Passing			02/28/13 00:17	1
Sieve Size #100 - Percent Finer	46.7				% Passing			02/28/13 00:17	1
Sieve Size #200 - Percent Finer	14.8				% Passing			02/28/13 00:17	1
Hydrometer Reading 1 - Percent Finer	7.7				% Passing			02/28/13 00:17	1
Hydrometer Reading 2 - Percent Finer	6.2				% Passing			02/28/13 00:17	1
Hydrometer Reading 3 - Percent Finer	5.1				% Passing			02/28/13 00:17	1
Hydrometer Reading 4 - Percent Finer	4.0				% Passing			02/28/13 00:17	1
Hydrometer Reading 5 - Percent Finer	3.6				% Passing			02/28/13 00:17	1
Hydrometer Reading 6 - Percent Finer	2.4				% Passing			02/28/13 00:17	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: MW24-96-S

Lab Sample ID: 680-87793-1

Date Collected: 02/20/13 09:40

Matrix: Solid

Date Received: 02/26/13 09:54

Method: D422 - Grain Size (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrometer Reading 7 - Percent Finer	1.6				% Passing			02/28/13 00:17	1

Client Sample ID: WP05-85-S

Lab Sample ID: 680-87793-2

Date Collected: 02/22/13 13:40

Matrix: Solid

Date Received: 02/26/13 09:54

Method: D2937 - Density of Soil in Place by the Drive-Cylinder Method

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
In Place Density	1.57				g/cc			02/28/13 00:08	1

Method: D422 - Grain Size

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			02/28/13 00:15	1
Hydrometer Reading 1 - Particle Size	32.7				um			02/28/13 00:15	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			02/28/13 00:15	1
Hydrometer Reading 2 - Particle Size	21.1				um			02/28/13 00:15	1
Sand	85.3				%			02/28/13 00:15	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			02/28/13 00:15	1
Coarse Sand	0.2				%			02/28/13 00:15	1
Hydrometer Reading 3 - Particle Size	12.5				um			02/28/13 00:15	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			02/28/13 00:15	1
Hydrometer Reading 4 - Particle Size	8.9				um			02/28/13 00:15	1
Medium Sand	0.9				%			02/28/13 00:15	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			02/28/13 00:15	1
Fine Sand	84.2				%			02/28/13 00:15	1
Hydrometer Reading 5 - Particle Size	6.4				um			02/28/13 00:15	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			02/28/13 00:15	1
Hydrometer Reading 6 - Particle Size	3.2				um			02/28/13 00:15	1
Sieve Size 0.375 inch - Percent Finer	100.0				% Passing			02/28/13 00:15	1
Silt	10.4				%			02/28/13 00:15	1
Clay	4.3				%			02/28/13 00:15	1
Hydrometer Reading 7 - Particle Size	1.3				um			02/28/13 00:15	1
Sieve Size #4 - Percent Finer	100.0				% Passing			02/28/13 00:15	1
Sieve Size #10 - Percent Finer	99.8				% Passing			02/28/13 00:15	1
Sieve Size #20 - Percent Finer	99.3				% Passing			02/28/13 00:15	1
Sieve Size #40 - Percent Finer	98.9				% Passing			02/28/13 00:15	1
Sieve Size #60 - Percent Finer	91.4				% Passing			02/28/13 00:15	1
Sieve Size #80 - Percent Finer	64.6				% Passing			02/28/13 00:15	1
Sieve Size #100 - Percent Finer	46.3				% Passing			02/28/13 00:15	1
Sieve Size #200 - Percent Finer	14.7				% Passing			02/28/13 00:15	1
Hydrometer Reading 1 - Percent Finer	7.6				% Passing			02/28/13 00:15	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: WP05-85-S

Lab Sample ID: 680-87793-2

Date Collected: 02/22/13 13:40

Matrix: Solid

Date Received: 02/26/13 09:54

Method: D422 - Grain Size (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Hydrometer Reading 2 - Percent Finer	6.4				% Passing			02/28/13 00:15	1
Hydrometer Reading 3 - Percent Finer	5.2				% Passing			02/28/13 00:15	1
Hydrometer Reading 4 - Percent Finer	4.6				% Passing			02/28/13 00:15	1
Hydrometer Reading 5 - Percent Finer	4.3				% Passing			02/28/13 00:15	1
Hydrometer Reading 6 - Percent Finer	3.1				% Passing			02/28/13 00:15	1
Hydrometer Reading 7 - Percent Finer	2.5				% Passing			02/28/13 00:15	1

Client Sample ID: WP05-75-S

Lab Sample ID: 680-87793-3

Date Collected: 02/22/13 11:30

Matrix: Solid

Date Received: 02/26/13 09:54

Method: D2937 - Density of Soil in Place by the Drive-Cylinder Method

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
In Place Density	1.74				g/cc			02/28/13 00:08	1

Method: D422 - Grain Size

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	11.2				%			02/28/13 00:19	1
Hydrometer Reading 1 - Particle Size	33.1				um			02/28/13 00:19	1
Sieve Size 3 inch - Percent Finer	100.0				% Passing			02/28/13 00:19	1
Hydrometer Reading 2 - Particle Size	21.1				um			02/28/13 00:19	1
Sand	62.1				%			02/28/13 00:19	1
Sieve Size 2 inch - Percent Finer	100.0				% Passing			02/28/13 00:19	1
Coarse Sand	13.0				%			02/28/13 00:19	1
Hydrometer Reading 3 - Particle Size	12.5				um			02/28/13 00:19	1
Sieve Size 1.5 inch - Percent Finer	100.0				% Passing			02/28/13 00:19	1
Hydrometer Reading 4 - Particle Size	9.0				um			02/28/13 00:19	1
Medium Sand	33.9				%			02/28/13 00:19	1
Sieve Size 1 inch - Percent Finer	100.0				% Passing			02/28/13 00:19	1
Fine Sand	15.2				%			02/28/13 00:19	1
Hydrometer Reading 5 - Particle Size	6.5				um			02/28/13 00:19	1
Sieve Size 0.75 inch - Percent Finer	100.0				% Passing			02/28/13 00:19	1
Hydrometer Reading 6 - Particle Size	3.2				um			02/28/13 00:19	1
Sieve Size 0.375 inch - Percent Finer	97.6				% Passing			02/28/13 00:19	1
Silt	22.6				%			02/28/13 00:19	1
Clay	4.1				%			02/28/13 00:19	1
Hydrometer Reading 7 - Particle Size	1.4				um			02/28/13 00:19	1
Sieve Size #4 - Percent Finer	88.8				% Passing			02/28/13 00:19	1
Sieve Size #10 - Percent Finer	75.8				% Passing			02/28/13 00:19	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: WP05-75-S

Lab Sample ID: 680-87793-3
Date Collected: 02/22/13 11:30
Matrix: Solid
Date Received: 02/26/13 09:54

Method: D422 - Grain Size (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sieve Size #20 - Percent Finer	59.2				% Passing			02/28/13 00:19	1
Sieve Size #40 - Percent Finer	41.9				% Passing			02/28/13 00:19	1
Sieve Size #60 - Percent Finer	35.3				% Passing			02/28/13 00:19	1
Sieve Size #80 - Percent Finer	31.3				% Passing			02/28/13 00:19	1
Sieve Size #100 - Percent Finer	29.8				% Passing			02/28/13 00:19	1
Sieve Size #200 - Percent Finer	26.7				% Passing			02/28/13 00:19	1
Hydrometer Reading 1 - Percent Finer	7.1				% Passing			02/28/13 00:19	1
Hydrometer Reading 2 - Percent Finer	6.5				% Passing			02/28/13 00:19	1
Hydrometer Reading 3 - Percent Finer	5.3				% Passing			02/28/13 00:19	1
Hydrometer Reading 4 - Percent Finer	4.7				% Passing			02/28/13 00:19	1
Hydrometer Reading 5 - Percent Finer	4.1				% Passing			02/28/13 00:19	1
Hydrometer Reading 6 - Percent Finer	3.1				% Passing			02/28/13 00:19	1
Hydrometer Reading 7 - Percent Finer	2.2				% Passing			02/28/13 00:19	1

Client Sample ID: WP08-113.4

Lab Sample ID: 680-87793-4
Date Collected: 02/21/13 08:52
Matrix: Water
Date Received: 02/26/13 09:54

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/27/13 15:06	1
Benzene	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/27/13 15:06	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/27/13 15:06	1
2-Butanone	1.0	U	10	1.0	ug/L			02/27/13 15:06	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/27/13 15:06	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/27/13 15:06	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/27/13 15:06	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/27/13 15:06	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/27/13 15:06	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/27/13 15:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/27/13 15:06	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/27/13 15:06	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/27/13 15:06	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/27/13 15:06	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/27/13 15:06	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/27/13 15:06	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/27/13 15:06	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: WP08-113.4

Lab Sample ID: 680-87793-4

Date Collected: 02/21/13 08:52

Matrix: Water

Date Received: 02/26/13 09:54

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/27/13 15:06	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/27/13 15:06	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/27/13 15:06	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/27/13 15:06	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/27/13 15:06	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/27/13 15:06	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/27/13 15:06	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/27/13 15:06	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/27/13 15:06	1
Styrene	0.25	U	1.0	0.11	ug/L			02/27/13 15:06	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/27/13 15:06	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/27/13 15:06	1
Toluene	**0.58**	**J**	1.0	0.33	ug/L			02/27/13 15:06	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/27/13 15:06	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/27/13 15:06	1
Trichloroethene	**0.20**	**J**	1.0	0.13	ug/L			02/27/13 15:06	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/27/13 15:06	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/27/13 15:06	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/27/13 15:06	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/27/13 15:06	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/27/13 15:06	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/27/13 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*02/27/13 15:06*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*02/27/13 15:06*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*02/27/13 15:06*	*1*

Client Sample ID: WP08-95.0

Lab Sample ID: 680-87793-5

Date Collected: 02/20/13 14:48

Matrix: Water

Date Received: 02/26/13 09:54

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/27/13 18:27	1
Benzene	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/27/13 18:27	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/27/13 18:27	1
2-Butanone	1.0	U	10	1.0	ug/L			02/27/13 18:27	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/27/13 18:27	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/27/13 18:27	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/27/13 18:27	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/27/13 18:27	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/27/13 18:27	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/27/13 18:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/27/13 18:27	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: WP08-95.0

Lab Sample ID: 680-87793-5

Date Collected: 02/20/13 14:48

Matrix: Water

Date Received: 02/26/13 09:54

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/27/13 18:27	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/27/13 18:27	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/27/13 18:27	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/27/13 18:27	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/27/13 18:27	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/27/13 18:27	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/27/13 18:27	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/27/13 18:27	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/27/13 18:27	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/27/13 18:27	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/27/13 18:27	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/27/13 18:27	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/27/13 18:27	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/27/13 18:27	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/27/13 18:27	1
Styrene	0.25	U	1.0	0.11	ug/L			02/27/13 18:27	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/27/13 18:27	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/27/13 18:27	1
Toluene	0.33	U	1.0	0.33	ug/L			02/27/13 18:27	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/27/13 18:27	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/27/13 18:27	1
Trichloroethene	**170**		1.0	0.13	ug/L			02/27/13 18:27	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/27/13 18:27	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/27/13 18:27	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/27/13 18:27	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/27/13 18:27	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/27/13 18:27	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/27/13 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*70 - 130*		*02/27/13 18:27*	*1*
Dibromofluoromethane	*118*		*70 - 130*		*02/27/13 18:27*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*02/27/13 18:27*	*1*

Client Sample ID: WP06-72.0

Lab Sample ID: 680-87793-6

Date Collected: 02/22/13 13:19

Matrix: Water

Date Received: 02/26/13 09:54

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/27/13 15:35	1
Benzene	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/27/13 15:35	1

Client Sample ID: WP06-72.0
Date Collected: 02/22/13 13:19
Date Received: 02/26/13 09:54

Lab Sample ID: 680-87793-6
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	0.80	U	1.0	0.80	ug/L			02/27/13 15:35	1
2-Butanone	1.0	U	10	1.0	ug/L			02/27/13 15:35	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/27/13 15:35	1
Carbon tetrachloride	**2.2**		1.0	0.50	ug/L			02/27/13 15:35	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/27/13 15:35	1
Chloroform	**0.75**	**J**	1.0	0.14	ug/L			02/27/13 15:35	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/27/13 15:35	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/27/13 15:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/27/13 15:35	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/27/13 15:35	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/27/13 15:35	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
1,1-Dichloroethane	**0.54**	**J**	1.0	0.25	ug/L			02/27/13 15:35	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/27/13 15:35	1
cis-1,2-Dichloroethene	**0.80**	**J**	1.0	0.15	ug/L			02/27/13 15:35	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/27/13 15:35	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/27/13 15:35	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/27/13 15:35	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/27/13 15:35	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/27/13 15:35	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/27/13 15:35	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/27/13 15:35	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/27/13 15:35	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/27/13 15:35	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/27/13 15:35	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/27/13 15:35	1
Styrene	0.25	U	1.0	0.11	ug/L			02/27/13 15:35	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/27/13 15:35	1
Tetrachloroethene	**20**		1.0	0.15	ug/L			02/27/13 15:35	1
Toluene	**0.60**	**J**	1.0	0.33	ug/L			02/27/13 15:35	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
1,1,1-Trichloroethane	**4.5**		1.0	0.50	ug/L			02/27/13 15:35	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/27/13 15:35	1
Trichloroethene	**11**		1.0	0.13	ug/L			02/27/13 15:35	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/27/13 15:35	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/27/13 15:35	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/27/13 15:35	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/27/13 15:35	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/27/13 15:35	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/27/13 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*02/27/13 15:35*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*02/27/13 15:35*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*02/27/13 15:35*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: WP07-82.4
Date Collected: 02/20/13 11:04
Date Received: 02/26/13 09:54

Lab Sample ID: 680-87793-7
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	50	10	ug/L			02/27/13 14:37	2
Benzene	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
Bromodichloromethane	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
Bromoform	1.0	U	2.0	1.0	ug/L			02/27/13 14:37	2
Bromomethane	1.6	U	2.0	1.6	ug/L			02/27/13 14:37	2
2-Butanone	2.0	U	20	2.0	ug/L			02/27/13 14:37	2
Carbon disulfide	1.2	U	4.0	1.2	ug/L			02/27/13 14:37	2
Carbon tetrachloride	1.0	U	2.0	1.0	ug/L			02/27/13 14:37	2
Chlorobenzene	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
Chloroethane	2.0	U	2.0	2.0	ug/L			02/27/13 14:37	2
Chloroform	0.50	U	2.0	0.28	ug/L			02/27/13 14:37	2
Chloromethane	0.66	U	2.0	0.66	ug/L			02/27/13 14:37	2
Dibromochloromethane	0.50	U	2.0	0.20	ug/L			02/27/13 14:37	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.88	ug/L			02/27/13 14:37	2
1,2-Dibromoethane	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
1,2-Dichlorobenzene	0.50	U	2.0	0.42	ug/L			02/27/13 14:37	2
1,3-Dichlorobenzene	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
1,4-Dichlorobenzene	0.56	U	2.0	0.56	ug/L			02/27/13 14:37	2
Dichlorodifluoromethane	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
1,1-Dichloroethane	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
1,2-Dichloroethane	0.50	U	2.0	0.20	ug/L			02/27/13 14:37	2
cis-1,2-Dichloroethene	0.50	U	2.0	0.30	ug/L			02/27/13 14:37	2
trans-1,2-Dichloroethene	0.50	U	2.0	0.40	ug/L			02/27/13 14:37	2
1,1-Dichloroethene	0.50	U	2.0	0.22	ug/L			02/27/13 14:37	2
1,2-Dichloropropane	0.50	U	2.0	0.26	ug/L			02/27/13 14:37	2
cis-1,3-Dichloropropene	0.50	U	2.0	0.22	ug/L			02/27/13 14:37	2
trans-1,3-Dichloropropene	0.50	U	2.0	0.42	ug/L			02/27/13 14:37	2
Ethylbenzene	0.50	U	2.0	0.22	ug/L			02/27/13 14:37	2
2-Hexanone	2.0	U	20	2.0	ug/L			02/27/13 14:37	2
Isopropylbenzene	0.50	U	2.0	0.20	ug/L			02/27/13 14:37	2
Methylene Chloride	2.0	U	10	2.0	ug/L			02/27/13 14:37	2
4-Methyl-2-pentanone	2.0	U	20	2.0	ug/L			02/27/13 14:37	2
Methyl tert-butyl ether	1.0	U	20	0.40	ug/L			02/27/13 14:37	2
Styrene	0.50	U	2.0	0.22	ug/L			02/27/13 14:37	2
1,1,2,2-Tetrachloroethane	0.50	U	2.0	0.36	ug/L			02/27/13 14:37	2
Tetrachloroethene	0.50	U	2.0	0.30	ug/L			02/27/13 14:37	2
Toluene	0.66	U	2.0	0.66	ug/L			02/27/13 14:37	2
1,2,4-Trichlorobenzene	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
1,1,1-Trichloroethane	1.0	U	2.0	1.0	ug/L			02/27/13 14:37	2
1,1,2-Trichloroethane	0.50	U	2.0	0.26	ug/L			02/27/13 14:37	2
Trichloroethene	**200**		2.0	0.26	ug/L			02/27/13 14:37	2
Trichlorofluoromethane	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	2.0	1.0	ug/L			02/27/13 14:37	2
Vinyl chloride	1.0	U	2.0	0.36	ug/L			02/27/13 14:37	2
Xylenes, Total	1.5	U	4.0	0.40	ug/L			02/27/13 14:37	2
Cyclohexane	0.50	U	2.0	0.50	ug/L			02/27/13 14:37	2
Methyl acetate	0.50	U	2.0	0.38	ug/L			02/27/13 14:37	2
Methylcyclohexane	0.50	U	2.0	0.20	ug/L			02/27/13 14:37	2

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: WP07-82.4
Date Collected: 02/20/13 11:04
Date Received: 02/26/13 09:54

Lab Sample ID: 680-87793-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	78		70 - 130		02/27/13 14:37	2
Dibromofluoromethane	105		70 - 130		02/27/13 14:37	2
Toluene-d8 (Surr)	91		70 - 130		02/27/13 14:37	2

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

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

Lab Sample ID: MB 680-267566/6
Matrix: Water
Analysis Batch: 267566

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			02/27/13 13:26	1
Benzene	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
Bromoform	0.50	U	1.0	0.50	ug/L			02/27/13 13:26	1
Bromomethane	0.80	U	1.0	0.80	ug/L			02/27/13 13:26	1
2-Butanone	1.0	U	10	1.0	ug/L			02/27/13 13:26	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			02/27/13 13:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			02/27/13 13:26	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
Chloroethane	1.0	U	1.0	1.0	ug/L			02/27/13 13:26	1
Chloroform	0.25	U	1.0	0.14	ug/L			02/27/13 13:26	1
Chloromethane	0.33	U	1.0	0.33	ug/L			02/27/13 13:26	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			02/27/13 13:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			02/27/13 13:26	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			02/27/13 13:26	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			02/27/13 13:26	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			02/27/13 13:26	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			02/27/13 13:26	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			02/27/13 13:26	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			02/27/13 13:26	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			02/27/13 13:26	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			02/27/13 13:26	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			02/27/13 13:26	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			02/27/13 13:26	1
2-Hexanone	1.0	U	10	1.0	ug/L			02/27/13 13:26	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			02/27/13 13:26	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			02/27/13 13:26	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			02/27/13 13:26	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			02/27/13 13:26	1
Styrene	0.25	U	1.0	0.11	ug/L			02/27/13 13:26	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			02/27/13 13:26	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			02/27/13 13:26	1
Toluene	0.33	U	1.0	0.33	ug/L			02/27/13 13:26	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			02/27/13 13:26	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			02/27/13 13:26	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			02/27/13 13:26	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			02/27/13 13:26	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			02/27/13 13:26	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			02/27/13 13:26	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			02/27/13 13:26	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			02/27/13 13:26	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			02/27/13 13:26	1

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

Lab Sample ID: MB 680-267566/6
Matrix: Water
Analysis Batch: 267566

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		70 - 130		02/27/13 13:26	1
Dibromofluoromethane	103		70 - 130		02/27/13 13:26	1
Toluene-d8 (Surr)	95		70 - 130		02/27/13 13:26	1

Lab Sample ID: LCS 680-267566/4
Matrix: Water
Analysis Batch: 267566

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	100		ug/L		100	39 - 162
Benzene	50.0	50.6		ug/L		101	74 - 123
Bromodichloromethane	50.0	59.0		ug/L		118	72 - 129
Bromoform	50.0	55.6		ug/L		111	60 - 134
Bromomethane	50.0	27.9		ug/L		56	10 - 171
2-Butanone	100	96.0		ug/L		96	55 - 142
Carbon disulfide	50.0	53.9		ug/L		108	63 - 142
Carbon tetrachloride	50.0	53.2		ug/L		106	70 - 131
Chlorobenzene	50.0	49.9		ug/L		100	79 - 120
Chloroethane	50.0	50.3		ug/L		101	47 - 148
Chloroform	50.0	50.6		ug/L		101	76 - 128
Chloromethane	50.0	44.2		ug/L		88	47 - 151
Dibromochloromethane	50.0	47.1		ug/L		94	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	52.3		ug/L		105	57 - 126
1,2-Dibromoethane	50.0	57.8		ug/L		116	75 - 127
1,2-Dichlorobenzene	50.0	52.8		ug/L		106	77 - 124
1,3-Dichlorobenzene	50.0	52.5		ug/L		105	79 - 123
1,4-Dichlorobenzene	50.0	51.1		ug/L		102	76 - 124
Dichlorodifluoromethane	50.0	43.0		ug/L		86	41 - 165
1,1-Dichloroethane	50.0	53.1		ug/L		106	69 - 132
1,2-Dichloroethane	50.0	49.2		ug/L		98	75 - 120
cis-1,2-Dichloroethene	50.0	55.2		ug/L		110	78 - 127
trans-1,2-Dichloroethene	50.0	53.4		ug/L		107	78 - 130
1,1-Dichloroethene	50.0	55.5		ug/L		111	73 - 134
1,2-Dichloropropane	50.0	45.0		ug/L		90	71 - 126
cis-1,3-Dichloropropene	50.0	42.0		ug/L		84	73 - 128
trans-1,3-Dichloropropene	50.0	52.3		ug/L		105	72 - 127
Ethylbenzene	50.0	52.8		ug/L		106	78 - 125
2-Hexanone	100	105		ug/L		105	52 - 149
Isopropylbenzene	50.0	51.8		ug/L		104	72 - 129
Methylene Chloride	50.0	51.0		ug/L		102	79 - 124
4-Methyl-2-pentanone	100	95.0		ug/L		95	51 - 143
Methyl tert-butyl ether	100	104		ug/L		104	76 - 126
Styrene	50.0	47.5		ug/L		95	75 - 129
1,1,2,2-Tetrachloroethane	50.0	55.4		ug/L		111	71 - 127
Tetrachloroethene	50.0	48.8		ug/L		98	77 - 128
Toluene	50.0	51.3		ug/L		103	77 - 125
1,2,4-Trichlorobenzene	50.0	51.0		ug/L		102	67 - 134
1,1,1-Trichloroethane	50.0	52.0		ug/L		104	76 - 126

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

Lab Sample ID: LCS 680-267566/4
Matrix: Water
Analysis Batch: 267566

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	50.0	46.8		ug/L		94	69 - 127
Trichloroethene	50.0	49.0		ug/L		98	80 - 120
Trichlorofluoromethane	50.0	48.5		ug/L		97	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	58.1		ug/L		116	72 - 139
Vinyl chloride	50.0	50.2		ug/L		100	58 - 141
Xylenes, Total	150	149		ug/L		99	80 - 124
Cyclohexane	50.0	54.2		ug/L		108	68 - 137
Methyl acetate	50.0	54.5		ug/L		109	26 - 182
Methylcyclohexane	50.0	49.2		ug/L		98	72 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*70 - 130*
Dibromofluoromethane	*106*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 680-267566/5
Matrix: Water
Analysis Batch: 267566

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
Acetone	100	98.8		ug/L		99	39 - 162	1	50
Benzene	50.0	51.8		ug/L		104	74 - 123	2	30
Bromodichloromethane	50.0	55.8		ug/L		112	72 - 129	6	30
Bromoform	50.0	53.0		ug/L		106	60 - 134	5	30
Bromomethane	50.0	32.5		ug/L		65	10 - 171	15	50
2-Butanone	100	102		ug/L		102	55 - 142	6	30
Carbon disulfide	50.0	56.0		ug/L		112	63 - 142	4	30
Carbon tetrachloride	50.0	49.5		ug/L		99	70 - 131	7	30
Chlorobenzene	50.0	52.1		ug/L		104	79 - 120	4	30
Chloroethane	50.0	51.7		ug/L		103	47 - 148	3	40
Chloroform	50.0	52.4		ug/L		105	76 - 128	4	30
Chloromethane	50.0	46.9		ug/L		94	47 - 151	6	30
Dibromochloromethane	50.0	43.6		ug/L		87	63 - 134	8	50
1,2-Dibromo-3-Chloropropane	50.0	49.8		ug/L		100	57 - 126	5	50
1,2-Dibromoethane	50.0	57.4		ug/L		115	75 - 127	1	30
1,2-Dichlorobenzene	50.0	54.8		ug/L		110	77 - 124	4	30
1,3-Dichlorobenzene	50.0	53.2		ug/L		106	79 - 123	1	30
1,4-Dichlorobenzene	50.0	52.3		ug/L		105	76 - 124	2	30
Dichlorodifluoromethane	50.0	42.8		ug/L		86	41 - 165	1	50
1,1-Dichloroethane	50.0	58.0		ug/L		116	69 - 132	9	30
1,2-Dichloroethane	50.0	51.2		ug/L		102	75 - 120	4	30
cis-1,2-Dichloroethene	50.0	57.5		ug/L		115	78 - 127	4	30
trans-1,2-Dichloroethene	50.0	58.9		ug/L		118	78 - 130	10	30
1,1-Dichloroethene	50.0	61.5		ug/L		123	73 - 134	10	30
1,2-Dichloropropane	50.0	50.1		ug/L		100	71 - 126	11	30
cis-1,3-Dichloropropene	50.0	41.3		ug/L		83	73 - 128	2	30
trans-1,3-Dichloropropene	50.0	47.8		ug/L		96	72 - 127	9	50

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

Lab Sample ID: LCSD 680-267566/5
Matrix: Water
Analysis Batch: 267566

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
Ethylbenzene			50.0	54.2		ug/L		108	78 - 125	3	30
2-Hexanone			100	103		ug/L		103	52 - 149	2	30
Isopropylbenzene			50.0	49.7		ug/L		99	72 - 129	4	30
Methylene Chloride			50.0	53.1		ug/L		106	79 - 124	4	30
4-Methyl-2-pentanone			100	88.2		ug/L		88	51 - 143	7	30
Methyl tert-butyl ether			100	109		ug/L		109	76 - 126	5	30
Styrene			50.0	53.8		ug/L		108	75 - 129	13	30
1,1,2,2-Tetrachloroethane			50.0	53.2		ug/L		106	71 - 127	4	30
Tetrachloroethene			50.0	47.8		ug/L		96	77 - 128	2	30
Toluene			50.0	45.3		ug/L		91	77 - 125	12	30
1,2,4-Trichlorobenzene			50.0	52.3		ug/L		105	67 - 134	3	30
1,1,1-Trichloroethane			50.0	45.3		ug/L		91	76 - 126	14	30
1,1,2-Trichloroethane			50.0	43.4		ug/L		87	69 - 127	8	30
Trichloroethene			50.0	52.1		ug/L		104	80 - 120	6	30
Trichlorofluoromethane			50.0	48.2		ug/L		96	66 - 144	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	60.7		ug/L		121	72 - 139	4	30
Vinyl chloride			50.0	52.3		ug/L		105	58 - 141	4	30
Xylenes, Total			150	159		ug/L		106	80 - 124	6	30
Cyclohexane			50.0	47.6		ug/L		95	68 - 137	13	30
Methyl acetate			50.0	63.5		ug/L		127	26 - 182	15	30
Methylcyclohexane			50.0	50.9		ug/L		102	72 - 133	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*110*		*70 - 130*
Dibromofluoromethane	*90*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

QC Association Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

GC/MS VOA

Analysis Batch: 267566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87793-4	WP08-113.4	Total/NA	Water	8260B	
680-87793-5	WP08-95.0	Total/NA	Water	8260B	
680-87793-6	WP06-72.0	Total/NA	Water	8260B	
680-87793-7	WP07-82.4	Total/NA	Water	8260B	
LCS 680-267566/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-267566/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-267566/6	Method Blank	Total/NA	Water	8260B	

Geotechnical

Analysis Batch: 52435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87793-1	MW24-96-S	Total/NA	Solid	D2937	
680-87793-2	WP05-85-S	Total/NA	Solid	D2937	
680-87793-3	WP05-75-S	Total/NA	Solid	D2937	

Analysis Batch: 52552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87793-1	MW24-96-S	Total/NA	Solid	D422	
680-87793-2	WP05-85-S	Total/NA	Solid	D422	
680-87793-3	WP05-75-S	Total/NA	Solid	D422	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: MW24-96-S — Lab Sample ID: 680-87793-1

Date Collected: 02/20/13 09:40 — **Matrix: Solid**
Date Received: 02/26/13 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D2937		1	52435	02/28/13 00:08	TPB	TAL BUR
Total/NA	Analysis	D422		1	52552	02/28/13 00:17	DJP	TAL BUR

Client Sample ID: WP05-85-S — Lab Sample ID: 680-87793-2

Date Collected: 02/22/13 13:40 — **Matrix: Solid**
Date Received: 02/26/13 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D2937		1	52435	02/28/13 00:08	TPB	TAL BUR
Total/NA	Analysis	D422		1	52552	02/28/13 00:15	DJP	TAL BUR

Client Sample ID: WP05-75-S — Lab Sample ID: 680-87793-3

Date Collected: 02/22/13 11:30 — **Matrix: Solid**
Date Received: 02/26/13 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D2937		1	52435	02/28/13 00:08	TPB	TAL BUR
Total/NA	Analysis	D422		1	52552	02/28/13 00:19	DJP	TAL BUR

Client Sample ID: WP08-113.4 — Lab Sample ID: 680-87793-4

Date Collected: 02/21/13 08:52 — **Matrix: Water**
Date Received: 02/26/13 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267566	02/27/13 15:06	JD	TAL SAV

Client Sample ID: WP08-95.0 — Lab Sample ID: 680-87793-5

Date Collected: 02/20/13 14:48 — **Matrix: Water**
Date Received: 02/26/13 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267566	02/27/13 18:27	JD	TAL SAV

Client Sample ID: WP06-72.0 — Lab Sample ID: 680-87793-6

Date Collected: 02/22/13 13:19 — **Matrix: Water**
Date Received: 02/26/13 09:54

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267566	02/27/13 15:35	JD	TAL SAV

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Client Sample ID: WP07-82.4
Date Collected: 02/20/13 11:04
Date Received: 02/26/13 09:54

Lab Sample ID: 680-87793-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	267566	02/27/13 14:37	JD	TAL SAV

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
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Fax: (912) 352-0165

Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NY SiteGW	680/1020	NY
TAL (LAB) PROJECT MANAGER: Michele Kersey	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Joe Schmidl	CLIENT PHONE: 802-224-4541	CLIENT FAX
CLIENT NAME: STONE ENV.	CLIENT E-MAIL: jschmidl@	
CLIENT ADDRESS: 535 STONE Cutters Way, Montpelier, VT		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE: OF

STANDARD REPORT DELIVERY ◯
DATE DUE
EXPEDITED REPORT DELIVERY (SURCHARGE) ◯
DATE DUE
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: Grain size ASTM D422-63	Bulk Density ASTM D2937	Effective Porosity ASTM D7263	VOC 8260B							REMARKS
			NUMBER OF CONTAINERS SUBMITTED															
2/20/13	9:40	MW24-96-S	G		X			X	X	X								
2/22/13	13:40	WP05-85-S			X			X	X	X								
2/22/13	11:30	WP05-75-S			X			X	X	X								
2/21/13	8:52	WP08-113.4		X							X							
2/20/13	14:48	WP08-95.0		X							X							
2/22/13	13:19	WP06-72.0		X							X							
2/20/13	11:04	WP07-82.4		X							X							

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	2/25/13	1810						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	02/26/13	0954	YES ◯ NO ◯		680-87793	3.6 C

TAL8240-680 (1008)

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Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87793-1
SDG Number: 68087793

Login Number: 87793
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87793-1
SDG Number: 68087793

Login Number: 87793
List Number: 1
Creator: Marion, Greg T

List Source: TestAmerica Burlington
List Creation: 02/27/13 11:50 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	430683
Sample custody seals, if present, are 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	4.0ºC IR GUN ID 181/CF=0
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?	N/A	Not requested on COC.
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	03-31-13
A2LA	ISO/IEC 17025		399.01	03-31-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	03-31-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-13
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-13-15

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87793-1
SDG: 68087793

Laboratory: TestAmerica Burlington (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E87467	06-30-13
L-A-B	DoD ELAP		L2336	10-26-13
Louisiana	NELAP	6	176292	06-30-13
Maine	State Program	1	VT00008	04-17-13
Minnesota	NELAP	5	050-999-436	12-31-13
New Hampshire	NELAP	1	200610	12-18-13
New Jersey	NELAP	2	VT972	06-30-13
New York	NELAP	2	10391	04-01-13
Pennsylvania	NELAP	3	68-00489	04-30-13
Rhode Island	State Program	1	LAO00298	12-30-13
USDA	Federal		P330-11-00093	02-17-14
Vermont	State Program	1	VT-4000	12-31-13
Virginia	NELAP	3	460209	12-14-13

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-87828-1
TestAmerica Sample Delivery Group: 68087828
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Authorized for release by:
3/15/2013 3:36:21 PM

Michele Kersey
Project Manager I
michele.kersey@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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Job ID: 680-87828-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87828-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/27/2013 11:57 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP04-76.0-GW (680-87828-1) and Trip Blank lot # 020113 (680-87828-2) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/04/2013.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 267744 exceeded control limits for the following analytes:methylcyclohexane and 1,2-dichloropropane.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 4 analytes to recover outside criteria for this method when a full list spike is utilized. The LCSD associated with batch 267744 had 1 analyte outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

METALS (ICP)

Sample WP04-76.0-GW (680-87828-1) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 03/05/2013 and analyzed on 03/06/2013.

The post digestion spike % recovery for calcium and magnesium associated with batch 680-268182 was outside of control limits.

Due to the high concentration of calcium and magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for batch 680-268182 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

SILICA BY ICP

Sample WP04-76.0-GW (680-87828-1) was analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were

Job ID: 680-87828-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

analyzed on 03/14/2013.

HEXAVALENT CHROMIUM
Sample WP04-76.0-GW (680-87828-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 02/27/2013.

To verify the absence of an interference, EPA Method 7196A requires the sample to be diluted until the matrix spike (MS) recovery is within 85-115%. For this reason, the following sample(s) was diluted: (680-87802-1 MS), (680-87802-1 MSD), Colonial G (680-87802-1). Elevated reporting limits (RLs) are provided.

The following sample(s) was received outside of holding time: WP04-76.0-GW (680-87828-1).

OIL AND GREASE AND TPH
Sample WP04-76.0-GW (680-87828-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 03/09/2013.

ALKALINITY
Sample WP04-76.0-GW (680-87828-1) was analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 02/28/2013.

HARDNESS
Sample WP04-76.0-GW (680-87828-1) was analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 02/28/2013.

TOTAL DISSOLVED SOLIDS
Sample WP04-76.0-GW (680-87828-1) was analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 02/27/2013.

TOTAL SUSPENDED SOLIDS
Sample WP04-76.0-GW (680-87828-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/01/2013.

ANIONS BY IC
Sample WP04-76.0-GW (680-87828-1) was analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 03/08/2013.

Sample WP04-76.0-GW (680-87828-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

ANIONS (NITRATE/NITRITE)
Sample WP04-76.0-GW (680-87828-1) was analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 02/28/2013.

Sample WP04-76.0-GW (680-87828-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Sample WP04-76.0-GW (680-87828-1) was analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 02/27/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

FERROUS IRON
Sample WP04-76.0-GW (680-87828-1) was analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 03/11/2013.

Job ID: 680-87828-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM

Sample WP04-76.0-GW (680-87828-1) was analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 03/11/2013.

PH

Sample WP04-76.0-GW (680-87828-1) was analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 02/28/2013.

The following sample was received outside of holding time: WP04-76.0-GW (680-87828-1).

TOTAL ORGANIC CARBON

Sample WP04-76.0-GW (680-87828-1) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/02/2013.

DISSOLVED ORGANIC CARBON

Sample WP04-76.0-GW (680-87828-1) was analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/09/2013.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87828-1	WP04-76.0-GW	Water	02/26/13 11:32	02/27/13 11:57
680-87828-2	Trip Blank lot # 020113	Water	02/26/13 00:00	02/27/13 11:57

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
6010C	Metals, Silica (ICP)	SW846	TAL SAV
1664A	HEM and SGT-HEM	1664A	TAL SAV
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
7196A	Chromium, Hexavalent	SW846	TAL SAV
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL SAV
9040C	pH	SW846	TAL SAV
9060	Organic Carbon, Total (TOC)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL SAV
SM 2340C	Hardness, Total	SM	TAL SAV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL SAV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL SAV
SM 3500 FE D	Iron, Ferrous	SM	TAL SAV
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL SAV

Protocol References:

1664A = EPA-821-98-002

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
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.
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Undetected at the Limit of Detection.
HF	Field parameter with a holding time of 15 minutes
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

Client Sample ID: WP04-76.0-GW
Date Collected: 02/26/13 11:32
Date Received: 02/27/13 11:57

Lab Sample ID: 680-87828-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/04/13 18:53	1
Benzene	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/04/13 18:53	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/04/13 18:53	1
2-Butanone	1.0	U	10	1.0	ug/L			03/04/13 18:53	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/04/13 18:53	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/04/13 18:53	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/04/13 18:53	1
Chloroform	**0.19**	**J**	1.0	0.14	ug/L			03/04/13 18:53	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/04/13 18:53	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.15	ug/L			03/04/13 18:53	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/04/13 18:53	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/04/13 18:53	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/04/13 18:53	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/04/13 18:53	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/04/13 18:53	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
1,1-Dichloroethane	**0.36**	**J**	1.0	0.25	ug/L			03/04/13 18:53	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/04/13 18:53	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/04/13 18:53	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/04/13 18:53	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/04/13 18:53	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/04/13 18:53	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/04/13 18:53	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/04/13 18:53	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/04/13 18:53	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/04/13 18:53	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/04/13 18:53	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/04/13 18:53	1
Styrene	0.25	U	1.0	0.11	ug/L			03/04/13 18:53	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/04/13 18:53	1
Tetrachloroethene	**16**		1.0	0.15	ug/L			03/04/13 18:53	1
Toluene	0.33	U	1.0	0.33	ug/L			03/04/13 18:53	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/04/13 18:53	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/04/13 18:53	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
1,1,1-Trichloroethane	**8.9**		1.0	0.50	ug/L			03/04/13 18:53	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/04/13 18:53	1
Trichloroethene	**31**		1.0	0.13	ug/L			03/04/13 18:53	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/04/13 18:53	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/04/13 18:53	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/04/13 18:53	1

Client Sample ID: WP04-76.0-GW

Lab Sample ID: 680-87828-1

Date Collected: 02/26/13 11:32

Matrix: Water

Date Received: 02/27/13 11:57

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*03/04/13 18:53*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*03/04/13 18:53*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/04/13 18:53*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**37**		10	1.2	ug/L		03/05/13 09:13	03/06/13 02:29	1
Iron	**11000**		100	50	ug/L		03/05/13 09:13	03/06/13 02:29	1
Magnesium	**20000**		500	9.9	ug/L		03/05/13 09:13	03/06/13 02:29	1
Manganese	**810**		10	2.0	ug/L		03/05/13 09:13	03/06/13 02:29	1
Titanium	**74**		10	1.0	ug/L		03/05/13 09:13	03/06/13 02:29	1

Method: 6010C - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**4600**		230	23	ug/L			03/14/13 11:03	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	**6.7**		4.8	1.3	mg/L			03/09/13 14:15	1
Nitrate as N	**0.43**	**D**	0.25	0.075	mg/L			02/28/13 05:39	5
Sulfate	**10**	**D**	5.0	2.6	mg/L			03/08/13 22:35	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			02/28/13 05:39	5
Chromium, hexavalent	0.0030	U H	0.010	0.0030	mg/L			02/27/13 14:46	1
Cr (III)	**0.037**		0.010	0.010	mg/L			03/11/13 10:50	1
pH	**7.87**	**H**			SU			02/28/13 17:31	1
Total Organic Carbon	**0.92**	**J**	1.0	0.50	mg/L			03/02/13 13:07	1
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			02/28/13 13:10	1
Hardness as calcium carbonate	**350**		10	10	mg/L			02/28/13 11:18	1
Total Dissolved Solids	**310**		10	10	mg/L			02/27/13 15:33	1
Total Suspended Solids	**200**		5.0	5.0	mg/L			03/01/13 15:46	1
Ferric Iron	**11**	**HF**	0.10	0.10	mg/L			03/11/13 10:48	1
Ferrous Iron	0.025	U HF	0.10	0.025	mg/L			02/27/13 15:32	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	0.50	U	1.0	1.0	mg/L			03/09/13 20:09	1

Client Sample ID: Trip Blank lot # 020113

Lab Sample ID: 680-87828-2

Date Collected: 02/26/13 00:00

Matrix: Water

Date Received: 02/27/13 11:57

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/04/13 18:23	1
Benzene	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/04/13 18:23	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/04/13 18:23	1
2-Butanone	1.0	U	10	1.0	ug/L			03/04/13 18:23	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/04/13 18:23	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/04/13 18:23	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

Client Sample ID: Trip Blank lot # 020113
Date Collected: 02/26/13 00:00
Date Received: 02/27/13 11:57

Lab Sample ID: 680-87828-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/04/13 18:23	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/04/13 18:23	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/04/13 18:23	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/04/13 18:23	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/04/13 18:23	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/04/13 18:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/04/13 18:23	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/04/13 18:23	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/04/13 18:23	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/04/13 18:23	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/04/13 18:23	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/04/13 18:23	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/04/13 18:23	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/04/13 18:23	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/04/13 18:23	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/04/13 18:23	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/04/13 18:23	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/04/13 18:23	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/04/13 18:23	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/04/13 18:23	1
Styrene	0.25	U	1.0	0.11	ug/L			03/04/13 18:23	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/04/13 18:23	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/04/13 18:23	1
Toluene	0.33	U	1.0	0.33	ug/L			03/04/13 18:23	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/04/13 18:23	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/04/13 18:23	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/04/13 18:23	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/04/13 18:23	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			03/04/13 18:23	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/04/13 18:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/04/13 18:23	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/04/13 18:23	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/04/13 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*70 - 130*		*03/04/13 18:23*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*03/04/13 18:23*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*03/04/13 18:23*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

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

Lab Sample ID: MB 680-268163/7
Matrix: Water
Analysis Batch: 268163

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/04/13 17:16	1
Benzene	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/04/13 17:16	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/04/13 17:16	1
2-Butanone	1.0	U	10	1.0	ug/L			03/04/13 17:16	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/04/13 17:16	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/04/13 17:16	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/04/13 17:16	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/04/13 17:16	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/04/13 17:16	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/04/13 17:16	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/04/13 17:16	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/04/13 17:16	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/04/13 17:16	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/04/13 17:16	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/04/13 17:16	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/04/13 17:16	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/04/13 17:16	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/04/13 17:16	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/04/13 17:16	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/04/13 17:16	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/04/13 17:16	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/04/13 17:16	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/04/13 17:16	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/04/13 17:16	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/04/13 17:16	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/04/13 17:16	1
Styrene	0.25	U	1.0	0.11	ug/L			03/04/13 17:16	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/04/13 17:16	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/04/13 17:16	1
Toluene	0.33	U	1.0	0.33	ug/L			03/04/13 17:16	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/04/13 17:16	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/04/13 17:16	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/04/13 17:16	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/04/13 17:16	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			03/04/13 17:16	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/04/13 17:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/04/13 17:16	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/04/13 17:16	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/04/13 17:16	1

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

Lab Sample ID: MB 680-268163/7
Matrix: Water
Analysis Batch: 268163

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		70 - 130		03/04/13 17:16	1
Dibromofluoromethane	98		70 - 130		03/04/13 17:16	1
Toluene-d8 (Surr)	95		70 - 130		03/04/13 17:16	1

Lab Sample ID: LCS 680-268163/4
Matrix: Water
Analysis Batch: 268163

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	90.5		ug/L		90	39 - 162
Benzene	50.0	50.5		ug/L		101	74 - 123
Bromodichloromethane	50.0	53.6		ug/L		107	72 - 129
Bromoform	50.0	46.5		ug/L		93	60 - 134
Bromomethane	50.0	17.7		ug/L		35	10 - 171
2-Butanone	100	98.2		ug/L		98	55 - 142
Carbon disulfide	50.0	57.4		ug/L		115	63 - 142
Carbon tetrachloride	50.0	51.8		ug/L		104	70 - 131
Chlorobenzene	50.0	48.2		ug/L		96	79 - 120
Chloroethane	50.0	40.7		ug/L		81	47 - 148
Chloroform	50.0	49.3		ug/L		99	76 - 128
Chloromethane	50.0	52.9		ug/L		106	47 - 151
cis-1,2-Dichloroethene	50.0	46.5		ug/L		93	78 - 127
cis-1,3-Dichloropropene	50.0	52.4		ug/L		105	73 - 128
Cyclohexane	50.0	58.0		ug/L		116	68 - 137
Dibromochloromethane	50.0	54.5		ug/L		109	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	52.8		ug/L		106	57 - 126
1,2-Dibromoethane	50.0	48.7		ug/L		97	75 - 127
1,2-Dichlorobenzene	50.0	46.0		ug/L		92	77 - 124
1,3-Dichlorobenzene	50.0	46.9		ug/L		94	79 - 123
1,4-Dichlorobenzene	50.0	46.3		ug/L		93	76 - 124
Dichlorodifluoromethane	50.0	65.6		ug/L		131	41 - 165
1,1-Dichloroethane	50.0	47.2		ug/L		94	69 - 132
1,2-Dichloroethane	50.0	51.8		ug/L		104	75 - 120
1,1-Dichloroethene	50.0	52.5		ug/L		105	73 - 134
1,2-Dichloropropane	50.0	49.8		ug/L		100	71 - 126
Ethylbenzene	50.0	51.0		ug/L		102	78 - 125
2-Hexanone	100	98.8		ug/L		99	52 - 149
Isopropylbenzene	50.0	53.2		ug/L		106	72 - 129
Methyl acetate	50.0	42.8		ug/L		86	26 - 182
Methylcyclohexane	50.0	58.3		ug/L		117	72 - 133
Methylene Chloride	50.0	48.1		ug/L		96	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	96.4		ug/L		96	76 - 126
Styrene	50.0	50.6		ug/L		101	75 - 129
1,1,2,2-Tetrachloroethane	50.0	48.3		ug/L		97	71 - 127
Tetrachloroethene	50.0	50.7		ug/L		101	77 - 128
Toluene	50.0	50.7		ug/L		101	77 - 125
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	78 - 130

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

Lab Sample ID: LCS 680-268163/4
Matrix: Water
Analysis Batch: 268163

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	55.8		ug/L		112	72 - 127
1,2,4-Trichlorobenzene	50.0	46.8		ug/L		94	67 - 134
1,1,1-Trichloroethane	50.0	55.7		ug/L		111	76 - 126
1,1,2-Trichloroethane	50.0	50.9		ug/L		102	69 - 127
Trichloroethene	50.0	51.9		ug/L		104	80 - 120
Trichlorofluoromethane	50.0	62.6		ug/L		125	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.7		ug/L		111	72 - 139
Vinyl chloride	50.0	56.6		ug/L		113	58 - 141
Xylenes, Total	150	153		ug/L		102	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane	*96*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 680-268163/5
Matrix: Water
Analysis Batch: 268163

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
Acetone	100	94.9		ug/L		95	39 - 162	5	50
Benzene	50.0	50.1		ug/L		100	74 - 123	1	30
Bromodichloromethane	50.0	52.7		ug/L		105	72 - 129	2	30
Bromoform	50.0	45.5		ug/L		91	60 - 134	2	30
Bromomethane	50.0	21.9		ug/L		44	10 - 171	21	50
2-Butanone	100	101		ug/L		101	55 - 142	3	30
Carbon disulfide	50.0	59.2		ug/L		118	63 - 142	3	30
Carbon tetrachloride	50.0	50.9		ug/L		102	70 - 131	2	30
Chlorobenzene	50.0	47.8		ug/L		96	79 - 120	1	30
Chloroethane	50.0	42.9		ug/L		86	47 - 148	5	40
Chloroform	50.0	50.3		ug/L		101	76 - 128	2	30
Chloromethane	50.0	54.8		ug/L		110	47 - 151	3	30
cis-1,2-Dichloroethene	50.0	48.6		ug/L		97	78 - 127	5	30
cis-1,3-Dichloropropene	50.0	51.7		ug/L		103	73 - 128	1	30
Cyclohexane	50.0	58.8		ug/L		118	68 - 137	1	30
Dibromochloromethane	50.0	53.9		ug/L		108	63 - 134	1	50
1,2-Dibromo-3-Chloropropane	50.0	52.4		ug/L		105	57 - 126	1	50
1,2-Dibromoethane	50.0	48.8		ug/L		98	75 - 127	0	30
1,2-Dichlorobenzene	50.0	46.2		ug/L		92	77 - 124	0	30
1,3-Dichlorobenzene	50.0	46.0		ug/L		92	79 - 123	2	30
1,4-Dichlorobenzene	50.0	46.6		ug/L		93	76 - 124	1	30
Dichlorodifluoromethane	50.0	67.9		ug/L		136	41 - 165	4	50
1,1-Dichloroethane	50.0	49.1		ug/L		98	69 - 132	4	30
1,2-Dichloroethane	50.0	50.3		ug/L		101	75 - 120	3	30
1,1-Dichloroethene	50.0	54.9		ug/L		110	73 - 134	4	30
1,2-Dichloropropane	50.0	49.0		ug/L		98	71 - 126	2	30
Ethylbenzene	50.0	50.7		ug/L		101	78 - 125	1	30

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

Lab Sample ID: LCSD 680-268163/5
Matrix: Water
Analysis Batch: 268163

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
2-Hexanone	100	97.3		ug/L		97	52 - 149	2	30
Isopropylbenzene	50.0	52.9		ug/L		106	72 - 129	1	30
Methyl acetate	50.0	43.9		ug/L		88	26 - 182	2	30
Methylcyclohexane	50.0	58.1		ug/L		116	72 - 133	0	30
Methylene Chloride	50.0	50.1		ug/L		100	79 - 124	4	30
4-Methyl-2-pentanone	100	100		ug/L		100	51 - 143	1	30
Methyl tert-butyl ether	100	98.8		ug/L		99	76 - 126	2	30
Styrene	50.0	50.1		ug/L		100	75 - 129	1	30
1,1,2,2-Tetrachloroethane	50.0	47.4		ug/L		95	71 - 127	2	30
Tetrachloroethene	50.0	50.0		ug/L		100	77 - 128	1	30
Toluene	50.0	50.4		ug/L		101	77 - 125	1	30
trans-1,2-Dichloroethene	50.0	50.5		ug/L		101	78 - 130	3	30
trans-1,3-Dichloropropene	50.0	53.8		ug/L		108	72 - 127	4	50
1,2,4-Trichlorobenzene	50.0	47.0		ug/L		94	67 - 134	0	30
1,1,1-Trichloroethane	50.0	55.0		ug/L		110	76 - 126	1	30
1,1,2-Trichloroethane	50.0	50.3		ug/L		101	69 - 127	1	30
Trichloroethene	50.0	51.7		ug/L		103	80 - 120	0	30
Trichlorofluoromethane	50.0	64.1		ug/L		128	66 - 144	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	56.9		ug/L		114	72 - 139	2	30
Vinyl chloride	50.0	58.8		ug/L		118	58 - 141	4	30
Xylenes, Total	150	152		ug/L		101	80 - 124	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*70 - 130*
Dibromofluoromethane	*98*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-268182/1-A
Matrix: Water
Analysis Batch: 268342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268182

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.0	U	10	1.2	ug/L		03/05/13 09:13	03/06/13 02:02	1
Iron	50	U	100	50	ug/L		03/05/13 09:13	03/06/13 02:02	1
Magnesium	20	U	500	9.9	ug/L		03/05/13 09:13	03/06/13 02:02	1
Manganese	2.0	U	10	2.0	ug/L		03/05/13 09:13	03/06/13 02:02	1
Titanium	1.0	U	10	1.0	ug/L		03/05/13 09:13	03/06/13 02:02	1

Lab Sample ID: LCS 680-268182/3-A
Matrix: Water
Analysis Batch: 268342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	183		ug/L		91	75 - 125
Iron	20000	18600		ug/L		93	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 680-268182/3-A
Matrix: Water
Analysis Batch: 268342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	20000	17900		ug/L		90	75 - 125
Manganese	2000	1840		ug/L		92	75 - 125
Titanium	200	182		ug/L		91	75 - 125

Lab Sample ID: 680-87828-1 MS
Matrix: Water
Analysis Batch: 268342

Client Sample ID: WP04-76.0-GW
Prep Type: Total/NA
Prep Batch: 268182

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	37		100	126		ug/L		89	75 - 125
Iron	11000		5000	15400		ug/L		84	75 - 125
Magnesium	20000		5000	24400	4	ug/L		82	75 - 125
Manganese	810		500	1250		ug/L		88	75 - 125
Titanium	74		100	173		ug/L		100	75 - 125

Lab Sample ID: 680-87828-1 MSD
Matrix: Water
Analysis Batch: 268342

Client Sample ID: WP04-76.0-GW
Prep Type: Total/NA
Prep Batch: 268182

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	37		100	124		ug/L		88	75 - 125	1	20
Iron	11000		5000	15000		ug/L		76	75 - 125	2	20
Magnesium	20000		5000	24100	4	ug/L		75	75 - 125	1	20
Manganese	810		500	1240		ug/L		85	75 - 125	1	20
Titanium	74		100	165		ug/L		91	75 - 125	5	20

Method: 6010C - Metals, Silica (ICP)

Lab Sample ID: MB 680-269405/1-A
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	23	U	230	23	ug/L			03/14/13 10:41	1

Lab Sample ID: LCS 680-269405/2-A
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	4680	4720		ug/L		101	75 - 125

Lab Sample ID: 680-87828-1 MS
Matrix: Water
Analysis Batch: 269417

Client Sample ID: WP04-76.0-GW
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	4600		4680	9440		ug/L		104	75 - 125

Method: 6010C - Metals, Silica (ICP) (Continued)

Lab Sample ID: 680-87828-1 MSD — **Client Sample ID: WP04-76.0-GW**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 269417

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silicon	4600		4680	9440		ug/L		104	75 - 125	0	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 680-268772/21 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268772

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	2.0	U	5.0	1.4	mg/L			03/09/13 14:15	1

Lab Sample ID: LCS 680-268772/22 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268772

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	37.0		mg/L		93	78 - 114

Lab Sample ID: LCSD 680-268772/23 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268772

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	35.2		mg/L		88	78 - 114	5	18

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-267760/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267760

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.075	U	0.25	0.075	mg/L			02/27/13 23:45	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			02/27/13 23:45	5

Lab Sample ID: LCS 680-267760/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	4.99	4.92	D	mg/L		99	90 - 110
Nitrite as N	4.99	5.08	D	mg/L		102	90 - 110

Lab Sample ID: LCSD 680-267760/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267760

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	4.99	4.97	D	mg/L		99	90 - 110	1	30

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 680-267760/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267760

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N			4.99	5.07	D	mg/L		102	90 - 110	0	30

Lab Sample ID: 680-87828-1 MS — **Client Sample ID: WP04-76.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	0.43	D	4.99	5.65	D	mg/L		104	90 - 110		
Nitrite as N	0.075	U	4.99	5.16	D	mg/L		104	90 - 110		

Lab Sample ID: MB 680-268800/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268800

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.6	U	5.0	2.6	mg/L			03/08/13 17:38	5

Lab Sample ID: LCS 680-268800/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268800

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			50.0	50.9	D	mg/L		102	90 - 110		

Lab Sample ID: LCSD 680-268800/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268800

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			50.0	51.5	D	mg/L		103	90 - 110	1	30

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 680-267675/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267675

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.0030	U	0.010	0.0030	mg/L			02/27/13 10:11	1

Lab Sample ID: LCS 680-267675/1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267675

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent			0.200	0.199		mg/L		100	85 - 115		

Method: 9040C - pH

Lab Sample ID: LCS 680-267841/7
Matrix: Water
Analysis Batch: 267841

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.010		SU		100	63 - 158

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 680-268062/13
Matrix: Water
Analysis Batch: 268062

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.50	U	1.0	0.50	mg/L			03/02/13 11:54	1

Lab Sample ID: LCS 680-268062/2
Matrix: Water
Analysis Batch: 268062

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	20.0	20.2		mg/L		101	80 - 120

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 680-268860/4
Matrix: Water
Analysis Batch: 268860

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	0.50	U	1.0	1.0	mg/L			03/09/13 19:34	1

Lab Sample ID: LCS 680-268860/5
Matrix: Water
Analysis Batch: 268860

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon	20.0	20.3		mg/L		101	80 - 120
DOC Result 1	20.0	20.3		mg/L		102	80 - 120
DOC Result 2	20.0	20.4		mg/L		102	80 - 120
DOC Result 3	20.0	20.0		mg/L		100	80 - 120
DOC Result 4	20.0	20.4		mg/L		102	80 - 120

Lab Sample ID: 680-87828-1 MS
Matrix: Water
Analysis Batch: 268860

Client Sample ID: WP04-76.0-GW
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon	0.50	U	20.0	20.4		mg/L		102	80 - 120
DOC Result 1	0.50		20.0	20.5		mg/L		102	80 - 120
DOC Result 2	0.50		20.0	20.5		mg/L		102	80 - 120
DOC Result 3	0.50		20.0	20.2		mg/L		101	80 - 120
DOC Result 4	0.50		20.0	20.5		mg/L		102	80 - 120

Method: 9060 - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: 680-87828-1 MSD
Matrix: Water
Analysis Batch: 268860

Client Sample ID: WP04-76.0-GW
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon	0.50	U	20.0	20.1		mg/L		100	80 - 120	2	20
DOC Result 1	0.50		20.0	20.3		mg/L		101	80 - 120	1	20
DOC Result 2	0.50		20.0	20.0		mg/L		100	80 - 120	2	20
DOC Result 3	0.50		20.0	20.0		mg/L		100	80 - 120	1	20
DOC Result 4	0.50		20.0	20.0		mg/L		100	80 - 120	3	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 680-267777/5
Matrix: Water
Analysis Batch: 267777

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3	5.0	U	5.0	5.0	mg/L			02/28/13 11:03	1

Lab Sample ID: 680-87828-1 DU
Matrix: Water
Analysis Batch: 267777

Client Sample ID: WP04-76.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbonate Alkalinity as CaCO3	5.0	U	5.0	U	mg/L		NC	30

Method: SM 2340C - Hardness, Total

Lab Sample ID: MB 680-267752/1
Matrix: Water
Analysis Batch: 267752

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	10	U	10	10	mg/L			02/28/13 11:18	1

Lab Sample ID: LCS 680-267752/2
Matrix: Water
Analysis Batch: 267752

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	400	387		mg/L		97	75 - 125

Lab Sample ID: LCSD 680-267752/3
Matrix: Water
Analysis Batch: 267752

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
Hardness as calcium carbonate	400	385		mg/L		96	75 - 125	0	30

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 680-267656/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267656

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			02/27/13 15:33	1

Lab Sample ID: LCS 680-267656/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267656

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			370	342		mg/L		92	80 - 120		

Lab Sample ID: LCSD 680-267656/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267656

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids			370	352		mg/L		95	80 - 120	3	25

Lab Sample ID: 680-87828-1 DU — **Client Sample ID: WP04-76.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267656

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	310			302		mg/L				3	25

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 680-267939/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267939

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	5.0	U	5.0	5.0	mg/L			03/01/13 15:22	1

Lab Sample ID: LCS 680-267939/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267939

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids			100	97.0		mg/L		97	80 - 120		

Lab Sample ID: LCSD 680-267939/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267939

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids			100	93.0		mg/L		93	80 - 120	4	25

QC Sample Results

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

Method: SM 3500 FE D - Iron, Ferrous

Lab Sample ID: MB 680-267676/2
Matrix: Water
Analysis Batch: 267676

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	0.025	U	0.10	0.025	mg/L			02/27/13 15:32	1

Lab Sample ID: LCS 680-267676/1
Matrix: Water
Analysis Batch: 267676

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron			2.00	2.08		mg/L		104	80 - 120		

Lab Sample ID: 680-87828-1 MS
Matrix: Water
Analysis Batch: 267676

Client Sample ID: WP04-76.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron	0.025	U HF	2.00	2.05		mg/L		103	80 - 120		

Lab Sample ID: 680-87828-1 MSD
Matrix: Water
Analysis Batch: 267676

Client Sample ID: WP04-76.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	0.025	U HF	2.00	2.06		mg/L		103	80 - 120	0	20

GC/MS VOA

Analysis Batch: 268163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	8260B	
680-87828-2	Trip Blank lot # 020113	Total/NA	Water	8260B	
LCS 680-268163/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-268163/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-268163/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 268182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	3010A	
680-87828-1 MS	WP04-76.0-GW	Total/NA	Water	3010A	
680-87828-1 MSD	WP04-76.0-GW	Total/NA	Water	3010A	
LCS 680-268182/3-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-268182/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 268342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	6010C	268182
680-87828-1 MS	WP04-76.0-GW	Total/NA	Water	6010C	268182
680-87828-1 MSD	WP04-76.0-GW	Total/NA	Water	6010C	268182
LCS 680-268182/3-A	Lab Control Sample	Total/NA	Water	6010C	268182
MB 680-268182/1-A	Method Blank	Total/NA	Water	6010C	268182

Analysis Batch: 269417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Dissolved	Water	6010C	
680-87828-1 MS	WP04-76.0-GW	Dissolved	Water	6010C	
680-87828-1 MSD	WP04-76.0-GW	Dissolved	Water	6010C	
LCS 680-269405/2-A	Lab Control Sample	Dissolved	Water	6010C	
MB 680-269405/1-A	Method Blank	Dissolved	Water	6010C	

General Chemistry

Analysis Batch: 267656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	SM 2540C	
680-87828-1 DU	WP04-76.0-GW	Total/NA	Water	SM 2540C	
LCS 680-267656/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 680-267656/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
MB 680-267656/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 267675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	7196A	
LCS 680-267675/1	Lab Control Sample	Total/NA	Water	7196A	
MB 680-267675/2	Method Blank	Total/NA	Water	7196A	

General Chemistry (Continued)

Analysis Batch: 267676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	SM 3500 FE D	
680-87828-1 MS	WP04-76.0-GW	Total/NA	Water	SM 3500 FE D	
680-87828-1 MSD	WP04-76.0-GW	Total/NA	Water	SM 3500 FE D	
LCS 680-267676/1	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 680-267676/2	Method Blank	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 267752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	SM 2340C	
LCS 680-267752/2	Lab Control Sample	Total/NA	Water	SM 2340C	
LCSD 680-267752/3	Lab Control Sample Dup	Total/NA	Water	SM 2340C	
MB 680-267752/1	Method Blank	Total/NA	Water	SM 2340C	

Analysis Batch: 267760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	300.0	
680-87828-1 MS	WP04-76.0-GW	Total/NA	Water	300.0	
LCS 680-267760/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-267760/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-267760/2	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 267777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	SM 2320B	
680-87828-1 DU	WP04-76.0-GW	Total/NA	Water	SM 2320B	
LCS 680-267777/6	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 680-267777/26	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 680-267777/5	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 267841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	9040C	
LCS 680-267841/7	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 267939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	SM 2540D	
LCS 680-267939/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 680-267939/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
MB 680-267939/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 268062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	9060	
LCS 680-268062/2	Lab Control Sample	Total/NA	Water	9060	
MB 680-268062/13	Method Blank	Total/NA	Water	9060	

Analysis Batch: 268772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	1664A	
LCS 680-268772/22	Lab Control Sample	Total/NA	Water	1664A	

General Chemistry (Continued)

Analysis Batch: 268772 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 680-268772/23	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 680-268772/21	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 268800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	300.0	
LCS 680-268800/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-268800/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-268800/2	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 268860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Dissolved	Water	9060	
680-87828-1 MS	WP04-76.0-GW	Dissolved	Water	9060	
680-87828-1 MSD	WP04-76.0-GW	Dissolved	Water	9060	
LCS 680-268860/5	Lab Control Sample	Dissolved	Water	9060	
MB 680-268860/4	Method Blank	Dissolved	Water	9060	

Analysis Batch: 268885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 268886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87828-1	WP04-76.0-GW	Total/NA	Water	7196A	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

Client Sample ID: WP04-76.0-GW

Lab Sample ID: 680-87828-1

Date Collected: 02/26/13 11:32
Matrix: Water
Date Received: 02/27/13 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268163	03/04/13 18:53	WJC	TAL SAV
Total/NA	Prep	3010A			268182	03/05/13 09:13	JKL	TAL SAV
Total/NA	Analysis	6010C		1	268342	03/06/13 02:29	BCB	TAL SAV
Dissolved	Analysis	6010C		1	269417	03/14/13 11:03	BCB	TAL SAV
Total/NA	Analysis	SM 2540C		1	267656	02/27/13 15:33	LE	TAL SAV
Total/NA	Analysis	7196A		1	267675	02/27/13 14:46	RW	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	267676	02/27/13 15:32	RW	TAL SAV
Total/NA	Analysis	SM 2340C		1	267752	02/28/13 11:18	AJO	TAL SAV
Total/NA	Analysis	300.0		5	267760	02/28/13 05:39	PAT	TAL SAV
Total/NA	Analysis	SM 2320B		1	267777	02/28/13 13:10	LE	TAL SAV
Total/NA	Analysis	9040C		1	267841	02/28/13 17:31	LE	TAL SAV
Total/NA	Analysis	SM 2540D		1	267939	03/01/13 15:46	LE	TAL SAV
Total/NA	Analysis	9060		1	268062	03/02/13 13:07	JR	TAL SAV
Total/NA	Analysis	1664A		1	268772	03/09/13 14:15	JS	TAL SAV
Total/NA	Analysis	300.0		5	268800	03/08/13 22:35	PAT	TAL SAV
Dissolved	Analysis	9060		1	268860	03/09/13 20:09	JR	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	268885	03/11/13 10:48	JR	TAL SAV
Total/NA	Analysis	7196A		1	268886	03/11/13 10:50	JR	TAL SAV

Client Sample ID: Trip Blank lot # 020113

Lab Sample ID: 680-87828-2

Date Collected: 02/26/13 00:00
Matrix: Water
Date Received: 02/27/13 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268163	03/04/13 18:23	WJC	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

◯ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NYS Site Gw	680110.20	NY
TAL (LAB) PROJECT MANAGER: Michele Kersey	P.O. NUMBER: Betsy Beauchamp	CONTRACT NO.
CLIENT (SITE) PM: Sue Schmidt	CLIENT PHONE: 802-229-4541	CLIENT FAX
CLIENT NAME: STONE ENV	CLIENT E-MAIL: jschmidt@stone-env.com	
CLIENT ADDRESS: 535 STONE cutters way, Montpelier, VT		
COMPANY CONTRACTING THIS WORK (if applicable): CENAE/CENAN		

PAGE ____ OF ____

STANDARD REPORT DELIVERY ◯

DATE DUE ____

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯

DATE DUE ____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 1

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260C HCL	8260B Hpres	8260C Total HCL	8260C Diss Unpres	8260C Total Unpres	8260C DoD HCL	8260B DoD Unpres	6010B Hpres	6010B DoD Hpres	SM2320B None	SM2320B DoD None	300.0 None	SM3500-Fe-D None	7196A None	7196A DoD None	REMARKS
2/26/13	1132	WP04-76.0-Gw	G	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

NUMBER OF CONTAINERS SUBMITTED

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	2/26/13	17.00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

680110.20

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
Mark L	2/27/13	0930	YES ◯ NO ◯		680-87823	0.3°C

TAL 8240 680 (1008)

13 12 11 10 9 8 7 6 5 4 3 2 1

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87828-1
SDG Number: 68087828

Login Number: 87828
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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 containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	03-31-13
A2LA	ISO/IEC 17025		399.01	03-31-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	03-31-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87828-1
SDG: 68087828

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87828-1	WP04-76.0-GW	Water	02/26/13 11:32	02/27/13 11:57
680-87828-2	Trip Blank lot # 020113	Water	02/26/13 00:00	02/27/13 11:57

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-87828-2

SDG Number: 68087828

Job Description: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, VT 05602

Attention: Mr. Joseph Schmidl

Approved for release.
Michele Kersey
Project Manager I
3/29/2013 11:52 AM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com
03/29/2013

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN: C-GA-02; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

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SAMPLE SUMMARY

Client: Stone Environmental

Job Number: 680-87828-2
Sdg Number: 68087828

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-87828-1	WP04-76.0-GW	Water	02/26/2013 1132	02/27/2013 1157

METHOD SUMMARY

Client: Stone Environmental

Job Number: 680-87828-2
Sdg Number: 68087828

Description	Lab Location	Method	Preparation Method
Matrix: Water			
General Sub Contract Method	SC0142	Subcontract	

Lab References:

SC0142 = Brooks Rand LLC

Method References:

BROOKS RAND LABS
MEANINGFUL METALS DATA

March 28, 2013

TestAmerica
Attn: Michelle Kersey
5102 LaRoche Ave.
Savannah, GA 31404
mkersey@testamericainc.com

RE: Brooks Rand Project: TST-SV1301 Client Project: 102305-R-CTask 6A

Dear Ms. Kersey,

On February 27, 2013, Brooks Rand Labs (BRL) received one (1) water sample. The sample was logged-in for analyses manganese speciation contractually defined as total recoverable manganese (Mn), Mn(II) and Mn(IV) determined by difference (see speciation note below). The samples were received, prepared, analyzed, and stored according to BRL SOP(s) and EPA methodology.

Manganese Speciation Note: This is an operationally defined method where the manganese (Mn) species are determined by the physical separation using filtration through 0.45-µm filters. Reduced manganese (Mn^{2+}) is soluble and oxidized manganese (Mn^{4+}) is not. Therefore, determinations on a sample that is filtered prior to any exposure to oxygen yields concentrations of reduced species, and determinations on an unfiltered sample yield a measurement of oxidized (or reduced and oxidized) species. For this Mn speciation method, samples are field-filtered using ventable in-line filters with no exposure to the air prior to filtration. Due to the chemical properties described above, the filtered sample is defined as Mn(II). An additional unfiltered sample is collected and analyzed for total recoverable Mn. Mn(IV) is calculated by the difference of total recoverable Mn minus Mn(II).

The results may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* for sample-specific MDL, MRL, and other details.

All results have been reported to the concentration of the method detection limit (MDL), referred to as the detection limit (DL) in the DoD QSM. The Limit of Quantitation (LOQ) is defined in this report as the method reporting limit (MRL).

The digestion method used for the samples took place in the original sample container. Therefore, the matrix spikes were prepared at the instrument and would be the same as post-digestion spikes.

The DoD acceptance criteria for the dilution tests state that the diluted result must be ±10% of the native result. Therefore, when the native sample produces a result of 1 (unit independent), the acceptable range for the dilution duplicate is 0.9 - 1.1 units. However, in the upper limit the relative percent difference (RPD) between the two values is 9.5% whereas in the lower limit the RPD is 10.5%. BRL has set the RPD limit to 10% in the report as this is the closest approximation the LIMS is capable of representing.

Per the client's specific request to adhere to the EPA Draft Method 1638 requirement of non-method blank corrected data, the results were not method blank corrected as described in the calculations section of the relevant BRL SOP(s). This deviates from BRL's standard protocol for trace level data quality and BRL believes that all low-level metals analyses should be method blank corrected and that not doing so may lead to less accurate results. The results from the method blanks that were analyzed are listed in the *Method Blanks & Reporting Limits* section of this report.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details, see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Tiffany Stilwater
Project Manager
tiffany@brooksrand.com

Lydia Greaves
Project Manager
lydia@brooksrand.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations /certifications, please visit our website at <http://www.brooksrand.com/default.asp?contentID=586>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	**MS**	matrix spike
BRL	Brooks Rand Labs	**MSD**	matrix spike duplicate
BS	laboratory fortified blank	**ND**	non-detect
CAL	calibration standard	**NR**	non-reportable
CCV	continuing calibration verification	**PS**	post preparation spike
COC	chain of custody record	**REC**	percent recovery
CRM	certified reference material	**RPD**	relative percent difference
D	dissolved fraction	**RSD**	relative standard deviation
DUP	duplicate	**SCV**	secondary calibration verification
ICV	initial calibration verification	**SOP**	standard operating procedure
MDL	method detection limit	**SRM**	standard reference material
MRL	method reporting limit	**T**	total recoverable fraction

Definition of Data Qualifiers

(Effective 9/23/09)

B Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H Holding time and/or preservation requirements not met. Result is estimated.
J Estimated value. A full explanation is presented in the narrative.
J-M Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N Spike recovery was not within acceptance criteria. Result is estimated.
R Rejected, unusable value. A full explanation is presented in the narrative.
U Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BRL.

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey
Client PO: Stone Environmental

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
WP04-760-GW	1309014-01	Water	Sample	02/26/2013	02/27/2013

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Mn	Water	EPA 1638	03/04/2013	03/25/2013	B130483	1300203
Mn(II)	Water	EPA 1638	03/04/2013	03/25/2013	B130483	1300203

Sample Results

Sample	Analyte	Basis	Result	Qualifier	MDL	LOD	MRL	Unit	Batch	Sequence
WP04-760-GW										
1309014-01	Mn	T	1500		0.21	0.63	0.63	µg/L	B130483	1300203
1309014-01	Mn(II)	D	110		0.211	0.632	0.632	µg/L	B130483	1300203
1309014-01	Mn(IV)	N/A	1390		0.421	0.632	1.26	µg/L	[CALC]	N/A

Accuracy & Precision Summary

Batch: B130483
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130483-BS1	**Laboratory Fortified Blank (1240040)**						
	Mn		1.053	1.10	µg/L	104% 80-120	
B130483-SRM1	**Certified Reference Material (1202032, NIST 1643e)**						
	Mn		38.97	39.48	µg/L	101% 75-125	
B130483-DUP1	**Duplicate (1309014-01)**						
	Mn	1503		1497	µg/L		0.4% 20
B130483-DUP2	**Duplicate (1309014-01)**						
	Mn	1503		1544	µg/L		3% 10
B130483-MS1	**Matrix Spike (1309014-01)**						
	Mn	1503	4211	5795	µg/L	102% 80-120	
B130483-MSD1	**Matrix Spike Duplicate (1309014-01)**						
	Mn	1503	4211	5788	µg/L	102% 80-120	0.1% 20

Method Blanks & Reporting Limits

Batch: B130483
Matrix: Water
Method: EPA 1638
Analyte: Mn

Sample	Result	Units
B130483-BLK1	-0.006	µg/L
B130483-BLK2	-0.005	µg/L
B130483-BLK3	-0.004	µg/L
B130483-BLK4	-0.001	µg/L

DoD QSEM Limit: 0.03

MDL: 0.02
MRL: 0.06

Analyte: Mn(II)

Sample	Result	Units
B130483-BLK1	-0.006	µg/L
B130483-BLK2	-0.005	µg/L
B130483-BLK3	-0.004	µg/L
B130483-BLK4	-0.001	µg/L

DoD QSEM Limit: 0.032

MDL: 0.021
MRL: 0.063

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey
Client PO: Stone Environmental

Sample Containers

Lab ID: 1309014-01
Sample: WP04-760-GW

Report Matrix: Water
Sample Type: Sample

Collected: 02/26/2013
Received: 02/27/2013

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler
B	Bottle HDPE ICP-W-D	125mL		0.1% HNO3 (BRL)	1306044	<2	Cooler

Shipping Containers

Cooler

Received: February 27, 2013 9:00
Tracking No: 898745654609 via FedEx
Coolant Type: Ice
Temperature: 1.4 °C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? Yes
Custody seals intact? Yes
COC present? Yes

BROOKS RAND LABS
MEANINGFUL METALS DATA
3958 6th Avenue NW
Seattle, WA 98107
Phone: 206-632-6206
Fax: 206-632-6017
samples@brooksrand.com
www.brooksrand.com

Chain of Custody Record

1309014

BRL Report 1309014

White: LAB COPY
Yellow: CUSTOMER COPY

Client: STONE ENV.	Address: 535 STONE Edition Hwy Montpelier, VT 05602	COC receipt confirmation? Y / N If so, by: email / fax (circle one)
Contact: Joe Schmidl		Email: jschmidle@stone-env.com
Client project ID: 102305-R-C Task 6A		
PO #:	Phone #: 802-229-4541	Fax #:

Requested TAT in business days:
- ☐ 20 (standard)
- ☐ 15
- ☐ 10
- ☐ 5
- ☐ Other ____

Surcharges apply for expedited turn around times.

	Sample ID	Collection: Date	Collection: Time	Miscellaneous: Sampler (initials)	Miscellaneous: Matrix type	Miscellaneous: # of containers	Miscellaneous: Field filtered? (Y/N)	Field Preservation: Unpreserved / ice only	Field Preservation: HCl / HNO3 (circle one)	Field Preservation: Other (specify)	Analyses required: Total Hg, EPA 1631	Analyses required: Methyl Hg, EPA 1630	Analyses required: ICP-MS Metals (specify)	Analyses required: As / Se species (specify)	Analyses required: % Solids	Analyses required: Filtration	Analyses required: Other (specify) 1638 modified	Analyses required: Other (specify)	Comments
1	WP04-76.0-GW	2/26/13	1132	DL	GW	21	Y		X								X		
2	WP04-76.0-GW	2/26/13	1132	DL	GW	1	N		X								X		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date: 2/26/13	Time: 17:00	Relinquished by:	Date:	Time:
Received by:	Date:	Time:	Received at BRL by:	Date: 2/27/13	Time: 0900
Shipping carrier: Fedex	# of coolers: 1		BRL work order ID:	BRL project ID:	

BROOKS RAND LABS
MEANINGFUL METALS DATA

3958 6th Avenue NW
Seattle, WA 98107
Phone: 206-632-6206
Fax: 206-632-6017

samples@brooksrand.com
www.brooksrand.com

Chain of Custody Record

1309014

BRL Report 1309014

White: LAB COPY
Yellow: CUSTOMER COPY

Client: STeNE ENV.	Address: 535 STONE Edition Way Montpelier, VT 05602	COC receipt confirmation? Y / N If so, by: email / fax (circle one)
Contact: Joe Schmidl		Email: jschmidle@stone-env.com
Client project ID: 102305-R-C Task 6A		
PO #:	Phone #: 802-229-4541	Fax #:

Requested TAT in business days:
☐ 20 (standard)
☐ 15
☐ 10
☐ 5
☐ Other ____

Surcharges apply for expedited turn around times.

	Sample ID	Collection: Date	Collection: Time	Misc: Sampler (initials)	Misc: Matrix type	Misc: # of containers	Misc: Field filtered? (Y/N)	Field Preservation: Unpreserved / ice only	Field Preservation: HCl / HNO3 (circle one)	Field Preservation: Other (specify)	Analyses required: Total Hg, EPA 1631	Analyses required: Methyl Hg, EPA 1630	Analyses required: ICP-MS Metals (specify)	Analyses required: As / Se species (specify)	Analyses required: % Solids	Analyses required: Filtration	Analyses required: Other (specify) 1638 mod.	Analyses required: Other (specify)	Comments
1	WP04-76.0-GW	2/26/13	1132	DL	GW	21	Y		X								X		
2	WP04-76.0-GW	2/26/13	1132	DL	GW	1	N		X								X		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date: 2/26/13	Time: 17:00	Relinquished by: / Date: / Time:
Received by:	Date:	Time:	Received at BRL by: / Date: 2/27/13 / Time: 0900
Shipping carrier: Fedex	# of coolers: 1		BRL work order ID: 680-87828-2 / BRL project ID:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-87900-1
TestAmerica Sample Delivery Group: 68087900
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Michele R Kersey

Authorized for release by:
3/18/2013 9:10:11 AM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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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Job ID: 680-87900-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87900-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 3/1/2013 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples WP05-95.0-GW (680-87900-1), WP-11-76.9 (680-87900-2), WP-11-81.9 (680-87900-3), WP-11-87.0 (680-87900-4), WP-12-78.0 (680-87900-5) and WP-12-93.0 (680-87900-6) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/05/2013.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

METALS (ICP)
Sample WP05-95.0-GW (680-87900-1) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 03/05/2013 and analyzed on 03/06/2013.

SILICA BY ICP
Sample WP05-95.0-GW (680-87900-1) was analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were analyzed on 03/14/2013.

HEXAVALENT CHROMIUM
Sample WP05-95.0-GW (680-87900-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 03/01/2013.

OIL AND GREASE AND TPH
Sample WP05-95.0-GW (680-87900-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 03/13/2013.

ALKALINITY
Sample WP05-95.0-GW (680-87900-1) was analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on

Job ID: 680-87900-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

03/14/2013.

HARDNESS
Sample WP05-95.0-GW (680-87900-1) was analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 03/11/2013.

TOTAL DISSOLVED SOLIDS
Sample WP05-95.0-GW (680-87900-1) was analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 03/01/2013.

TOTAL SUSPENDED SOLIDS
Sample WP05-95.0-GW (680-87900-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/05/2013.

ANIONS BY IC
Sample WP05-95.0-GW (680-87900-1) was analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 03/12/2013.

Sample WP05-95.0-GW (680-87900-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

ANIONS (NITRATE/NITRITE)
Sample WP05-95.0-GW (680-87900-1) was analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 03/01/2013.

Sample WP05-95.0-GW (680-87900-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Sample WP05-95.0-GW (680-87900-1) was analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 03/01/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

FERROUS IRON
Sample WP05-95.0-GW (680-87900-1) was analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 03/11/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM
Sample WP05-95.0-GW (680-87900-1) was analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 03/11/2013.

PH
Sample WP05-95.0-GW (680-87900-1) was analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 03/06/2013.

TOTAL ORGANIC CARBON
Sample WP05-95.0-GW (680-87900-1) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/02/2013.

DISSOLVED ORGANIC CARBON
Sample WP05-95.0-GW (680-87900-1) was analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/12/2013.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87900-1	WP05-95.0-GW	Water	02/28/13 11:22	03/01/13 09:35
680-87900-2	WP-11-76.9	Water	02/27/13 11:42	03/01/13 09:35
680-87900-3	WP-11-81.9	Water	02/27/13 12:48	03/01/13 09:35
680-87900-4	WP-11-87.0	Water	02/27/13 13:50	03/01/13 09:35
680-87900-5	WP-12-78.0	Water	02/28/13 09:05	03/01/13 09:35
680-87900-6	WP-12-93.0	Water	02/28/13 11:55	03/01/13 09:35

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
6010C	Metals, Silica (ICP)	SW846	TAL SAV
1664A	HEM and SGT-HEM	1664A	TAL SAV
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
7196A	Chromium, Hexavalent	SW846	TAL SAV
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL SAV
9040C	pH	SW846	TAL SAV
9060	Organic Carbon, Total (TOC)	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL DEN
SM 2340C	Hardness, Total	SM	TAL SAV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL SAV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL SAV
SM 3500 FE D	Iron, Ferrous	SM	TAL SAV
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL SAV

Protocol References:

1664A = EPA-821-98-002

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
HF	Field parameter with a holding time of 15 minutes
J	Estimated: The analyte was positively identified; the quantitation is an estimation
D	The reported value is from a dilution.
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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP05-95.0-GW
Date Collected: 02/28/13 11:22
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/05/13 06:22	1
Benzene	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/05/13 06:22	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/05/13 06:22	1
2-Butanone	1.0	U	10	1.0	ug/L			03/05/13 06:22	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/05/13 06:22	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/05/13 06:22	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/05/13 06:22	1
Chloroform	**1.0**		1.0	0.14	ug/L			03/05/13 06:22	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/05/13 06:22	1
cis-1,2-Dichloroethene	**1.1**		1.0	0.15	ug/L			03/05/13 06:22	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/05/13 06:22	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/05/13 06:22	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/05/13 06:22	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/05/13 06:22	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/05/13 06:22	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/05/13 06:22	1
1,1-Dichloroethene	**25**		1.0	0.11	ug/L			03/05/13 06:22	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/05/13 06:22	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/05/13 06:22	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/05/13 06:22	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/05/13 06:22	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/05/13 06:22	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/05/13 06:22	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/05/13 06:22	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/05/13 06:22	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/05/13 06:22	1
Styrene	0.25	U	1.0	0.11	ug/L			03/05/13 06:22	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/05/13 06:22	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 06:22	1
Toluene	0.33	U	1.0	0.33	ug/L			03/05/13 06:22	1
trans-1,2-Dichloroethene	**0.26**	**J**	1.0	0.20	ug/L			03/05/13 06:22	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/05/13 06:22	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/05/13 06:22	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/05/13 06:22	1
Trichloroethene	**73**		1.0	0.13	ug/L			03/05/13 06:22	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 06:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/05/13 06:22	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/05/13 06:22	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/05/13 06:22	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP05-95.0-GW

Lab Sample ID: 680-87900-1

Date Collected: 02/28/13 11:22
Matrix: Water
Date Received: 03/01/13 09:35

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*100*		*70 - 130*		*03/05/13 06:22*	*1*
Dibromofluoromethane	*105*		*70 - 130*		*03/05/13 06:22*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/05/13 06:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**49**		10	1.2	ug/L		03/05/13 09:13	03/06/13 03:10	1
Iron	**20000**		100	50	ug/L		03/05/13 09:13	03/06/13 03:10	1
Magnesium	**32000**		500	9.9	ug/L		03/05/13 09:13	03/06/13 03:10	1
Manganese	**680**		10	2.0	ug/L		03/05/13 09:13	03/06/13 03:10	1
Titanium	**120**		10	1.0	ug/L		03/05/13 09:13	03/06/13 03:10	1

Method: 6010C - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**3900**		230	23	ug/L			03/14/13 11:25	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	1.9	U	4.6	1.3	mg/L			03/13/13 09:10	1
Nitrate as N	**0.22**	**J D**	0.25	0.075	mg/L			03/01/13 17:26	5
Sulfate	**60**	**D**	5.0	2.6	mg/L			03/12/13 22:45	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			03/01/13 17:26	5
Chromium, hexavalent	0.0030	U	0.010	0.0030	mg/L			03/01/13 10:53	1
Cr (III)	**0.049**		0.010	0.010	mg/L			03/11/13 10:50	1
pH	**8.09**	**H**			SU			03/06/13 15:24	1
Total Organic Carbon	**1.7**		1.0	0.50	mg/L			03/02/13 13:23	1
Carbonate Alkalinity as CaCO3	2.0	U	5.0	1.1	mg/L			03/14/13 11:38	1
Hardness as calcium carbonate	**640**		10	10	mg/L			03/11/13 16:34	1
Total Dissolved Solids	**360**		10	10	mg/L			03/01/13 16:06	1
Total Suspended Solids	**600**		8.3	8.3	mg/L			03/05/13 09:24	1
Ferric Iron	**20**	**HF**	0.10	0.10	mg/L			03/11/13 10:48	1
Ferrous Iron	**0.033**	**J HF**	0.10	0.025	mg/L			03/01/13 11:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**1.7**		1.0	1.0	mg/L			03/12/13 06:49	1

Client Sample ID: WP-11-76.9

Lab Sample ID: 680-87900-2

Date Collected: 02/27/13 11:42
Matrix: Water
Date Received: 03/01/13 09:35

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/05/13 18:12	1
Benzene	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/05/13 18:12	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/05/13 18:12	1
2-Butanone	1.0	U	10	1.0	ug/L			03/05/13 18:12	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/05/13 18:12	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/05/13 18:12	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP-11-76.9
Date Collected: 02/27/13 11:42
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/05/13 18:12	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/05/13 18:12	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/05/13 18:12	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/05/13 18:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/05/13 18:12	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/05/13 18:12	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/05/13 18:12	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/05/13 18:12	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 18:12	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/05/13 18:12	1
1,1-Dichloroethene	**0.22**	**J**	1.0	0.11	ug/L			03/05/13 18:12	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/05/13 18:12	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/05/13 18:12	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/05/13 18:12	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/05/13 18:12	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/05/13 18:12	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/05/13 18:12	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/05/13 18:12	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/05/13 18:12	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/05/13 18:12	1
Styrene	0.25	U	1.0	0.11	ug/L			03/05/13 18:12	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/05/13 18:12	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 18:12	1
Toluene	0.33	U	1.0	0.33	ug/L			03/05/13 18:12	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/05/13 18:12	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/05/13 18:12	1
Trichloroethene	**110**		1.0	0.13	ug/L			03/05/13 18:12	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/05/13 18:12	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/05/13 18:12	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/05/13 18:12	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/05/13 18:12	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/05/13 18:12	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/05/13 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*70 - 130*		*03/05/13 18:12*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*03/05/13 18:12*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/05/13 18:12*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP-11-81.9
Date Collected: 02/27/13 12:48
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-3
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/05/13 04:31	1
Benzene	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/05/13 04:31	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/05/13 04:31	1
2-Butanone	1.0	U	10	1.0	ug/L			03/05/13 04:31	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/05/13 04:31	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/05/13 04:31	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/05/13 04:31	1
Chloroform	**0.16**	**J**	1.0	0.14	ug/L			03/05/13 04:31	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/05/13 04:31	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/05/13 04:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/05/13 04:31	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/05/13 04:31	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/05/13 04:31	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/05/13 04:31	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 04:31	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/05/13 04:31	1
1,1-Dichloroethene	**0.41**	**J**	1.0	0.11	ug/L			03/05/13 04:31	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/05/13 04:31	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/05/13 04:31	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/05/13 04:31	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/05/13 04:31	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/05/13 04:31	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/05/13 04:31	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/05/13 04:31	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/05/13 04:31	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/05/13 04:31	1
Styrene	0.25	U	1.0	0.11	ug/L			03/05/13 04:31	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/05/13 04:31	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 04:31	1
Toluene	0.33	U	1.0	0.33	ug/L			03/05/13 04:31	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/05/13 04:31	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/05/13 04:31	1
Trichloroethene	**170**		1.0	0.13	ug/L			03/05/13 04:31	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/05/13 04:31	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/05/13 04:31	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/05/13 04:31	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/05/13 04:31	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/05/13 04:31	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/05/13 04:31	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP-11-81.9

Date Collected: 02/27/13 12:48
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*70 - 130*		*03/05/13 04:31*	*1*
Dibromofluoromethane	*106*		*70 - 130*		*03/05/13 04:31*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*03/05/13 04:31*	*1*

Client Sample ID: WP-11-87.0

Date Collected: 02/27/13 13:50
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-4

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/05/13 04:58	1
Benzene	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/05/13 04:58	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/05/13 04:58	1
2-Butanone	1.0	U	10	1.0	ug/L			03/05/13 04:58	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/05/13 04:58	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/05/13 04:58	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/05/13 04:58	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/05/13 04:58	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/05/13 04:58	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/05/13 04:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/05/13 04:58	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/05/13 04:58	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/05/13 04:58	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/05/13 04:58	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 04:58	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/05/13 04:58	1
1,1-Dichloroethene	**0.25**	**J**	1.0	0.11	ug/L			03/05/13 04:58	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/05/13 04:58	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/05/13 04:58	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/05/13 04:58	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/05/13 04:58	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/05/13 04:58	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/05/13 04:58	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/05/13 04:58	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/05/13 04:58	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/05/13 04:58	1
Styrene	0.25	U	1.0	0.11	ug/L			03/05/13 04:58	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/05/13 04:58	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 04:58	1
Toluene	0.33	U	1.0	0.33	ug/L			03/05/13 04:58	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/05/13 04:58	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/05/13 04:58	1

Client Sample ID: WP-11-87.0
Date Collected: 02/27/13 13:50
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**120**		1.0	0.13	ug/L			03/05/13 04:58	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/05/13 04:58	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/05/13 04:58	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/05/13 04:58	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/05/13 04:58	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/05/13 04:58	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/05/13 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*03/05/13 04:58*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*03/05/13 04:58*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/05/13 04:58*	*1*

Client Sample ID: WP-12-78.0
Date Collected: 02/28/13 09:05
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/05/13 05:26	1
Benzene	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/05/13 05:26	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/05/13 05:26	1
2-Butanone	1.0	U	10	1.0	ug/L			03/05/13 05:26	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/05/13 05:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/05/13 05:26	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/05/13 05:26	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/05/13 05:26	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/05/13 05:26	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/05/13 05:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/05/13 05:26	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/05/13 05:26	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/05/13 05:26	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/05/13 05:26	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 05:26	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/05/13 05:26	1
1,1-Dichloroethene	**0.16**	**J**	1.0	0.11	ug/L			03/05/13 05:26	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/05/13 05:26	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/05/13 05:26	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/05/13 05:26	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/05/13 05:26	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/05/13 05:26	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/05/13 05:26	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP-12-78.0

Date Collected: 02/28/13 09:05
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-5

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/05/13 05:26	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/05/13 05:26	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/05/13 05:26	1
Styrene	0.25	U	1.0	0.11	ug/L			03/05/13 05:26	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/05/13 05:26	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 05:26	1
Toluene	0.33	U	1.0	0.33	ug/L			03/05/13 05:26	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/05/13 05:26	1
1,1,2-Trichloroethane	**0.18**	**J**	1.0	0.13	ug/L			03/05/13 05:26	1
Trichloroethene	**39**		1.0	0.13	ug/L			03/05/13 05:26	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/05/13 05:26	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/05/13 05:26	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/05/13 05:26	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/05/13 05:26	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/05/13 05:26	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/05/13 05:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*03/05/13 05:26*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*03/05/13 05:26*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/05/13 05:26*	*1*

Client Sample ID: WP-12-93.0

Date Collected: 02/28/13 11:55
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-6

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/05/13 05:54	1
Benzene	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/05/13 05:54	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/05/13 05:54	1
2-Butanone	1.0	U	10	1.0	ug/L			03/05/13 05:54	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/05/13 05:54	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/05/13 05:54	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/05/13 05:54	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/05/13 05:54	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/05/13 05:54	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/05/13 05:54	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/05/13 05:54	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/05/13 05:54	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/05/13 05:54	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP-12-93.0
Date Collected: 02/28/13 11:55
Date Received: 03/01/13 09:35

Lab Sample ID: 680-87900-6
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/05/13 05:54	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 05:54	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/05/13 05:54	1
1,1-Dichloroethene	**0.42**	**J**	1.0	0.11	ug/L			03/05/13 05:54	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/05/13 05:54	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/05/13 05:54	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/05/13 05:54	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/05/13 05:54	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/05/13 05:54	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/05/13 05:54	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/05/13 05:54	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/05/13 05:54	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/05/13 05:54	1
Styrene	0.25	U	1.0	0.11	ug/L			03/05/13 05:54	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/05/13 05:54	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 05:54	1
Toluene	0.33	U	1.0	0.33	ug/L			03/05/13 05:54	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/05/13 05:54	1
1,1,2-Trichloroethane	**0.36**	**J**	1.0	0.13	ug/L			03/05/13 05:54	1
Trichloroethene	**34**		1.0	0.13	ug/L			03/05/13 05:54	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/05/13 05:54	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/05/13 05:54	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/05/13 05:54	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/05/13 05:54	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/05/13 05:54	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/05/13 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*70 - 130*		*03/05/13 05:54*	*1*
Dibromofluoromethane	*104*		*70 - 130*		*03/05/13 05:54*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/05/13 05:54*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

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

Lab Sample ID: MB 680-268165/7
Matrix: Water
Analysis Batch: 268165

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/04/13 22:11	1
Benzene	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/04/13 22:11	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/04/13 22:11	1
2-Butanone	1.0	U	10	1.0	ug/L			03/04/13 22:11	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/04/13 22:11	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/04/13 22:11	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/04/13 22:11	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/04/13 22:11	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/04/13 22:11	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/04/13 22:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/04/13 22:11	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/04/13 22:11	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/04/13 22:11	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/04/13 22:11	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/04/13 22:11	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/04/13 22:11	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/04/13 22:11	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/04/13 22:11	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/04/13 22:11	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/04/13 22:11	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/04/13 22:11	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/04/13 22:11	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/04/13 22:11	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/04/13 22:11	1
Styrene	0.25	U	1.0	0.11	ug/L			03/04/13 22:11	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/04/13 22:11	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/04/13 22:11	1
Toluene	0.33	U	1.0	0.33	ug/L			03/04/13 22:11	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/04/13 22:11	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/04/13 22:11	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/04/13 22:11	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/04/13 22:11	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			03/04/13 22:11	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/04/13 22:11	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/04/13 22:11	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/04/13 22:11	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/04/13 22:11	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/04/13 22:11	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/04/13 22:11	1

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

Lab Sample ID: MB 680-268165/7
Matrix: Water
Analysis Batch: 268165

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		70 - 130		03/04/13 22:11	1
Dibromofluoromethane	104		70 - 130		03/04/13 22:11	1
Toluene-d8 (Surr)	98		70 - 130		03/04/13 22:11	1

Lab Sample ID: LCS 680-268165/4
Matrix: Water
Analysis Batch: 268165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	111		ug/L		111	39 - 162
Benzene	50.0	48.5		ug/L		97	74 - 123
Bromodichloromethane	50.0	45.1		ug/L		90	72 - 129
Bromoform	50.0	49.2		ug/L		98	60 - 134
Bromomethane	50.0	36.6		ug/L		73	10 - 171
2-Butanone	100	99.9		ug/L		100	55 - 142
Carbon disulfide	50.0	64.3		ug/L		129	63 - 142
Carbon tetrachloride	50.0	46.3		ug/L		93	70 - 131
Chlorobenzene	50.0	48.5		ug/L		97	79 - 120
Chloroethane	50.0	47.0		ug/L		94	47 - 148
Chloroform	50.0	51.5		ug/L		103	76 - 128
Chloromethane	50.0	47.8		ug/L		96	47 - 151
Dibromochloromethane	50.0	41.0		ug/L		82	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	48.7		ug/L		97	57 - 126
1,2-Dibromoethane	50.0	51.3		ug/L		103	75 - 127
1,2-Dichlorobenzene	50.0	48.9		ug/L		98	77 - 124
1,3-Dichlorobenzene	50.0	49.6		ug/L		99	79 - 123
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	78 - 127
1,4-Dichlorobenzene	50.0	50.0		ug/L		100	76 - 124
Dichlorodifluoromethane	50.0	51.9		ug/L		104	41 - 165
1,1-Dichloroethane	50.0	58.5		ug/L		117	69 - 132
1,2-Dichloroethane	50.0	50.0		ug/L		100	75 - 120
cis-1,3-Dichloropropene	50.0	45.2		ug/L		90	73 - 128
1,1-Dichloroethene	50.0	61.4		ug/L		123	73 - 134
1,2-Dichloropropane	50.0	49.3		ug/L		99	71 - 126
Ethylbenzene	50.0	49.8		ug/L		100	78 - 125
2-Hexanone	100	97.5		ug/L		97	52 - 149
Isopropylbenzene	50.0	53.6		ug/L		107	72 - 129
Methylene Chloride	50.0	59.8		ug/L		120	79 - 124
4-Methyl-2-pentanone	100	101		ug/L		101	51 - 143
Methyl tert-butyl ether	100	120		ug/L		120	76 - 126
Styrene	50.0	51.8		ug/L		104	75 - 129
1,1,2,2-Tetrachloroethane	50.0	48.6		ug/L		97	71 - 127
Tetrachloroethene	50.0	49.2		ug/L		98	77 - 128
Toluene	50.0	50.7		ug/L		101	77 - 125
trans-1,2-Dichloroethene	50.0	59.4		ug/L		119	78 - 130
trans-1,3-Dichloropropene	50.0	44.8		ug/L		90	72 - 127
1,2,4-Trichlorobenzene	50.0	45.1		ug/L		90	67 - 134
1,1,1-Trichloroethane	50.0	53.3		ug/L		107	76 - 126

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

Lab Sample ID: LCS 680-268165/4
Matrix: Water
Analysis Batch: 268165

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	50.0	51.1		ug/L		102	69 - 127
Trichloroethene	50.0	52.0		ug/L		104	80 - 120
Trichlorofluoromethane	50.0	63.6		ug/L		127	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	60.1		ug/L		120	72 - 139
Cyclohexane	50.0	49.9		ug/L		100	68 - 137
Methyl acetate	50.0	46.6		ug/L		93	26 - 182
Vinyl chloride	50.0	49.7		ug/L		99	58 - 141
Methylcyclohexane	50.0	49.4		ug/L		99	72 - 133
Xylenes, Total	150	153		ug/L		102	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*70 - 130*
Dibromofluoromethane	*106*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 680-268165/5
Matrix: Water
Analysis Batch: 268165

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
Acetone	100	115		ug/L		115	39 - 162	3	50
Benzene	50.0	48.2		ug/L		96	74 - 123	1	30
Bromodichloromethane	50.0	45.3		ug/L		91	72 - 129	1	30
Bromoform	50.0	49.7		ug/L		99	60 - 134	1	30
Bromomethane	50.0	28.5		ug/L		57	10 - 171	25	50
2-Butanone	100	97.2		ug/L		97	55 - 142	3	30
Carbon disulfide	50.0	62.9		ug/L		126	63 - 142	2	30
Carbon tetrachloride	50.0	45.5		ug/L		91	70 - 131	2	30
Chlorobenzene	50.0	48.5		ug/L		97	79 - 120	0	30
Chloroethane	50.0	47.9		ug/L		96	47 - 148	2	40
Chloroform	50.0	50.9		ug/L		102	76 - 128	1	30
Chloromethane	50.0	47.2		ug/L		94	47 - 151	1	30
Dibromochloromethane	50.0	41.7		ug/L		83	63 - 134	2	50
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/L		101	57 - 126	4	50
1,2-Dibromoethane	50.0	51.7		ug/L		103	75 - 127	1	30
1,2-Dichlorobenzene	50.0	49.0		ug/L		98	77 - 124	0	30
1,3-Dichlorobenzene	50.0	49.8		ug/L		100	79 - 123	1	30
cis-1,2-Dichloroethene	50.0	47.3		ug/L		95	78 - 127	2	30
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	76 - 124	1	30
Dichlorodifluoromethane	50.0	48.9		ug/L		98	41 - 165	6	50
1,1-Dichloroethane	50.0	55.9		ug/L		112	69 - 132	5	30
1,2-Dichloroethane	50.0	50.7		ug/L		101	75 - 120	2	30
cis-1,3-Dichloropropene	50.0	45.9		ug/L		92	73 - 128	2	30
1,1-Dichloroethene	50.0	63.4		ug/L		127	73 - 134	3	30
1,2-Dichloropropane	50.0	49.7		ug/L		99	71 - 126	1	30
Ethylbenzene	50.0	49.7		ug/L		99	78 - 125	0	30
2-Hexanone	100	99.7		ug/L		100	52 - 149	2	30

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

Lab Sample ID: LCSD 680-268165/5
Matrix: Water
Analysis Batch: 268165

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
Isopropylbenzene			50.0	53.4		ug/L		107	72 - 129	0	30
Methylene Chloride			50.0	59.6		ug/L		119	79 - 124	0	30
4-Methyl-2-pentanone			100	103		ug/L		103	51 - 143	2	30
Methyl tert-butyl ether			100	123		ug/L		123	76 - 126	3	30
Styrene			50.0	51.8		ug/L		104	75 - 129	0	30
1,1,2,2-Tetrachloroethane			50.0	49.8		ug/L		100	71 - 127	2	30
Tetrachloroethene			50.0	49.1		ug/L		98	77 - 128	0	30
Toluene			50.0	50.2		ug/L		100	77 - 125	1	30
trans-1,2-Dichloroethene			50.0	60.2		ug/L		120	78 - 130	1	30
trans-1,3-Dichloropropene			50.0	45.7		ug/L		91	72 - 127	2	50
1,2,4-Trichlorobenzene			50.0	46.1		ug/L		92	67 - 134	2	30
1,1,1-Trichloroethane			50.0	53.4		ug/L		107	76 - 126	0	30
1,1,2-Trichloroethane			50.0	52.9		ug/L		106	69 - 127	3	30
Trichloroethene			50.0	52.2		ug/L		104	80 - 120	0	30
Trichlorofluoromethane			50.0	63.1		ug/L		126	66 - 144	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	60.3		ug/L		121	72 - 139	0	30
Cyclohexane			50.0	49.2		ug/L		98	68 - 137	1	30
Methyl acetate			50.0	48.5		ug/L		97	26 - 182	4	30
Vinyl chloride			50.0	50.8		ug/L		102	58 - 141	2	30
Methylcyclohexane			50.0	48.8		ug/L		98	72 - 133	1	30
Xylenes, Total			150	153		ug/L		102	80 - 124	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*70 - 130*
Dibromofluoromethane	*105*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 680-268305/7
Matrix: Water
Analysis Batch: 268305

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/05/13 16:37	1
Benzene	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/05/13 16:37	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/05/13 16:37	1
2-Butanone	1.0	U	10	1.0	ug/L			03/05/13 16:37	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/05/13 16:37	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/05/13 16:37	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/05/13 16:37	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/05/13 16:37	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/05/13 16:37	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/05/13 16:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/05/13 16:37	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1

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

Lab Sample ID: MB 680-268305/7
Matrix: Water
Analysis Batch: 268305

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/05/13 16:37	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 16:37	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/05/13 16:37	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/05/13 16:37	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/05/13 16:37	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/05/13 16:37	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/05/13 16:37	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/05/13 16:37	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/05/13 16:37	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/05/13 16:37	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/05/13 16:37	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/05/13 16:37	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/05/13 16:37	1
Styrene	0.25	U	1.0	0.11	ug/L			03/05/13 16:37	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/05/13 16:37	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/05/13 16:37	1
Toluene	0.33	U	1.0	0.33	ug/L			03/05/13 16:37	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/05/13 16:37	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/05/13 16:37	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/05/13 16:37	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/05/13 16:37	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			03/05/13 16:37	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/05/13 16:37	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/05/13 16:37	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/05/13 16:37	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/05/13 16:37	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/05/13 16:37	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/05/13 16:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*70 - 130*		*03/05/13 16:37*	*1*
Dibromofluoromethane	*101*		*70 - 130*		*03/05/13 16:37*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*03/05/13 16:37*	*1*

Lab Sample ID: LCS 680-268305/4
Matrix: Water
Analysis Batch: 268305

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	114		ug/L		114	39 - 162
Benzene	50.0	45.7		ug/L		91	74 - 123
Bromodichloromethane	50.0	43.3		ug/L		87	72 - 129
Bromoform	50.0	51.5		ug/L		103	60 - 134

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

Lab Sample ID: LCS 680-268305/4
Matrix: Water
Analysis Batch: 268305

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	50.0	34.6		ug/L		69	10 - 171
2-Butanone	100	88.4		ug/L		88	55 - 142
Carbon disulfide	50.0	59.7		ug/L		119	63 - 142
Carbon tetrachloride	50.0	44.1		ug/L		88	70 - 131
Chlorobenzene	50.0	50.0		ug/L		100	79 - 120
Chloroethane	50.0	50.3		ug/L		101	47 - 148
Chloroform	50.0	46.7		ug/L		93	76 - 128
Chloromethane	50.0	44.5		ug/L		89	47 - 151
Dibromochloromethane	50.0	43.2		ug/L		86	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	51.7		ug/L		103	57 - 126
1,2-Dibromoethane	50.0	49.3		ug/L		99	75 - 127
1,2-Dichlorobenzene	50.0	51.4		ug/L		103	77 - 124
1,3-Dichlorobenzene	50.0	52.2		ug/L		104	79 - 123
cis-1,2-Dichloroethene	50.0	43.2		ug/L		86	78 - 127
1,4-Dichlorobenzene	50.0	52.0		ug/L		104	76 - 124
Dichlorodifluoromethane	50.0	45.9		ug/L		92	41 - 165
1,1-Dichloroethane	50.0	60.5		ug/L		121	69 - 132
1,2-Dichloroethane	50.0	48.9		ug/L		98	75 - 120
cis-1,3-Dichloropropene	50.0	43.1		ug/L		86	73 - 128
1,1-Dichloroethene	50.0	60.8		ug/L		122	73 - 134
1,2-Dichloropropane	50.0	46.2		ug/L		92	71 - 126
Ethylbenzene	50.0	51.6		ug/L		103	78 - 125
2-Hexanone	100	102		ug/L		102	52 - 149
Isopropylbenzene	50.0	55.4		ug/L		111	72 - 129
Methylene Chloride	50.0	58.2		ug/L		116	79 - 124
4-Methyl-2-pentanone	100	96.8		ug/L		97	51 - 143
Methyl tert-butyl ether	100	113		ug/L		113	76 - 126
Styrene	50.0	53.4		ug/L		107	75 - 129
1,1,2,2-Tetrachloroethane	50.0	50.6		ug/L		101	71 - 127
Tetrachloroethene	50.0	51.2		ug/L		102	77 - 128
Toluene	50.0	48.0		ug/L		96	77 - 125
trans-1,2-Dichloroethene	50.0	56.1		ug/L		112	78 - 130
trans-1,3-Dichloropropene	50.0	42.4		ug/L		85	72 - 127
1,2,4-Trichlorobenzene	50.0	47.6		ug/L		95	67 - 134
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	76 - 126
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	69 - 127
Trichloroethene	50.0	49.4		ug/L		99	80 - 120
Trichlorofluoromethane	50.0	62.3		ug/L		125	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	58.5		ug/L		117	72 - 139
Cyclohexane	50.0	46.9		ug/L		94	68 - 137
Methyl acetate	50.0	46.4		ug/L		93	26 - 182
Vinyl chloride	50.0	52.3		ug/L		105	58 - 141
Methylcyclohexane	50.0	46.0		ug/L		92	72 - 133
Xylenes, Total	150	157		ug/L		105	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*

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

Lab Sample ID: LCS 680-268305/4
Matrix: Water
Analysis Batch: 268305

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	*95*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 680-268305/5
Matrix: Water
Analysis Batch: 268305

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
Acetone			100	111		ug/L		111	39 - 162	3	50
Benzene			50.0	46.0		ug/L		92	74 - 123	1	30
Bromodichloromethane			50.0	43.3		ug/L		87	72 - 129	0	30
Bromoform			50.0	51.2		ug/L		102	60 - 134	1	30
Bromomethane			50.0	26.2		ug/L		52	10 - 171	27	50
2-Butanone			100	87.3		ug/L		87	55 - 142	1	30
Carbon disulfide			50.0	61.5		ug/L		123	63 - 142	3	30
Carbon tetrachloride			50.0	44.8		ug/L		90	70 - 131	2	30
Chlorobenzene			50.0	50.5		ug/L		101	79 - 120	1	30
Chloroethane			50.0	50.8		ug/L		102	47 - 148	1	40
Chloroform			50.0	47.6		ug/L		95	76 - 128	2	30
Chloromethane			50.0	44.8		ug/L		90	47 - 151	1	30
Dibromochloromethane			50.0	43.2		ug/L		86	63 - 134	0	50
1,2-Dibromo-3-Chloropropane			50.0	51.4		ug/L		103	57 - 126	1	50
1,2-Dibromoethane			50.0	49.4		ug/L		99	75 - 127	0	30
1,2-Dichlorobenzene			50.0	51.4		ug/L		103	77 - 124	0	30
1,3-Dichlorobenzene			50.0	52.0		ug/L		104	79 - 123	0	30
cis-1,2-Dichloroethene			50.0	44.3		ug/L		89	78 - 127	3	30
1,4-Dichlorobenzene			50.0	52.5		ug/L		105	76 - 124	1	30
Dichlorodifluoromethane			50.0	48.9		ug/L		98	41 - 165	6	50
1,1-Dichloroethane			50.0	65.1		ug/L		130	69 - 132	7	30
1,2-Dichloroethane			50.0	48.9		ug/L		98	75 - 120	0	30
cis-1,3-Dichloropropene			50.0	43.3		ug/L		87	73 - 128	0	30
1,1-Dichloroethene			50.0	59.9		ug/L		120	73 - 134	1	30
1,2-Dichloropropane			50.0	47.2		ug/L		94	71 - 126	2	30
Ethylbenzene			50.0	52.3		ug/L		105	78 - 125	1	30
2-Hexanone			100	102		ug/L		102	52 - 149	1	30
Isopropylbenzene			50.0	56.3		ug/L		113	72 - 129	1	30
Methylene Chloride			50.0	58.9		ug/L		118	79 - 124	1	30
4-Methyl-2-pentanone			100	96.6		ug/L		97	51 - 143	0	30
Methyl tert-butyl ether			100	115		ug/L		115	76 - 126	1	30
Styrene			50.0	53.8		ug/L		108	75 - 129	1	30
1,1,2,2-Tetrachloroethane			50.0	51.4		ug/L		103	71 - 127	2	30
Tetrachloroethene			50.0	52.2		ug/L		104	77 - 128	2	30
Toluene			50.0	48.6		ug/L		97	77 - 125	1	30
trans-1,2-Dichloroethene			50.0	57.2		ug/L		114	78 - 130	2	30
trans-1,3-Dichloropropene			50.0	42.7		ug/L		85	72 - 127	1	50
1,2,4-Trichlorobenzene			50.0	48.2		ug/L		96	67 - 134	1	30
1,1,1-Trichloroethane			50.0	51.5		ug/L		103	76 - 126	2	30
1,1,2-Trichloroethane			50.0	49.6		ug/L		99	69 - 127	0	30

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

Lab Sample ID: LCSD 680-268305/5
Matrix: Water
Analysis Batch: 268305

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
Trichloroethene	50.0	50.3		ug/L		101	80 - 120	2	30
Trichlorofluoromethane	50.0	64.7		ug/L		129	66 - 144	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.5		ug/L		119	72 - 139	2	30
Cyclohexane	50.0	47.6		ug/L		95	68 - 137	2	30
Methyl acetate	50.0	46.2		ug/L		92	26 - 182	1	30
Vinyl chloride	50.0	51.5		ug/L		103	58 - 141	1	30
Methylcyclohexane	50.0	47.4		ug/L		95	72 - 133	3	30
Xylenes, Total	150	160		ug/L		106	80 - 124	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*
Dibromofluoromethane	*98*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-268182/1-A
Matrix: Water
Analysis Batch: 268342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268182

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.0	U	10	1.2	ug/L		03/05/13 09:13	03/06/13 02:02	1
Iron	50	U	100	50	ug/L		03/05/13 09:13	03/06/13 02:02	1
Magnesium	20	U	500	9.9	ug/L		03/05/13 09:13	03/06/13 02:02	1
Manganese	2.0	U	10	2.0	ug/L		03/05/13 09:13	03/06/13 02:02	1
Titanium	1.0	U	10	1.0	ug/L		03/05/13 09:13	03/06/13 02:02	1

Lab Sample ID: LCS 680-268182/3-A
Matrix: Water
Analysis Batch: 268342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	183		ug/L		91	75 - 125
Iron	20000	18600		ug/L		93	75 - 125
Magnesium	20000	17900		ug/L		90	75 - 125
Manganese	2000	1840		ug/L		92	75 - 125
Titanium	200	182		ug/L		91	75 - 125

Method: 6010C - Metals, Silica (ICP)

Lab Sample ID: MB 680-269405/1-A
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	23	U	230	23	ug/L			03/14/13 10:41	1

Method: 6010C - Metals, Silica (ICP) (Continued)

Lab Sample ID: LCS 680-269405/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 269417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	4680	4720		ug/L		101	75 - 125

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 680-269044/21 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269044

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	2.0	U	5.0	1.4	mg/L			03/13/13 09:10	1

Lab Sample ID: LCS 680-269044/22 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269044

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	41.8		mg/L		105	78 - 114

Lab Sample ID: LCSD 680-269044/23 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269044

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	42.4		mg/L		106	78 - 114	1	18

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-268079/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268079

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.075	U	0.25	0.075	mg/L			03/01/13 13:20	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			03/01/13 13:20	5

Lab Sample ID: LCS 680-268079/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268079

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	4.99	4.73	D	mg/L		95	90 - 110
Nitrite as N	4.99	4.84	D	mg/L		97	90 - 110

Lab Sample ID: LCSD 680-268079/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268079

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	4.99	4.74	D	mg/L		95	90 - 110	0	30

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 680-268079/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268079

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N			4.99	4.86	D	mg/L		97	90 - 110	0	30

Lab Sample ID: 680-87900-1 MS — **Client Sample ID: WP05-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268079

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	0.22	J D	4.99	5.11	D	mg/L		98	90 - 110		
Nitrite as N	0.075	U	4.99	4.92	D	mg/L		99	90 - 110		

Lab Sample ID: 680-87900-1 MSD — **Client Sample ID: WP05-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268079

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.22	J D	4.99	5.09	D	mg/L		98	90 - 110	0	30
Nitrite as N	0.075	U	4.99	4.88	D	mg/L		98	90 - 110	1	30

Lab Sample ID: MB 680-269199/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269199

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.6	U	5.0	2.6	mg/L			03/12/13 21:43	5

Lab Sample ID: LCS 680-269199/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269199

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			50.0	51.6	D	mg/L		103	90 - 110		

Lab Sample ID: LCSD 680-269199/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269199

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			50.0	51.7	D	mg/L		103	90 - 110	0	30

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 680-267965/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267965

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.0030	U	0.010	0.0030	mg/L			03/01/13 10:33	1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCS 680-267965/1
Matrix: Water
Analysis Batch: 267965

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent			0.200	0.198		mg/L		99	85 - 115		

Lab Sample ID: 680-87900-1 MS
Matrix: Water
Analysis Batch: 267965

Client Sample ID: WP05-95.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, hexavalent	0.0030	U	0.200	0.190		mg/L		95	85 - 115		

Lab Sample ID: 680-87900-1 MSD
Matrix: Water
Analysis Batch: 267965

Client Sample ID: WP05-95.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.0030	U	0.200	0.189		mg/L		94	85 - 115	1	20

Method: 9040C - pH

Lab Sample ID: LCS 680-268424/1
Matrix: Water
Analysis Batch: 268424

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.090		SU		101	63 - 158		

Lab Sample ID: 680-87900-1 DU
Matrix: Water
Analysis Batch: 268424

Client Sample ID: WP05-95.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.09	H		8.080		SU				0.1	40

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 680-268062/13
Matrix: Water
Analysis Batch: 268062

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.50	U	1.0	0.50	mg/L			03/02/13 11:54	1

Lab Sample ID: LCS 680-268062/2
Matrix: Water
Analysis Batch: 268062

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			20.0	20.2		mg/L		101	80 - 120		

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: 680-87900-1 DU — **Client Sample ID: WP05-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268062

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	1.7		1.64		mg/L		5	25

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-164897/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 164897

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3	2.0	U	5.0	1.1	mg/L			03/14/13 11:07	1

Lab Sample ID: LCS 280-164897/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 164897

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	199		mg/L		99	90 - 110

Lab Sample ID: LCSD 280-164897/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 164897

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity	200	198		mg/L		99	90 - 110	1	10

Method: SM 2340C - Hardness, Total

Lab Sample ID: MB 680-268955/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268955

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	10	U	10	10	mg/L			03/11/13 16:34	1

Lab Sample ID: LCS 680-268955/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	400	393		mg/L		98	75 - 125

Lab Sample ID: LCSD 680-268955/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268955

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness as calcium carbonate	400	395		mg/L		99	75 - 125	1	30

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 680-267950/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267950

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			03/01/13 16:06	1

Lab Sample ID: LCS 680-267950/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	370	352		mg/L		95	80 - 120

Lab Sample ID: LCSD 680-267950/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267950

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Dissolved Solids	370	321		mg/L		87	80 - 120	9	25

Lab Sample ID: 680-87900-1 DU — **Client Sample ID: WP05-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267950

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	360		342		mg/L		6	25

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 680-268178/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268178

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	5.0	U	5.0	5.0	mg/L			03/05/13 09:07	1

Lab Sample ID: LCS 680-268178/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	86.5		mg/L		87	80 - 120

Lab Sample ID: LCSD 680-268178/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268178

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	100	97.0		mg/L		97	80 - 120	11	25

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Method: SM 3500 FE D - Iron, Ferrous

Lab Sample ID: MB 680-267966/2
Matrix: Water
Analysis Batch: 267966

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	0.025	U	0.10	0.025	mg/L			03/01/13 11:15	1

Lab Sample ID: LCS 680-267966/1
Matrix: Water
Analysis Batch: 267966

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	2.00	2.06		mg/L		103	80 - 120

GC/MS VOA

Analysis Batch: 268165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	8260B	
680-87900-3	WP-11-81.9	Total/NA	Water	8260B	
680-87900-4	WP-11-87.0	Total/NA	Water	8260B	
680-87900-5	WP-12-78.0	Total/NA	Water	8260B	
680-87900-6	WP-12-93.0	Total/NA	Water	8260B	
LCS 680-268165/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-268165/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-268165/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 268305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-2	WP-11-76.9	Total/NA	Water	8260B	
LCS 680-268305/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-268305/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-268305/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 268182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	3010A	
LCS 680-268182/3-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-268182/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 268342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	6010C	268182
LCS 680-268182/3-A	Lab Control Sample	Total/NA	Water	6010C	268182
MB 680-268182/1-A	Method Blank	Total/NA	Water	6010C	268182

Analysis Batch: 269417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Dissolved	Water	6010C	
LCS 680-269405/2-A	Lab Control Sample	Dissolved	Water	6010C	
MB 680-269405/1-A	Method Blank	Dissolved	Water	6010C	

General Chemistry

Analysis Batch: 164897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	SM 2320B	
LCS 280-164897/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-164897/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 280-164897/6	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 267950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	SM 2540C	
680-87900-1 DU	WP05-95.0-GW	Total/NA	Water	SM 2540C	
LCS 680-267950/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 267950 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 680-267950/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
MB 680-267950/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 267965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	7196A	
680-87900-1 MS	WP05-95.0-GW	Total/NA	Water	7196A	
680-87900-1 MSD	WP05-95.0-GW	Total/NA	Water	7196A	
LCS 680-267965/1	Lab Control Sample	Total/NA	Water	7196A	
MB 680-267965/2	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 267966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	SM 3500 FE D	
LCS 680-267966/1	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 680-267966/2	Method Blank	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 268062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	9060	
680-87900-1 DU	WP05-95.0-GW	Total/NA	Water	9060	
LCS 680-268062/2	Lab Control Sample	Total/NA	Water	9060	
MB 680-268062/13	Method Blank	Total/NA	Water	9060	

Analysis Batch: 268079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	300.0	
680-87900-1 MS	WP05-95.0-GW	Total/NA	Water	300.0	
680-87900-1 MSD	WP05-95.0-GW	Total/NA	Water	300.0	
LCS 680-268079/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-268079/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-268079/2	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 268178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	SM 2540D	
LCS 680-268178/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 680-268178/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
MB 680-268178/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 268424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	9040C	
680-87900-1 DU	WP05-95.0-GW	Total/NA	Water	9040C	
LCS 680-268424/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 268885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	SM 3500 FE D	

General Chemistry (Continued)

Analysis Batch: 268886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	7196A	

Analysis Batch: 268955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	SM 2340C	
LCS 680-268955/2	Lab Control Sample	Total/NA	Water	SM 2340C	
LCSD 680-268955/3	Lab Control Sample Dup	Total/NA	Water	SM 2340C	
MB 680-268955/1	Method Blank	Total/NA	Water	SM 2340C	

Analysis Batch: 269044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	1664A	
LCS 680-269044/22	Lab Control Sample	Total/NA	Water	1664A	
LCSD 680-269044/23	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 680-269044/21	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 269144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Dissolved	Water	9060	

Analysis Batch: 269199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-87900-1	WP05-95.0-GW	Total/NA	Water	300.0	
LCS 680-269199/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-269199/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-269199/2	Method Blank	Total/NA	Water	300.0	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP05-95.0-GW

Lab Sample ID: 680-87900-1

Date Collected: 02/28/13 11:22
Matrix: Water
Date Received: 03/01/13 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268165	03/05/13 06:22	WJC	TAL SAV
Total/NA	Prep	3010A			268182	03/05/13 09:13	JKL	TAL SAV
Total/NA	Analysis	6010C		1	268342	03/06/13 03:10	BCB	TAL SAV
Dissolved	Analysis	6010C		1	269417	03/14/13 11:25	BCB	TAL SAV
Total/NA	Analysis	SM 2320B		1	164897	03/14/13 11:38	AK	TAL DEN
Total/NA	Analysis	SM 2540C		1	267950	03/01/13 16:06	LE	TAL SAV
Total/NA	Analysis	7196A		1	267965	03/01/13 10:53	RW	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	267966	03/01/13 11:15	RW	TAL SAV
Total/NA	Analysis	9060		1	268062	03/02/13 13:23	JR	TAL SAV
Total/NA	Analysis	300.0		5	268079	03/01/13 17:26	PAT	TAL SAV
Total/NA	Analysis	SM 2540D		1	268178	03/05/13 09:24	LE	TAL SAV
Total/NA	Analysis	9040C		1	268424	03/06/13 15:24	LE	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	268885	03/11/13 10:48	JR	TAL SAV
Total/NA	Analysis	7196A		1	268886	03/11/13 10:50	JR	TAL SAV
Total/NA	Analysis	SM 2340C		1	268955	03/11/13 16:34	AJO	TAL SAV
Total/NA	Analysis	1664A		1	269044	03/13/13 09:10	JS	TAL SAV
Dissolved	Analysis	9060		1	269144	03/12/13 06:49	JR	TAL SAV
Total/NA	Analysis	300.0		5	269199	03/12/13 22:45	PAT	TAL SAV

Client Sample ID: WP-11-76.9

Lab Sample ID: 680-87900-2

Date Collected: 02/27/13 11:42
Matrix: Water
Date Received: 03/01/13 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268305	03/05/13 18:12	WJC	TAL SAV

Client Sample ID: WP-11-81.9

Lab Sample ID: 680-87900-3

Date Collected: 02/27/13 12:48
Matrix: Water
Date Received: 03/01/13 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268165	03/05/13 04:31	WJC	TAL SAV

Client Sample ID: WP-11-87.0

Lab Sample ID: 680-87900-4

Date Collected: 02/27/13 13:50
Matrix: Water
Date Received: 03/01/13 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268165	03/05/13 04:58	WJC	TAL SAV

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Client Sample ID: WP-12-78.0

Lab Sample ID: 680-87900-5

Date Collected: 02/28/13 09:05
Matrix: Water
Date Received: 03/01/13 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268165	03/05/13 05:26	WJC	TAL SAV

Client Sample ID: WP-12-93.0

Lab Sample ID: 680-87900-6

Date Collected: 02/28/13 11:55
Matrix: Water
Date Received: 03/01/13 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268165	03/05/13 05:54	WJC	TAL SAV

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number 63782

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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Alternate Laboratory Name/Location
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Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NY Site GW	68011020	NY
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Betsy Beauchamp		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Joe Schmidl	802-229-4541	
CLIENT NAME	CLIENT E-MAIL	
Joe Schmidl/Stone Env.	jschmidl@stone-env.com	
CLIENT ADDRESS		
STONE Environ Way, Montpelier, VT		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 3

STANDARD REPORT DELIVERY ○
DATE DUE _____
EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE _____
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260C	6013	9060 TOM	9060 Diss.	25540 Total	25540 Dis	1664A	9040B	SM2340C	SM2320B	300.0	SM3500-Fe-D	7196A	8260B VOC	REMARKS
								HCl UNOS	HCl	HCl	None	None	None	H2SO4	None	UNOS	None	None	None	None	HCl	
								NUMBER OF CONTAINERS SUBMITTED														
2/28/13	1122	WP05-95.0-GW	G	X				X	X	X	X	X	X	X	X	X	X	X	X	X		
2/27/13	1142	WP-11-76.9																			X	
2/27/13	12:48	WP-11-81.9																			X	
2/27/13	13:50	WP-11-87.0																			X	
2/28/13	9:05	WP-12-78.0																			X	
2/28/13	11:53	WP-12-93.0																			X	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	2/28/13	17:00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	3/1/13	0935	YES ○ NO ○		680-87900	4.8°C

TAL8240-680 (1008)

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87900-1
SDG Number: 68087900

Login Number: 87900
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-87900-1
SDG Number: 68087900

Login Number: 87900
List Number: 1
Creator: Kramer, Julieann L

List Source: TestAmerica Denver
List Creation: 03/13/13 11:33 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	False	Received project as a subcontract.
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	03-31-13
A2LA	ISO/IEC 17025		399.01	03-31-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	03-31-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

Laboratory: TestAmerica Denver

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Laboratory: TestAmerica Denver (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-30	04-05-13
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	06-01-13
California	State Program	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-13
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-13
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-13
Louisiana	NELAP	6	30785	06-30-13
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13
Nevada	State Program	9	CO0026	07-30-13
New Hampshire	NELAP	1	205310	04-28-13
New Jersey	NELAP	2	CO004	06-30-13
New Mexico	State Program	6	CO00026	06-30-13
New York	NELAP	2	11964	04-01-13
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-13
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	07-31-13
South Carolina	State Program	4	72002	06-30-13
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-08-00036	02-08-14
Utah	NELAP	8	QUAN5	06-30-13
Virginia	NELAP	3	460232	06-14-13
Washington	State Program	10	C583	08-03-13
West Virginia DEP	State Program	3	354	11-30-13
Wisconsin	State Program	5	999615430	08-31-13
Wyoming (UST)	A2LA	8		10-31-13

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-87900-1
SDG: 68087900

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87900-1	WP05-95.0-GW	Water	02/28/13 11:22	03/01/13 09:35
680-87900-2	WP-11-76.9	Water	02/27/13 11:42	03/01/13 09:35
680-87900-3	WP-11-81.9	Water	02/27/13 12:48	03/01/13 09:35
680-87900-4	WP-11-87.0	Water	02/27/13 13:50	03/01/13 09:35
680-87900-5	WP-12-78.0	Water	02/28/13 09:05	03/01/13 09:35
680-87900-6	WP-12-93.0	Water	02/28/13 11:55	03/01/13 09:35

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-87900-2

SDG Number: 68087900

Job Description: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, VT 05602

Attention: Mr. Joseph Schmidl

Approved for release.
Michele Kersey
Project Manager I
3/29/2013 3:57 PM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com
03/29/2013

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN: C-GA-02; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

TestAmerica Laboratories, Inc.
TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404
Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com

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Method Summary 5
Subcontracted Data 6

SAMPLE SUMMARY

Client: Stone Environmental

Job Number: 680-87900-2
Sdg Number: 68087900

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-87900-1	WP05-95.0-GW	Water	02/28/2013 1122	03/01/2013 0935

METHOD SUMMARY

Client: Stone Environmental

Job Number: 680-87900-2
Sdg Number: 68087900

Description	Lab Location	Method	Preparation Method
Matrix: Water			
General Sub Contract Method	SC0142	Subcontract	

Lab References:

SC0142 = Brooks Rand LLC

Method References:

BROOKS RAND LABS
MEANINGFUL METALS DATA

March 29, 2013

TestAmerica
Attn: Michelle Kersey
5102 LaRoche Ave.
Savannah, GA 31404
mkersey@testamericainc.com

RE: Brooks Rand Project: TST-SV1301 Client Project: 102305-R-CTask 6A

Dear Ms. Kersey,

On March 1, 2013, Brooks Rand Labs (BRL) received one (1) water sample. The sample was logged-in for analyses manganese speciation contractually defined as total recoverable manganese (Mn), Mn(II) and Mn(IV) determined by difference (see speciation note below). The samples were received, prepared, analyzed, and stored according to BRL SOP(s) and EPA methodology.

Manganese Speciation Note: This is an operationally defined method where the manganese (Mn) species are determined by the physical separation using filtration through 0.45-µm filters. Reduced manganese (Mn^{2+}) is soluble and oxidized manganese (Mn^{4+}) is not. Therefore, determinations on a sample that is filtered prior to any exposure to oxygen yields concentrations of reduced species, and determinations on an unfiltered sample yield a measurement of oxidized (or reduced and oxidized) species. For this Mn speciation method, samples are field-filtered using ventable in-line filters with no exposure to the air prior to filtration. Due to the chemical properties described above, the filtered sample is defined as Mn(II). An additional unfiltered sample is collected and analyzed for total recoverable Mn. Mn(IV) is calculated by the difference of total recoverable Mn minus Mn(II).

The results may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* for sample-specific MDL, MRL, and other details.

All results have been reported to the concentration of the method detection limit (MDL), referred to as the detection limit (DL) in the DoD QSM. The Limit of Quantitation (LOQ) is defined in this report as the method reporting limit (MRL).

The digestion method used for the samples took place in the original sample container. Therefore, the matrix spikes were prepared at the instrument and would be the same as post-digestion spikes.

The DoD acceptance criteria for the dilution tests state that the diluted result must be ±10% of the native result. Therefore, when the native sample produces a result of 1 (unit independent), the acceptable range for the dilution duplicate is 0.9 - 1.1 units. However, in the upper limit the relative percent difference (RPD) between the two values is 9.5% whereas in the lower limit the RPD is 10.5%. BRL has set the RPD limit to 10% in the report as this is the closest approximation the LIMS is capable of representing.

Per the client's specific request to adhere to the EPA Draft Method 1638 requirement of non-method blank corrected data, the results were not method blank corrected as described in the calculations section of the relevant BRL SOP(s). This deviates from BRL's standard protocol for trace level data quality and BRL believes that all low-level metals analyses should be method blank corrected and that not doing so may lead to less accurate results. The results from the method blanks that were analyzed are listed in the *Method Blanks & Reporting Limits* section of this report.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details, see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Tiffany Stilwater
Project Manager
tiffany@brooksrand.com

Lydia Greaves
Project Manager
lydia@brooksrand.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations /certifications, please visit our website at <http://www.brooksrand.com/default.asp?contentID=586>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	**MS**	matrix spike
BRL	Brooks Rand Labs	**MSD**	matrix spike duplicate
BS	laboratory fortified blank	**ND**	non-detect
CAL	calibration standard	**NR**	non-reportable
CCV	continuing calibration verification	**PS**	post preparation spike
COC	chain of custody record	**REC**	percent recovery
CRM	certified reference material	**RPD**	relative percent difference
D	dissolved fraction	**RSD**	relative standard deviation
DUP	duplicate	**SCV**	secondary calibration verification
ICV	initial calibration verification	**SOP**	standard operating procedure
MDL	method detection limit	**SRM**	standard reference material
MRL	method reporting limit	**T**	total recoverable fraction

Definition of Data Qualifiers

(Effective 9/23/09)

B Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H Holding time and/or preservation requirements not met. Result is estimated.
J Estimated value. A full explanation is presented in the narrative.
J-M Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N Spike recovery was not within acceptance criteria. Result is estimated.
R Rejected, unusable value. A full explanation is presented in the narrative.
U Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BRL.

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
WP05-95.0-GW	1309028-01	Ground Water	Sample	02/28/2013	03/01/2013

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Mn	Water	EPA 1638	03/20/2013	03/21/2013	B130443	1300197
Mn(II)	Water	EPA 1638	03/20/2013	03/21/2013	B130442	1300197

Sample Results

Sample	Analyte	Basis	Result	Qualifier	MDL	LOD	MRL	Unit	Batch	Sequence
WP05-95.0-GW										
1309028-01	Mn	T	1020		1.05	3.16	3.16	µg/L	B130443	1300197
1309028-01	Mn(II)	D	40.3		0.021	0.063	0.063	µg/L	B130442	1300197
1309028-01	Mn(IV)	N/A	977		1.07	3.18	3.22	µg/L	[CALC]	N/A

Accuracy & Precision Summary

Batch: B130442
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130442-BS2	**Laboratory Fortified Blank (1311005)**						
	Mn(II)		1.053	1.076	µg/L	102% 80-120	
B130442-SRM1	**Certified Reference Material (1202032, NIST 1643e)**						
	Mn(II)		38.97	39.78	µg/L	102% 75-125	
B130442-DUP1	**Duplicate (1309028-01)**						
	Mn(II)	40.26		40.42	µg/L		0.4% 20
B130442-DUP2	**Duplicate (1309028-01)**						
	Mn(II)	40.26		42.03	µg/L		4% 10
B130442-MS1	**Matrix Spike (1309028-01)**						
	Mn(II)	40.26	52.63	94.40	µg/L	103% 80-120	
B130442-MSD1	**Matrix Spike Duplicate (1309028-01)**						
	Mn(II)	40.26	52.63	90.48	µg/L	95% 80-120	4% 20

Batch: B130443
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130443-BS2	**Laboratory Fortified Blank (1311005)**						
	Mn		1.053	1.08	µg/L	102% 80-120	
B130443-SRM1	**Certified Reference Material (1202032, NIST 1643e)**						
	Mn		38.97	39.78	µg/L	102% 75-125	
B130443-DUP3	**Duplicate (1309028-01)**						
	Mn	1017		1048	µg/L		3% 20

Accuracy & Precision Summary

Batch: B130443
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130443-DUP4	**Duplicate (1309028-01)**						
	Mn	1017		1062	µg/L		4% 10
B130443-MS2	**Matrix Spike (1309028-01)**						
	Mn	1017	21050	22000	µg/L	100% 80-120	
B130443-MSD2	**Matrix Spike Duplicate (1309028-01)**						
	Mn	1017	21050	22970	µg/L	104% 80-120	4% 20

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Method Blanks & Reporting Limits

Batch: B130442
Matrix: Water
Method: EPA 1638
Analyte: Mn(II)

Sample	Result	Units
B130442-BLK5	0.0002	µg/L
B130442-BLK6	0.003	µg/L
B130442-BLK7	-0.002	µg/L
B130442-BLK8	-0.0009	µg/L

DoD QSEM Limit: 0.032

MDL: 0.021
MRL: 0.063

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Method Blanks & Reporting Limits

Batch: B130443
Matrix: Water
Method: EPA 1638
Analyte: Mn

Sample	Result	Units
B130443-BLK5	0.0002	µg/L
B130443-BLK6	0.003	µg/L
B130443-BLK7	-0.002	µg/L
B130443-BLK8	-0.0009	µg/L

DoD QSEM Limit: 0.03

MDL: 0.01
MRL: 0.05

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Sample Containers

Lab ID: 1309028-01
Sample: WP05-95.0-GW

Report Matrix: Ground Water
Sample Type: Sample

Collected: 02/28/2013
Received: 03/01/2013

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W-D	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler
B	Bottle HDPE ICP-W	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler

Shipping Containers

Cooler

Received: March 1, 2013 9:30
Tracking No: 8026 3939 6716 via
Coolant Type: Ice
Temperature: 2.2 °C

Description: Default Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? No
Custody seals intact? No
COC present? Yes

BROOKS RAND LABS
MEANINGFUL METALS DATA
3958 6th Avenue NW
Seattle, WA 98107
Phone: 206-632-6206
Fax: 206-632-6017
samples@brooksrand.com
www.brooksrand.com

Chain of Custody Record

BRL Report 1309028

White: LAB COPY
Yellow: CUSTOMER COPY

Client: STONE ENV.	Address: 535 Stone Cutters Way Montpelier, VT 05602	COC receipt confirmation? (Y) / N
Contact: Joe Schmidle		If so, by: (email) / fax (circle one)
Client project ID: 102305-RC Task 6A		Email: JSchmidle@stone-env.com
PO #:	Phone #: 802 229 4541	Fax #:

Requested TAT in business days:
- ☐ 20 (standard)
- ☐ 15
- ☐ 10
- ☐ 5
- ☐ Other ____

Surcharges apply for expedited turn around times.

	Sample ID	Collection: Date	Collection: Time	Miscellaneous: Sampler (initials)	Miscellaneous: Matrix type	Miscellaneous: # of containers	Miscellaneous: Field filtered? (Y/N)	Field Preservation: Unpreserved / ice only	Field Preservation: HCl / HNO3 (circle one)	Field Preservation: Other (specify)	Analyses required: Total Hg, EPA 1631	Analyses required: Methyl Hg, EPA 1630	Analyses required: ICP-MS Metals (specify)	Analyses required: As / Se species (specify)	Analyses required: % Solids	Analyses required: Filtration	Analyses required: Other (specify) 1638 mod Ltd	Analyses required: Other (specify)	Comments
1	WP05-95.0-GW	2/28/13	1122	DL	GW	1	Y		X								X		
2	WP05-95.0-GW	2/28/13	1122	DL	GW	1	N		X								X		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date: 2/28/13	Time: 17:00	Relinquished by:	Date:	Time:
Received by:	Date:	Time:	Received at BRL by: Kyle Arcuri	Date: 3/1/13	Time: 0930
Shipping carrier:	# of coolers:		BRL work order ID:	BRL project ID:	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-88026-1
TestAmerica Sample Delivery Group: 68088026
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Michele R Kersey

Authorized for release by:
3/20/2013 4:06:41 PM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com

LINKS

Review your project results through TotalAccess

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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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Job ID: 680-88026-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-88026-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The sample was received on 3/6/2013 9:17 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample WP03-95.0-GW (680-88026-1) was analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/14/2013.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

METALS (ICP)
Sample WP03-95.0-GW (680-88026-1) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 03/12/2013 and analyzed on 03/16/2013.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 680-269064 were outside control limits for arsenic. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Due to the high concentration of calcium, the matrix spike / matrix spike duplicate (MS/MSD) for batch 680-269064 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

SILICA BY ICP
Sample WP03-95.0-GW (680-88026-1) was analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were analyzed on 03/14/2013.

HEXAVALENT CHROMIUM
Sample WP03-95.0-GW (680-88026-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 03/06/2013.

The following sample(s) was received outside of holding time: WP03-95.0-GW (680-88026-1).

Job ID: 680-88026-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

To verify the absence of an interference, EPA Method 7196A requires the sample to be diluted until the matrix spike (MS) recovery is within 85-115%. For this reason, the following sample(s) was diluted: (680-88006-1 MS), (680-88006-1 MSD), 13-0143-1 HICKORY HILL EFFLUENT (680-88006-1). Elevated reporting limits (RLs) are provided.

OIL AND GREASE AND TPH
Sample WP03-95.0-GW (680-88026-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 03/15/2013.

ALKALINITY
Sample WP03-95.0-GW (680-88026-1) was analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 03/15/2013.

HARDNESS
Sample WP03-95.0-GW (680-88026-1) was analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 03/11/2013.

TOTAL DISSOLVED SOLIDS
Sample WP03-95.0-GW (680-88026-1) was analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 03/08/2013.

TOTAL SUSPENDED SOLIDS
Sample WP03-95.0-GW (680-88026-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/07/2013.

ANIONS BY IC
Sample WP03-95.0-GW (680-88026-1) was analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 03/16/2013.

Sample WP03-95.0-GW (680-88026-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Due to the high concentration of nitrate and non-target analytes, the sample duplicate for batch 268493 could not be evaluated for precision. The matrix spike (MS) was performed in duplicate to provide precision data for this batch.

ANIONS (NITRATE/NITRITE)
Sample WP03-95.0-GW (680-88026-1) was analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 03/06/2013.

Sample WP03-95.0-GW (680-88026-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Sample WP03-95.0-GW (680-88026-1) was analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 03/06/2013.

Sample WP03-95.0-GW (680-88026-1) was analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 03/11/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM
Sample WP03-95.0-GW (680-88026-1) was analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 03/11/2013.

PH

Job ID: 680-88026-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Sample WP03-95.0-GW (680-88026-1) was analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 03/07/2013.

TOTAL ORGANIC CARBON

Sample WP03-95.0-GW (680-88026-1) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/17/2013.

DISSOLVED ORGANIC CARBON

Sample WP03-95.0-GW (680-88026-1) was analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/12/2013.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-88026-1	WP03-95.0-GW	Water	03/05/13 10:08	03/06/13 09:17

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
6010C	Metals, Silica (ICP)	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
1664A	HEM and SGT-HEM	1664A	TAL SAV
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
7196A	Chromium, Hexavalent	SW846	TAL SAV
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL SAV
9040C	pH	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
9060	Organic Carbon, Total (TOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL DEN
SM 2340C	Hardness, Total	SM	TAL SAV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL SAV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL SAV
SM 3500 FE D	Iron, Ferrous	SM	TAL SAV
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL SAV

Protocol References:

1664A = EPA-821-98-002

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes
D	The reported value is from a dilution.

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Client Sample ID: WP03-95.0-GW
Date Collected: 03/05/13 10:08
Date Received: 03/06/13 09:17

Lab Sample ID: 680-88026-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/14/13 19:26	1
Benzene	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/14/13 19:26	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/14/13 19:26	1
2-Butanone	1.0	U	10	1.0	ug/L			03/14/13 19:26	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/14/13 19:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/14/13 19:26	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/14/13 19:26	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/14/13 19:26	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/14/13 19:26	1
cis-1,2-Dichloroethene	**0.17**	**J**	1.0	0.15	ug/L			03/14/13 19:26	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/14/13 19:26	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/14/13 19:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/14/13 19:26	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/14/13 19:26	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/14/13 19:26	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/14/13 19:26	1
1,1-Dichloroethene	**2.0**		1.0	0.11	ug/L			03/14/13 19:26	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/14/13 19:26	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/14/13 19:26	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/14/13 19:26	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/14/13 19:26	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/14/13 19:26	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/14/13 19:26	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/14/13 19:26	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/14/13 19:26	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/14/13 19:26	1
Styrene	0.25	U	1.0	0.11	ug/L			03/14/13 19:26	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/14/13 19:26	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/14/13 19:26	1
Toluene	**3.4**		1.0	0.33	ug/L			03/14/13 19:26	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/14/13 19:26	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/14/13 19:26	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/14/13 19:26	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/14/13 19:26	1
Trichloroethene	**29**		1.0	0.13	ug/L			03/14/13 19:26	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/14/13 19:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/14/13 19:26	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/14/13 19:26	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/14/13 19:26	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Client Sample ID: WP03-95.0-GW
Date Collected: 03/05/13 10:08
Date Received: 03/06/13 09:17

Lab Sample ID: 680-88026-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*70 - 130*		*03/14/13 19:26*	*1*
Dibromofluoromethane	*107*		*70 - 130*		*03/14/13 19:26*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*03/14/13 19:26*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**9.3**	**J**	10	1.2	ug/L		03/12/13 12:57	03/16/13 00:57	1
Iron	**2700**		100	50	ug/L		03/12/13 12:57	03/16/13 00:57	1
Magnesium	**18000**		500	9.9	ug/L		03/12/13 12:57	03/16/13 00:57	1
Manganese	**110**		10	2.0	ug/L		03/12/13 12:57	03/16/13 00:57	1
Titanium	**11**		10	1.0	ug/L		03/12/13 12:57	03/16/13 00:57	1

Method: 6010C - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**29000**		230	23	ug/L			03/14/13 11:00	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	1.8	U	4.6	1.3	mg/L			03/15/13 09:20	1
Nitrate as N	0.075	U	0.25	0.075	mg/L			03/06/13 17:45	5
Sulfate	**26**	**D**	5.0	2.6	mg/L			03/16/13 17:42	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			03/06/13 17:45	5
Chromium, hexavalent	0.0030	U H	0.010	0.0030	mg/L			03/06/13 15:13	1
Cr (III)	0.010	U	0.010	0.010	mg/L			03/11/13 10:50	1
pH	**7.84**	**H**			SU			03/07/13 16:38	1
Total Organic Carbon	**16**		1.0	0.50	mg/L			03/17/13 06:19	1
Carbonate Alkalinity as CaCO3	2.0	U	5.0	1.1	mg/L			03/15/13 17:28	1
Hardness as calcium carbonate	**240**		10	10	mg/L			03/11/13 16:34	1
Total Dissolved Solids	**440**		10	10	mg/L			03/08/13 12:38	1
Total Suspended Solids	**42**		20	20	mg/L			03/07/13 15:31	1
Ferric Iron	**2.7**	**HF**	0.10	0.10	mg/L			03/11/13 10:48	1
Ferrous Iron	0.025	U HF	0.10	0.025	mg/L			03/06/13 15:33	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**15**		1.0	1.0	mg/L			03/12/13 10:14	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

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

Lab Sample ID: MB 680-269337/7
Matrix: Water
Analysis Batch: 269337

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/14/13 12:02	1
Benzene	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/14/13 12:02	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/14/13 12:02	1
2-Butanone	1.0	U	10	1.0	ug/L			03/14/13 12:02	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/14/13 12:02	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/14/13 12:02	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/14/13 12:02	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/14/13 12:02	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/14/13 12:02	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/14/13 12:02	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/14/13 12:02	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/14/13 12:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/14/13 12:02	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/14/13 12:02	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/14/13 12:02	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/14/13 12:02	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/14/13 12:02	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/14/13 12:02	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/14/13 12:02	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/14/13 12:02	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/14/13 12:02	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/14/13 12:02	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/14/13 12:02	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/14/13 12:02	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/14/13 12:02	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/14/13 12:02	1
Styrene	0.25	U	1.0	0.11	ug/L			03/14/13 12:02	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/14/13 12:02	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/14/13 12:02	1
Toluene	0.33	U	1.0	0.33	ug/L			03/14/13 12:02	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/14/13 12:02	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/14/13 12:02	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/14/13 12:02	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/14/13 12:02	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			03/14/13 12:02	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/14/13 12:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/14/13 12:02	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/14/13 12:02	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/14/13 12:02	1

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

Lab Sample ID: MB 680-269337/7
Matrix: Water
Analysis Batch: 269337

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		70 - 130		03/14/13 12:02	1
Dibromofluoromethane	109		70 - 130		03/14/13 12:02	1
Toluene-d8 (Surr)	101		70 - 130		03/14/13 12:02	1

Lab Sample ID: LCS 680-269337/4
Matrix: Water
Analysis Batch: 269337

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	91.8		ug/L		92	39 - 162
Benzene	50.0	50.5		ug/L		101	74 - 123
Bromodichloromethane	50.0	47.8		ug/L		96	72 - 129
Bromoform	50.0	49.9		ug/L		100	60 - 134
Bromomethane	50.0	41.2		ug/L		82	10 - 171
2-Butanone	100	102		ug/L		102	55 - 142
Carbon disulfide	50.0	50.9		ug/L		102	63 - 142
Carbon tetrachloride	50.0	47.6		ug/L		95	70 - 131
Chlorobenzene	50.0	49.3		ug/L		99	79 - 120
Chloroethane	50.0	50.8		ug/L		102	47 - 148
Chloroform	50.0	50.1		ug/L		100	76 - 128
Chloromethane	50.0	50.9		ug/L		102	47 - 151
cis-1,2-Dichloroethene	50.0	50.8		ug/L		102	78 - 127
cis-1,3-Dichloropropene	50.0	50.7		ug/L		101	73 - 128
Cyclohexane	50.0	51.8		ug/L		104	68 - 137
Dibromochloromethane	50.0	49.4		ug/L		99	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	52.0		ug/L		104	57 - 126
1,2-Dibromoethane	50.0	52.4		ug/L		105	75 - 127
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	77 - 124
1,3-Dichlorobenzene	50.0	50.5		ug/L		101	79 - 123
1,4-Dichlorobenzene	50.0	50.0		ug/L		100	76 - 124
Dichlorodifluoromethane	50.0	47.5		ug/L		95	41 - 165
1,1-Dichloroethane	50.0	49.9		ug/L		100	69 - 132
1,2-Dichloroethane	50.0	48.6		ug/L		97	75 - 120
1,1-Dichloroethene	50.0	50.1		ug/L		100	73 - 134
1,2-Dichloropropane	50.0	51.6		ug/L		103	71 - 126
Ethylbenzene	50.0	51.3		ug/L		103	78 - 125
2-Hexanone	100	95.8		ug/L		96	52 - 149
Isopropylbenzene	50.0	52.1		ug/L		104	72 - 129
Methyl acetate	50.0	49.7		ug/L		99	26 - 182
Methylcyclohexane	50.0	48.9		ug/L		98	72 - 133
Methylene Chloride	50.0	50.2		ug/L		100	79 - 124
4-Methyl-2-pentanone	100	91.3		ug/L		91	51 - 143
Methyl tert-butyl ether	100	108		ug/L		108	76 - 126
Styrene	50.0	52.8		ug/L		106	75 - 129
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	71 - 127
Tetrachloroethene	50.0	50.5		ug/L		101	77 - 128
Toluene	50.0	51.6		ug/L		103	77 - 125
trans-1,2-Dichloroethene	50.0	50.6		ug/L		101	78 - 130

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

Lab Sample ID: LCS 680-269337/4
Matrix: Water
Analysis Batch: 269337

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	51.1		ug/L		102	72 - 127
1,2,4-Trichlorobenzene	50.0	52.0		ug/L		104	67 - 134
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	76 - 126
1,1,2-Trichloroethane	50.0	51.2		ug/L		102	69 - 127
Trichloroethene	50.0	50.7		ug/L		101	80 - 120
Trichlorofluoromethane	50.0	49.0		ug/L		98	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.7		ug/L		103	72 - 139
Vinyl chloride	50.0	52.4		ug/L		105	58 - 141
Xylenes, Total	150	155		ug/L		103	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*70 - 130*
Dibromofluoromethane	*100*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 680-269337/5
Matrix: Water
Analysis Batch: 269337

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
Acetone	100	88.3		ug/L		88	39 - 162	4	50
Benzene	50.0	51.1		ug/L		102	74 - 123	1	30
Bromodichloromethane	50.0	47.0		ug/L		94	72 - 129	2	30
Bromoform	50.0	48.7		ug/L		97	60 - 134	3	30
Bromomethane	50.0	47.9		ug/L		96	10 - 171	15	50
2-Butanone	100	101		ug/L		101	55 - 142	1	30
Carbon disulfide	50.0	54.2		ug/L		108	63 - 142	6	30
Carbon tetrachloride	50.0	48.7		ug/L		97	70 - 131	2	30
Chlorobenzene	50.0	50.8		ug/L		102	79 - 120	3	30
Chloroethane	50.0	49.9		ug/L		100	47 - 148	2	40
Chloroform	50.0	51.6		ug/L		103	76 - 128	3	30
Chloromethane	50.0	54.5		ug/L		109	47 - 151	7	30
cis-1,2-Dichloroethene	50.0	53.2		ug/L		106	78 - 127	5	30
cis-1,3-Dichloropropene	50.0	49.2		ug/L		98	73 - 128	3	30
Cyclohexane	50.0	53.1		ug/L		106	68 - 137	2	30
Dibromochloromethane	50.0	49.3		ug/L		99	63 - 134	0	50
1,2-Dibromo-3-Chloropropane	50.0	49.1		ug/L		98	57 - 126	6	50
1,2-Dibromoethane	50.0	50.9		ug/L		102	75 - 127	3	30
1,2-Dichlorobenzene	50.0	50.6		ug/L		101	77 - 124	1	30
1,3-Dichlorobenzene	50.0	51.2		ug/L		102	79 - 123	1	30
1,4-Dichlorobenzene	50.0	49.9		ug/L		100	76 - 124	0	30
Dichlorodifluoromethane	50.0	51.1		ug/L		102	41 - 165	7	50
1,1-Dichloroethane	50.0	54.0		ug/L		108	69 - 132	8	30
1,2-Dichloroethane	50.0	47.4		ug/L		95	75 - 120	3	30
1,1-Dichloroethene	50.0	53.9		ug/L		108	73 - 134	7	30
1,2-Dichloropropane	50.0	52.4		ug/L		105	71 - 126	2	30
Ethylbenzene	50.0	53.0		ug/L		106	78 - 125	3	30

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

Lab Sample ID: LCSD 680-269337/5
Matrix: Water
Analysis Batch: 269337

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
2-Hexanone			100	95.4		ug/L		95	52 - 149	0	30
Isopropylbenzene			50.0	54.3		ug/L		109	72 - 129	4	30
Methyl acetate			50.0	49.3		ug/L		99	26 - 182	1	30
Methylcyclohexane			50.0	50.2		ug/L		100	72 - 133	3	30
Methylene Chloride			50.0	52.1		ug/L		104	79 - 124	4	30
4-Methyl-2-pentanone			100	87.8		ug/L		88	51 - 143	4	30
Methyl tert-butyl ether			100	108		ug/L		108	76 - 126	0	30
Styrene			50.0	53.6		ug/L		107	75 - 129	2	30
1,1,2,2-Tetrachloroethane			50.0	50.4		ug/L		101	71 - 127	3	30
Tetrachloroethene			50.0	52.6		ug/L		105	77 - 128	4	30
Toluene			50.0	51.5		ug/L		103	77 - 125	0	30
trans-1,2-Dichloroethene			50.0	52.2		ug/L		104	78 - 130	3	30
trans-1,3-Dichloropropene			50.0	49.2		ug/L		98	72 - 127	4	50
1,2,4-Trichlorobenzene			50.0	51.8		ug/L		104	67 - 134	1	30
1,1,1-Trichloroethane			50.0	51.0		ug/L		102	76 - 126	1	30
1,1,2-Trichloroethane			50.0	49.4		ug/L		99	69 - 127	3	30
Trichloroethene			50.0	51.7		ug/L		103	80 - 120	2	30
Trichlorofluoromethane			50.0	53.3		ug/L		107	66 - 144	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	55.2		ug/L		110	72 - 139	6	30
Vinyl chloride			50.0	52.5		ug/L		105	58 - 141	0	30
Xylenes, Total			150	158		ug/L		105	80 - 124	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*106*		*70 - 130*
Dibromofluoromethane	*104*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-269064/1-A
Matrix: Water
Analysis Batch: 269621

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269064

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.0	U	10	1.2	ug/L		03/12/13 12:57	03/16/13 00:25	1
Iron	50	U	100	50	ug/L		03/12/13 12:57	03/16/13 00:25	1
Magnesium	20	U	500	9.9	ug/L		03/12/13 12:57	03/16/13 00:25	1
Manganese	2.0	U	10	2.0	ug/L		03/12/13 12:57	03/16/13 00:25	1
Titanium	1.0	U	10	1.0	ug/L		03/12/13 12:57	03/16/13 00:25	1

Lab Sample ID: LCS 680-269064/3-A
Matrix: Water
Analysis Batch: 269621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269064

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium			200	210		ug/L		105	75 - 125
Iron			20000	21400		ug/L		107	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 680-269064/3-A
Matrix: Water
Analysis Batch: 269621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	20000	20700		ug/L		103	75 - 125
Manganese	2000	2130		ug/L		107	75 - 125
Titanium	200	211		ug/L		105	75 - 125

Lab Sample ID: 680-88026-1 MS
Matrix: Water
Analysis Batch: 269621

Client Sample ID: WP03-95.0-GW
Prep Type: Total/NA
Prep Batch: 269064

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	9.3	J	100	109		ug/L		100	75 - 125
Iron	2700		5000	7310		ug/L		92	75 - 125
Magnesium	18000		5000	22200		ug/L		82	75 - 125
Manganese	110		500	621		ug/L		102	75 - 125
Titanium	11		100	115		ug/L		104	75 - 125

Lab Sample ID: 680-88026-1 MSD
Matrix: Water
Analysis Batch: 269621

Client Sample ID: WP03-95.0-GW
Prep Type: Total/NA
Prep Batch: 269064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	9.3	J	100	115		ug/L		106	75 - 125	5	20
Iron	2700		5000	7620		ug/L		98	75 - 125	4	20
Magnesium	18000		5000	23200		ug/L		103	75 - 125	5	20
Manganese	110		500	653		ug/L		109	75 - 125	5	20
Titanium	11		100	105		ug/L		94	75 - 125	9	20

Method: 6010C - Metals, Silica (ICP)

Lab Sample ID: MB 680-269405/1-A
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	23	U	230	23	ug/L			03/14/13 10:41	1

Lab Sample ID: LCS 680-269405/2-A
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	4680	4720		ug/L		101	75 - 125

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 680-269465/21
Matrix: Water
Analysis Batch: 269465

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	2.0	U	5.0	1.4	mg/L			03/15/13 09:20	1

Lab Sample ID: LCS 680-269465/22
Matrix: Water
Analysis Batch: 269465

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
HEM (Oil & Grease)			40.0	43.2		mg/L		108	78 - 114		

Lab Sample ID: LCSD 680-269465/23
Matrix: Water
Analysis Batch: 269465

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
HEM (Oil & Grease)			40.0	37.8		mg/L		94	78 - 114	13	18

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-268493/10
Matrix: Water
Analysis Batch: 268493

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.075	U	0.25	0.075	mg/L			03/06/13 14:40	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			03/06/13 14:40	5

Lab Sample ID: LCS 680-268493/11
Matrix: Water
Analysis Batch: 268493

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			4.99	4.76	D	mg/L		95	90 - 110		
Nitrite as N			4.99	4.77	D	mg/L		96	90 - 110		

Lab Sample ID: LCSD 680-268493/12
Matrix: Water
Analysis Batch: 268493

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
Nitrate as N			4.99	4.75	D	mg/L		95	90 - 110	0	30
Nitrite as N			4.99	4.79	D	mg/L		96	90 - 110	0	30

Lab Sample ID: 680-88026-1 MS
Matrix: Water
Analysis Batch: 268493

Client Sample ID: WP03-95.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N	0.075	U	4.99	4.62	D	mg/L		92	90 - 110		
Nitrite as N	0.075	U	4.99	4.71	D	mg/L		94	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 680-88026-1 MSD — **Client Sample ID: WP03-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.075	U	4.99	4.63	D	mg/L		93	90 - 110	0	30
Nitrite as N	0.075	U	4.99	4.67	D	mg/L		94	90 - 110	1	30

Lab Sample ID: MB 680-269706/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269706

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.6	U	5.0	2.6	mg/L			03/16/13 15:25	5

Lab Sample ID: LCS 680-269706/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	50.0	52.8	D	mg/L		106	90 - 110

Lab Sample ID: LCSD 680-269706/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269706

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	50.0	52.8	D	mg/L		106	90 - 110	0	30

Lab Sample ID: 680-88026-1 MS — **Client Sample ID: WP03-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269706

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	26	D	50.0	76.8	D	mg/L		101	90 - 110

Lab Sample ID: 680-88026-1 MSD — **Client Sample ID: WP03-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269706

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	26	D	50.0	76.5	D	mg/L		101	90 - 110	0	30

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 680-268436/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268436

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.0030	U	0.010	0.0030	mg/L			03/06/13 10:30	1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCS 680-268436/1
Matrix: Water
Analysis Batch: 268436

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.200	0.192		mg/L		96	85 - 115

Method: 9040C - pH

Lab Sample ID: LCS 680-268612/1
Matrix: Water
Analysis Batch: 268612

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.010		SU		100	63 - 158

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 680-269677/2
Matrix: Water
Analysis Batch: 269677

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.50	U	1.0	0.50	mg/L			03/17/13 05:46	1

Lab Sample ID: LCS 680-269677/3
Matrix: Water
Analysis Batch: 269677

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	20.0	20.7		mg/L		103	80 - 120

Lab Sample ID: 680-88026-1 MS
Matrix: Water
Analysis Batch: 269677

Client Sample ID: WP03-95.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	16		20.0	35.8		mg/L		100	80 - 120

Lab Sample ID: 680-88026-1 MSD
Matrix: Water
Analysis Batch: 269677

Client Sample ID: WP03-95.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon	16		20.0	35.3		mg/L		98	80 - 120	1	25

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-165257/6
Matrix: Water
Analysis Batch: 165257

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3	2.0	U	5.0	1.1	mg/L			03/15/13 17:23	1

Method: SM 2340C - Hardness, Total

Lab Sample ID: MB 680-268955/1
Matrix: Water
Analysis Batch: 268955

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	10	U	10	10	mg/L			03/11/13 16:34	1

Lab Sample ID: LCS 680-268955/2
Matrix: Water
Analysis Batch: 268955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	400	393		mg/L		98	75 - 125

Lab Sample ID: LCSD 680-268955/3
Matrix: Water
Analysis Batch: 268955

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
Hardness as calcium carbonate	400	395		mg/L		99	75 - 125	1	30

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 680-268706/1
Matrix: Water
Analysis Batch: 268706

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			03/08/13 12:38	1

Lab Sample ID: LCS 680-268706/2
Matrix: Water
Analysis Batch: 268706

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	370	361		mg/L		98	80 - 120

Lab Sample ID: LCSD 680-268706/3
Matrix: Water
Analysis Batch: 268706

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
Total Dissolved Solids	370	355		mg/L		96	80 - 120	2	25

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 680-268584/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268584

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	5.0	U	5.0	5.0	mg/L			03/07/13 15:21	1

Lab Sample ID: LCS 680-268584/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	94.5		mg/L		95	80 - 120

Lab Sample ID: LCSD 680-268584/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268584

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	100	96.0		mg/L		96	80 - 120	2	25

Method: SM 3500 FE D - Iron, Ferrous

Lab Sample ID: MB 680-268438/7 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268438

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	0.025	U	0.10	0.025	mg/L			03/06/13 15:36	1

Lab Sample ID: LCS 680-268438/6 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	2.00	2.03		mg/L		101	80 - 120

Lab Sample ID: 680-88026-1 MS — **Client Sample ID: WP03-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268438

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.025	U HF	2.00	2.11		mg/L		105	80 - 120

Lab Sample ID: 680-88026-1 MSD — **Client Sample ID: WP03-95.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268438

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	0.025	U HF	2.00	2.03		mg/L		101	80 - 120	4	20

GC/MS VOA

Analysis Batch: 269337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	8260B	
LCS 680-269337/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-269337/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-269337/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 269064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	3010A	
680-88026-1 MS	WP03-95.0-GW	Total/NA	Water	3010A	
680-88026-1 MSD	WP03-95.0-GW	Total/NA	Water	3010A	
LCS 680-269064/3-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-269064/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 269417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Dissolved	Water	6010C	
LCS 680-269405/2-A	Lab Control Sample	Dissolved	Water	6010C	
MB 680-269405/1-A	Method Blank	Dissolved	Water	6010C	

Analysis Batch: 269621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	6010C	269064
680-88026-1 MS	WP03-95.0-GW	Total/NA	Water	6010C	269064
680-88026-1 MSD	WP03-95.0-GW	Total/NA	Water	6010C	269064
LCS 680-269064/3-A	Lab Control Sample	Total/NA	Water	6010C	269064
MB 680-269064/1-A	Method Blank	Total/NA	Water	6010C	269064

General Chemistry

Analysis Batch: 165257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	SM 2320B	
MB 280-165257/6	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 268436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	7196A	
LCS 680-268436/1	Lab Control Sample	Total/NA	Water	7196A	
MB 680-268436/2	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 268438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	SM 3500 FE D	
680-88026-1 MS	WP03-95.0-GW	Total/NA	Water	SM 3500 FE D	
680-88026-1 MSD	WP03-95.0-GW	Total/NA	Water	SM 3500 FE D	
LCS 680-268438/6	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 680-268438/7	Method Blank	Total/NA	Water	SM 3500 FE D	

General Chemistry (Continued)

Analysis Batch: 268493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	300.0	
680-88026-1 MS	WP03-95.0-GW	Total/NA	Water	300.0	
680-88026-1 MSD	WP03-95.0-GW	Total/NA	Water	300.0	
LCS 680-268493/11	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-268493/12	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-268493/10	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 268584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	SM 2540D	
LCS 680-268584/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 680-268584/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
MB 680-268584/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 268612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	9040C	
LCS 680-268612/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 268706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	SM 2540C	
LCS 680-268706/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 680-268706/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
MB 680-268706/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 268885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 268886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	7196A	

Analysis Batch: 268955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	SM 2340C	
LCS 680-268955/2	Lab Control Sample	Total/NA	Water	SM 2340C	
LCSD 680-268955/3	Lab Control Sample Dup	Total/NA	Water	SM 2340C	
MB 680-268955/1	Method Blank	Total/NA	Water	SM 2340C	

Analysis Batch: 269144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Dissolved	Water	9060	

Analysis Batch: 269465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	1664A	
LCS 680-269465/22	Lab Control Sample	Total/NA	Water	1664A	
LCSD 680-269465/23	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 680-269465/21	Method Blank	Total/NA	Water	1664A	

General Chemistry (Continued)

Analysis Batch: 269677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	9060	
680-88026-1 MS	WP03-95.0-GW	Total/NA	Water	9060	
680-88026-1 MSD	WP03-95.0-GW	Total/NA	Water	9060	
LCS 680-269677/3	Lab Control Sample	Total/NA	Water	9060	
MB 680-269677/2	Method Blank	Total/NA	Water	9060	

Analysis Batch: 269706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88026-1	WP03-95.0-GW	Total/NA	Water	300.0	
680-88026-1 MS	WP03-95.0-GW	Total/NA	Water	300.0	
680-88026-1 MSD	WP03-95.0-GW	Total/NA	Water	300.0	
LCS 680-269706/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-269706/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-269706/2	Method Blank	Total/NA	Water	300.0	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Client Sample ID: WP03-95.0-GW
Date Collected: 03/05/13 10:08
Date Received: 03/06/13 09:17

Lab Sample ID: 680-88026-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	269337	03/14/13 19:26	JD	TAL SAV
Dissolved	Analysis	6010C		1	269417	03/14/13 11:00	BCB	TAL SAV
Total/NA	Prep	3010A			269064	03/12/13 12:57	JKL	TAL SAV
Total/NA	Analysis	6010C		1	269621	03/16/13 00:57	BCB	TAL SAV
Total/NA	Analysis	SM 2320B		1	165257	03/15/13 17:28	AK	TAL DEN
Total/NA	Analysis	7196A		1	268436	03/06/13 15:13	RW	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	268438	03/06/13 15:33	RW	TAL SAV
Total/NA	Analysis	300.0		5	268493	03/06/13 17:45	PAT	TAL SAV
Total/NA	Analysis	SM 2540D		1	268584	03/07/13 15:31	LE	TAL SAV
Total/NA	Analysis	9040C		1	268612	03/07/13 16:38	LE	TAL SAV
Total/NA	Analysis	SM 2540C		1	268706	03/08/13 12:38	LE	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	268885	03/11/13 10:48	JR	TAL SAV
Total/NA	Analysis	7196A		1	268886	03/11/13 10:50	JR	TAL SAV
Total/NA	Analysis	SM 2340C		1	268955	03/11/13 16:34	AJO	TAL SAV
Dissolved	Analysis	9060		1	269144	03/12/13 10:14	JR	TAL SAV
Total/NA	Analysis	1664A		1	269465	03/15/13 09:20	JS	TAL SAV
Total/NA	Analysis	9060		1	269677	03/17/13 06:19	JR	TAL SAV
Total/NA	Analysis	300.0		5	269706	03/16/13 17:42	PAT	TAL SAV

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

◯ Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NY Site GW	68011020	NY
TAL (LAB) PROJECT MANAGER: Betsy Beauchamp	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Joe Schmidl	CLIENT PHONE: 832-229-4541	CLIENT FAX
CLIENT NAME: STONE ENV.	CLIENT E-MAIL: jschmidl@stone-env.com	
CLIENT ADDRESS: 535 Stone Cutters Way, Montpelier, VT		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ◯
DATE DUE
EXPEDITED REPORT DELIVERY (SURCHARGE) ◯
DATE DUE

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	8260C 6013 HCl None	8260C Total 8260 Diss. 8260 None	25/624C Total 25/624C Diss. None	1664A H2SO4	9040B None	SM 2340C HNO3	SM 2320B None	310.2 None	SM 7500-Fe-D None	7196A None	REMARKS
3/5/13	1008	WP03-95.0-GW	G	X				X	X	X	X	X	X	X	X	X	X	

NUMBER OF CONTAINERS SUBMITTED

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	3/5/13	17:00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	3/6/13	0917	YES ◯ NO ◯		320-8802-6	1.3 °C

TAL8240-680 (1008)

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Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-88026-1
SDG Number: 68088026

Login Number: 88026
List Number: 1
Creator: Conner, Keaton

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-88026-1
SDG Number: 68088026

Login Number: 88026
List Number: 1
Creator: Laspe, Laura

List Source: TestAmerica Denver
List Creation: 03/15/13 03:04 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	03-31-13
A2LA	ISO/IEC 17025		399.01	03-31-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	03-31-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

Laboratory: TestAmerica Denver

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Laboratory: TestAmerica Denver (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-30	04-05-13
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	06-01-13
California	State Program	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-13
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-13
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-13
Louisiana	NELAP	6	30785	06-30-13
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13
Nevada	State Program	9	CO0026	07-30-13
New Hampshire	NELAP	1	205310	04-28-13
New Jersey	NELAP	2	CO004	06-30-13
New Mexico	State Program	6	CO00026	06-30-13
New York	NELAP	2	11964	04-01-13
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-13
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	07-31-13
South Carolina	State Program	4	72002	06-30-13
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-08-00036	02-08-14
Utah	NELAP	8	QUAN5	06-30-13
Virginia	NELAP	3	460232	06-14-13
Washington	State Program	10	C583	08-03-13
West Virginia DEP	State Program	3	354	11-30-13
Wisconsin	State Program	5	999615430	08-31-13
Wyoming (UST)	A2LA	8		10-31-13

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88026-1
SDG: 68088026

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-88026-1	WP03-95.0-GW	Water	03/05/13 10:08	03/06/13 09:17

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-88026-2

SDG Number: 68088026

Job Description: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, VT 05602

Attention: Mr. Joseph Schmidl

Approved for release.
Michele Kersey
Project Manager I
3/29/2013 3:58 PM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com
03/29/2013

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN: C-GA-02; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

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Subcontracted Data 6

SAMPLE SUMMARY

Client: Stone Environmental

Job Number: 680-88026-2
Sdg Number: 68088026

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-88026-1	WP03-95.0-GW	Water	03/05/2013 1008	03/06/2013 0917

METHOD SUMMARY

Client: Stone Environmental

Job Number: 680-88026-2
Sdg Number: 68088026

Description	Lab Location	Method	Preparation Method
Matrix: Water			
General Sub Contract Method	SC0142	Subcontract	

Lab References:

SC0142 = Brooks Rand LLC

Method References:

March 29, 2013

TestAmerica
Attn: Michelle Kersey
5102 LaRoche Ave.
Savannah, GA 31404
mkersey@testamericainc.com

RE: Brooks Rand Project: TST-SV1301 Client Project: 102305-R-CTask 6A

Dear Ms. Kersey,

On March 6, 2013, Brooks Rand Labs (BRL) received one (1) water sample. The sample was logged-in for analyses manganese speciation contractually defined as total recoverable manganese (Mn), Mn(II) and Mn(IV) determined by difference (see speciation note below). The samples were received, prepared, analyzed, and stored according to BRL SOP(s) and EPA methodology.

Manganese Speciation Note: This is an operationally defined method where the manganese (Mn) species are determined by the physical separation using filtration through 0.45-µm filters. Reduced manganese (Mn^{2+}) is soluble and oxidized manganese (Mn^{4+}) is not. Therefore, determinations on a sample that is filtered prior to any exposure to oxygen yields concentrations of reduced species, and determinations on an unfiltered sample yield a measurement of oxidized (or reduced and oxidized) species. For this Mn speciation method, samples are field-filtered using ventable in-line filters with no exposure to the air prior to filtration. Due to the chemical properties described above, the filtered sample is defined as Mn(II). An additional unfiltered sample is collected and analyzed for total recoverable Mn. Mn(IV) is calculated by the difference of total recoverable Mn minus Mn(II).

The results may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* for sample-specific MDL, MRL, and other details.

All results have been reported to the concentration of the method detection limit (MDL), referred to as the detection limit (DL) in the DoD QSM. The Limit of Quantitation (LOQ) is defined in this report as the method reporting limit (MRL).

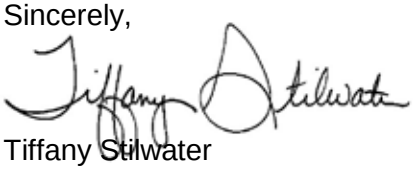
The digestion method used for the samples took place in the original sample container. Therefore, the matrix spikes were prepared at the instrument and would be the same as post-digestion spikes.

The DoD acceptance criteria for the dilution tests state that the diluted result must be ±10% of the native result. Therefore, when the native sample produces a result of 1 (unit independent), the acceptable range for the dilution duplicate is 0.9 - 1.1 units. However, in the upper limit the relative percent difference (RPD) between the two values is 9.5% whereas in the lower limit the RPD is 10.5%. BRL has set the RPD limit to 10% in the report as this is the closest approximation the LIMS is capable of representing.

Per the client's specific request to adhere to the EPA Draft Method 1638 requirement of non-method blank corrected data, the results were not method blank corrected as described in the calculations section of the relevant BRL SOP(s). This deviates from BRL's standard protocol for trace level data quality and BRL believes that all low-level metals analyses should be method blank corrected and that not doing so may lead to less accurate results. The results from the method blanks that were analyzed are listed in the *Method Blanks & Reporting Limits* section of this report.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details, see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Tiffany Stilwater
Project Manager
tiffany@brooksrand.com



Lydia Greaves
Project Manager
lydia@brooksrand.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations /certifications, please visit our website at <http://www.brooksrand.com/default.asp?contentID=586>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	**MS**	matrix spike
BRL	Brooks Rand Labs	**MSD**	matrix spike duplicate
BS	laboratory fortified blank	**ND**	non-detect
CAL	calibration standard	**NR**	non-reportable
CCV	continuing calibration verification	**PS**	post preparation spike
COC	chain of custody record	**REC**	percent recovery
CRM	certified reference material	**RPD**	relative percent difference
D	dissolved fraction	**RSD**	relative standard deviation
DUP	duplicate	**SCV**	secondary calibration verification
ICV	initial calibration verification	**SOP**	standard operating procedure
MDL	method detection limit	**SRM**	standard reference material
MRL	method reporting limit	**T**	total recoverable fraction

Definition of Data Qualifiers

(Effective 9/23/09)

B Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H Holding time and/or preservation requirements not met. Result is estimated.
J Estimated value. A full explanation is presented in the narrative.
J-M Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N Spike recovery was not within acceptance criteria. Result is estimated.
R Rejected, unusable value. A full explanation is presented in the narrative.
U Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BRL.

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
WP03-95.0-GW	1310011-01	Ground Water	Sample	03/05/2013	03/06/2013

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Mn	Water	EPA 1638	03/14/2013	03/21/2013	B130416	1300197
Mn(II)	Water	EPA 1638	03/20/2013	03/21/2013	B130442	1300197

Sample Results

Sample	Analyte	Basis	Result	Qualifier	MDL	LOD	MRL	Unit	Batch	Sequence
WP03-95.0-GW										
1310011-01	Mn	T	115		0.02	0.06	0.06	µg/L	B130416	1300197
1310011-01	Mn(II)	D	39.2		0.021	0.063	0.063	µg/L	B130442	1300197
1310011-01	Mn(IV)	N/A	75.4		0.04	0.15	0.13	µg/L	[CALC]	N/A

Accuracy & Precision Summary

Batch: B130416
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130416-BS1	**Laboratory Fortified Blank (1311005)**						
	Mn		1.053	1.06	µg/L	100% 80-120	
B130416-SRM1	**Certified Reference Material (1202032, NIST 1643e)**						
	Mn		38.97	39.78	µg/L	102% 75-125	
B130416-DUP1	**Duplicate (1310011-01)**						
	Mn	114.5		114.0	µg/L		0.5% 20
B130416-DUP2	**Duplicate (1310011-01)**						
	Mn	114.5		118.9	µg/L		4% 10
B130416-MS1	**Matrix Spike (1310011-01)**						
	Mn	114.5	52.63	160.0	µg/L	86% 80-120	
B130416-MSD1	**Matrix Spike Duplicate (1310011-01)**						
	Mn	114.5	52.63	160.2	µg/L	87% 80-120	0.1% 20

Batch: B130442
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130442-BS2	**Laboratory Fortified Blank (1311005)**						
	Mn(II)		1.053	1.076	µg/L	102% 80-120	
B130442-SRM1	**Certified Reference Material (1202032, NIST 1643e)**						
	Mn(II)		38.97	39.78	µg/L	102% 75-125	
B130442-DUP1	**Duplicate (1309028-01)**						
	Mn(II)	40.26		40.42	µg/L		0.4% 20

Accuracy & Precision Summary

Batch: B130442
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130442-DUP2	**Duplicate (1309028-01)**						
	Mn(II)	40.26		42.03	µg/L		4% 10
B130442-MS1	**Matrix Spike (1309028-01)**						
	Mn(II)	40.26	52.63	94.40	µg/L	103% 80-120	
B130442-MSD1	**Matrix Spike Duplicate (1309028-01)**						
	Mn(II)	40.26	52.63	90.48	µg/L	95% 80-120	4% 20

Method Blanks & Reporting Limits

Batch: B130416
Matrix: Water
Method: EPA 1638
Analyte: Mn

Sample	Result	Units
B130416-BLK1	-0.004	µg/L
B130416-BLK2	-0.007	µg/L
B130416-BLK3	-0.01	µg/L
B130416-BLK4	-0.01	µg/L

DoD QSEM Limit: 0.03

MDL: 0.02
MRL: 0.06

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Method Blanks & Reporting Limits

Batch: B130442
Matrix: Water
Method: EPA 1638
Analyte: Mn(II)

Sample	Result	Units
B130442-BLK5	0.0002	µg/L
B130442-BLK6	0.003	µg/L
B130442-BLK7	-0.002	µg/L
B130442-BLK8	-0.0009	µg/L

DoD QSEM Limit: 0.032

MDL: 0.021
MRL: 0.063

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Sample Containers

Lab ID: 1310011-01
Sample: WP03-95.0-GW

Report Matrix: Ground Water
Sample Type: Sample

Collected: 03/05/2013
Received: 03/06/2013

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W-D	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler
B	Bottle HDPE ICP-W	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler

Shipping Containers

Cooler

Received: March 6, 2013 8:50
Tracking No: 802639396680 via FedEx
Coolant Type: None
Temperature: 0.2 °C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? No
Custody seals intact? No
COC present? Yes

BROOKS RAND LABS
MEANINGFUL METALS DATA
3958 6th Avenue NW
Seattle, WA 98107
Phone: 206-632-6206
Fax: 206-632-6017
samples@brooksrand.com
www.brooksrand.com

Chain of Custody Record

BRL Report 1310011

1310011

White: LAB COPY
Yellow: CUSTOMER COPY

03/29/2013

Client: STONE ENV.	Address: 535 STONE Cutters Way Montpelier, VT 05602	COC receipt confirmation? (Y) / N	
Contact: Joe Schmidl		If so, by: email / fax (circle one)	
Client project ID: 102305-R-C Task6A		Email: jschmidl@stone-env.com	
PO #:	Phone #: 802-229-4541	Fax #:	

Requested TAT in business days:
- ☐ 20 (standard)
- ☐ 15
- ☐ 10
- ☐ 5
- ☐ Other ____

Surcharges apply for expedited turn around times.

	Sample ID	Collection: Date	Collection: Time	Miscellaneous: Sampler (initials)	Miscellaneous: Matrix type	Miscellaneous: # of containers	Miscellaneous: Field filtered? (Y/N)	Field Preservation: Unpreserved / ice only	Field Preservation: HCl / HNO3 (circle one)	Field Preservation: Other (specify)	Analyses required: Total Hg, EPA 1631	Analyses required: Methyl Hg, EPA 1630	Analyses required: ICP-MS Metals (specify)	Analyses required: As / Se species (specify)	Analyses required: % Solids	Analyses required: Filtration	Analyses required: Other (specify) 1638 modified	Analyses required: Other (specify)	Comments
1	WP03-95.0-GW	3/5/13	1008	DSL	GW	1	Y		X								X		
2	WP03-95.0-GW	3/5/13	1008	DSL	GW	1	N		X								X		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date: 3/5/13	Time: 17:00	Relinquished by: / Date: / Time:
Received by:	Date:	Time:	Received at BRL by: / Date: 3/6/13 / Time: 0850
Shipping carrier:	# of coolers:		BRL work order ID: / BRL project ID:

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Tel: (912)354-7858

TestAmerica Job ID: 680-88114-1
TestAmerica Sample Delivery Group: 68088114
Client Project/Site: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, Vermont 05602

Attn: Mr. Joseph Schmidl

Authorized for release by:
3/21/2013 12:22:48 PM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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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Certification Summary 40

Job ID: 680-88114-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-88114-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 3/8/2013 9:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP02-105.0-GW (680-88114-1), WP02-105.0-GW-D (680-88114-2), WP-14-98.0 (680-88114-3), WP-14-103.0 (680-88114-4), WP-15-75.4 (680-88114-5), WP-16-68.0 (680-88114-6), WP-16-73.0 (680-88114-7) and TB-030713 (680-88114-8) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/11/2013.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 4 analytes to recover outside criteria for this method when a full list spike is utilized. The LCS associated with batch 268899 had 2 analytes outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

METALS (ICP)

Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 03/12/2013 and analyzed on 03/16/2013.

SILICA BY ICP

Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were analyzed on 03/14/2013.

HEXAVALENT CHROMIUM

Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 03/08/2013.

The following sample(s) was received with insufficient time remaining to perform the analysis within holding time: WP02-105.0-GW

Job ID: 680-88114-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

(680-88114-1), WP02-105.0-GW-D (680-88114-2).

OIL AND GREASE AND TPH
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 03/19/2013.

ALKALINITY
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 03/18/2013.

HARDNESS
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 03/16/2013.

TOTAL DISSOLVED SOLIDS
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 03/08/2013.

TOTAL SUSPENDED SOLIDS
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/12/2013.

ANIONS BY IC
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 03/17/2013 and 03/19/2013.

Samples WP02-105.0-GW (680-88114-1)[5X] and WP02-105.0-GW-D (680-88114-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

ANIONS (NITRATE/NITRITE)
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 03/09/2013.

Samples WP02-105.0-GW (680-88114-1)[5X] and WP02-105.0-GW-D (680-88114-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 03/08/2013.

Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 03/11/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 03/11/2013.

PH
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 03/08/2013.

TOTAL ORGANIC CARBON

Job ID: 680-88114-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/17/2013.

DISSOLVED ORGANIC CARBON

Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/12/2013.

Sample Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-88114-1	WP02-105.0-GW	Water	03/07/13 09:33	03/08/13 09:21
680-88114-2	WP02-105.0-GW-D	Water	03/07/13 09:33	03/08/13 09:21
680-88114-3	WP-14-98.0	Water	03/06/13 08:27	03/08/13 09:21
680-88114-4	WP-14-103.0	Water	03/06/13 09:21	03/08/13 09:21
680-88114-5	WP-15-75.4	Water	03/06/13 10:40	03/08/13 09:21
680-88114-6	WP-16-68.0	Water	03/07/13 09:20	03/08/13 09:21
680-88114-7	WP-16-73.0	Water	03/07/13 09:52	03/08/13 09:21
680-88114-8	TB-030713	Water	03/07/13 08:00	03/08/13 09:21

Method Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
6010C	Metals, Silica (ICP)	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
1664A	HEM and SGT-HEM	1664A	TAL SAV
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
7196A	Chromium, Hexavalent	SW846	TAL SAV
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL SAV
9040C	pH	SW846	TAL SAV
9060	Organic Carbon, Dissolved (DOC)	SW846	TAL SAV
9060	Organic Carbon, Total (TOC)	SW846	TAL SAV
SM 2320B	Alkalinity	SM	TAL DEN
SM 2340C	Hardness, Total	SM	TAL SAV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL SAV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL SAV
SM 3500 FE D	Iron, Ferrous	SM	TAL SAV
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL SAV

Protocol References:

1664A = EPA-821-98-002

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
Q	One or more quality control criteria failed.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

Metals

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
H	Sample was prepped or analyzed beyond the specified holding time
HF	Field parameter with a holding time of 15 minutes
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP02-105.0-GW
Date Collected: 03/07/13 09:33
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-1
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 15:56	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 15:56	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 15:56	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 15:56	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 15:56	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 15:56	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 15:56	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 15:56	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 15:56	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 15:56	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 15:56	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 15:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 15:56	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 15:56	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 15:56	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 15:56	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/11/13 15:56	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 15:56	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 15:56	1
2-Hexanone	1.0	U Q	10	1.0	ug/L			03/11/13 15:56	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 15:56	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 15:56	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 15:56	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 15:56	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 15:56	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 15:56	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 15:56	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 15:56	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 15:56	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 15:56	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 15:56	1
trans-1,3-Dichloropropene	0.25	U Q	1.0	0.21	ug/L			03/11/13 15:56	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 15:56	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/11/13 15:56	1
Trichloroethene	**150**		1.0	0.13	ug/L			03/11/13 15:56	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 15:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 15:56	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 15:56	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 15:56	1

Client Sample ID: WP02-105.0-GW

Date Collected: 03/07/13 09:33
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*03/11/13 15:56*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*03/11/13 15:56*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*03/11/13 15:56*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**52**		10	1.2	ug/L		03/12/13 12:57	03/16/13 02:19	1
Iron	**49000**		100	50	ug/L		03/12/13 12:57	03/16/13 02:19	1
Magnesium	**68000**		500	9.9	ug/L		03/12/13 12:57	03/16/13 02:19	1
Manganese	**2400**		10	2.0	ug/L		03/12/13 12:57	03/16/13 02:19	1
Titanium	**250**		10	1.0	ug/L		03/12/13 12:57	03/16/13 02:19	1

Method: 6010C - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**5000**		230	23	ug/L			03/14/13 10:54	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	1.9	U	4.6	1.3	mg/L			03/19/13 09:15	1
Nitrate as N	**0.17**	**J D**	0.25	0.075	mg/L			03/09/13 04:37	5
Sulfate	**17**	**D**	5.0	2.6	mg/L			03/19/13 17:07	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			03/09/13 04:37	5
Chromium, hexavalent	0.0030	U H	0.010	0.0030	mg/L			03/08/13 10:11	1
Cr (III)	**0.052**		0.010	0.010	mg/L			03/11/13 10:50	1
pH	**7.96**	**H**			SU			03/08/13 15:51	1
Total Organic Carbon	**0.59**	**J**	1.0	0.50	mg/L			03/17/13 07:05	1
Alkalinity	**45**		5.0	1.1	mg/L			03/18/13 14:25	1
Bicarbonate Alkalinity as CaCO3	**45**		5.0	1.1	mg/L			03/18/13 14:25	1
Carbonate Alkalinity as CaCO3	2.0	U	5.0	1.1	mg/L			03/18/13 14:25	1
Hydroxide Alkalinity	2.0	U	5.0	1.1	mg/L			03/18/13 14:25	1
Phenolphthalein Alkalinity	2.0	U	5.0	1.1	mg/L			03/18/13 14:25	1
Hardness as calcium carbonate	**1800**		25	25	mg/L			03/16/13 15:11	1
Total Dissolved Solids	**330**		10	10	mg/L			03/08/13 12:38	1
Total Suspended Solids	**1600**		19	19	mg/L			03/12/13 14:27	1
Ferric Iron	**49**	**HF**	0.10	0.10	mg/L			03/11/13 10:48	1
Ferrous Iron	0.025	U HF	0.10	0.025	mg/L			03/08/13 15:51	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	**1.1**		1.0	1.0	mg/L			03/12/13 10:31	1

Client Sample ID: WP02-105.0-GW-D

Date Collected: 03/07/13 09:33
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 16:26	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 16:26	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP02-105.0-GW-D
Date Collected: 03/07/13 09:33
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-2
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 16:26	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 16:26	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 16:26	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 16:26	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 16:26	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 16:26	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 16:26	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 16:26	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 16:26	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 16:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 16:26	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 16:26	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 16:26	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 16:26	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/11/13 16:26	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 16:26	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 16:26	1
2-Hexanone	1.0	U Q	10	1.0	ug/L			03/11/13 16:26	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 16:26	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 16:26	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 16:26	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 16:26	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 16:26	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 16:26	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 16:26	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 16:26	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 16:26	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 16:26	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 16:26	1
trans-1,3-Dichloropropene	0.25	U Q	1.0	0.21	ug/L			03/11/13 16:26	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 16:26	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/11/13 16:26	1
Trichloroethene	**150**		1.0	0.13	ug/L			03/11/13 16:26	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 16:26	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 16:26	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*03/11/13 16:26*	*1*
Dibromofluoromethane	*100*		*70 - 130*		*03/11/13 16:26*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*03/11/13 16:26*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP02-105.0-GW-D

Lab Sample ID: 680-88114-2

Date Collected: 03/07/13 09:33

Matrix: Water

Date Received: 03/08/13 09:21

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	**360**		10	1.2	ug/L		03/12/13 12:57	03/16/13 02:35	1
Iron	**170000**		100	50	ug/L		03/12/13 12:57	03/16/13 02:35	1
Magnesium	**77000**		500	9.9	ug/L		03/12/13 12:57	03/16/13 02:35	1
Manganese	**5100**		10	2.0	ug/L		03/12/13 12:57	03/16/13 02:35	1
Titanium	**560**		10	1.0	ug/L		03/12/13 12:57	03/16/13 02:35	1

Method: 6010C - Metals, Silica (ICP) - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	**5100**		230	23	ug/L			03/14/13 10:57	1

General Chemistry

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	1.9	U	4.8	1.3	mg/L			03/19/13 09:15	1
Nitrate as N	**0.18**	**J D**	0.25	0.075	mg/L			03/09/13 05:24	5
Sulfate	**17**	**D**	5.0	2.6	mg/L			03/17/13 01:21	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			03/09/13 05:24	5
Chromium, hexavalent	0.0030	U H	0.010	0.0030	mg/L			03/08/13 10:07	1
Cr (III)	**0.36**		0.010	0.010	mg/L			03/11/13 10:50	1
pH	**8.04**	**H**			SU			03/08/13 15:51	1
Total Organic Carbon	**0.60**	**J**	1.0	0.50	mg/L			03/17/13 07:23	1
Alkalinity	**120**		5.0	1.1	mg/L			03/18/13 14:29	1
Bicarbonate Alkalinity as CaCO3	**120**		5.0	1.1	mg/L			03/18/13 14:29	1
Carbonate Alkalinity as CaCO3	2.0	U	5.0	1.1	mg/L			03/18/13 14:29	1
Hydroxide Alkalinity	2.0	U	5.0	1.1	mg/L			03/18/13 14:29	1
Phenolphthalein Alkalinity	2.0	U	5.0	1.1	mg/L			03/18/13 14:29	1
Hardness as calcium carbonate	**1900**		25	25	mg/L			03/16/13 15:11	1
Total Dissolved Solids	**370**		10	10	mg/L			03/08/13 12:38	1
Total Suspended Solids	**1300**		15	15	mg/L			03/12/13 14:26	1
Ferric Iron	**170**	**HF**	0.10	0.10	mg/L			03/11/13 10:48	1
Ferrous Iron	0.025	U HF	0.10	0.025	mg/L			03/08/13 15:51	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	0.50	U	1.0	1.0	mg/L			03/12/13 10:51	1

Client Sample ID: WP-14-98.0

Lab Sample ID: 680-88114-3

Date Collected: 03/06/13 08:27

Matrix: Water

Date Received: 03/08/13 09:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 16:55	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 16:55	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 16:55	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 16:55	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 16:55	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 16:55	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP-14-98.0
Date Collected: 03/06/13 08:27
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-3
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 16:55	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 16:55	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 16:55	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 16:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 16:55	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 16:55	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 16:55	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 16:55	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 16:55	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 16:55	1
1,1-Dichloroethene	**0.26**	**J**	1.0	0.11	ug/L			03/11/13 16:55	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 16:55	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 16:55	1
trans-1,3-Dichloropropene	0.25	U Q	1.0	0.21	ug/L			03/11/13 16:55	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 16:55	1
2-Hexanone	1.0	U Q	10	1.0	ug/L			03/11/13 16:55	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 16:55	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 16:55	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 16:55	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 16:55	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 16:55	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 16:55	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 16:55	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 16:55	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 16:55	1
1,1,2-Trichloroethane	**0.22**	**J**	1.0	0.13	ug/L			03/11/13 16:55	1
Trichloroethene	**61**		1.0	0.13	ug/L			03/11/13 16:55	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 16:55	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 16:55	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 16:55	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 16:55	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 16:55	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*03/11/13 16:55*	*1*
Dibromofluoromethane	*85*		*70 - 130*		*03/11/13 16:55*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/11/13 16:55*	*1*

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP-14-103.0
Date Collected: 03/06/13 09:21
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-4
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 17:25	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 17:25	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 17:25	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 17:25	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 17:25	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 17:25	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 17:25	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 17:25	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 17:25	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 17:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 17:25	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 17:25	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 17:25	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 17:25	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 17:25	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 17:25	1
1,1-Dichloroethene	**0.24**	**J**	1.0	0.11	ug/L			03/11/13 17:25	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 17:25	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 17:25	1
trans-1,3-Dichloropropene	0.25	U Q	1.0	0.21	ug/L			03/11/13 17:25	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 17:25	1
2-Hexanone	1.0	U Q	10	1.0	ug/L			03/11/13 17:25	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 17:25	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 17:25	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 17:25	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 17:25	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 17:25	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 17:25	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 17:25	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 17:25	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 17:25	1
1,1,2-Trichloroethane	**0.18**	**J**	1.0	0.13	ug/L			03/11/13 17:25	1
Trichloroethene	**59**		1.0	0.13	ug/L			03/11/13 17:25	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 17:25	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 17:25	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 17:25	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 17:25	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 17:25	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 17:25	1

Client Sample ID: WP-14-103.0

Date Collected: 03/06/13 09:21
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-4
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*03/11/13 17:25*	*1*
Dibromofluoromethane	*93*		*70 - 130*		*03/11/13 17:25*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*03/11/13 17:25*	*1*

Client Sample ID: WP-15-75.4

Date Collected: 03/06/13 10:40
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-5
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 17:55	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 17:55	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 17:55	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 17:55	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 17:55	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 17:55	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 17:55	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 17:55	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 17:55	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 17:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 17:55	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 17:55	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 17:55	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 17:55	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 17:55	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 17:55	1
1,1-Dichloroethene	**0.25**	**J**	1.0	0.11	ug/L			03/11/13 17:55	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 17:55	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 17:55	1
trans-1,3-Dichloropropene	0.25	U Q	1.0	0.21	ug/L			03/11/13 17:55	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 17:55	1
2-Hexanone	1.0	U Q	10	1.0	ug/L			03/11/13 17:55	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 17:55	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 17:55	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 17:55	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 17:55	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 17:55	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 17:55	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 17:55	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 17:55	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 17:55	1
1,1,2-Trichloroethane	**0.56**	**J**	1.0	0.13	ug/L			03/11/13 17:55	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP-15-75.4

Lab Sample ID: 680-88114-5

Date Collected: 03/06/13 10:40
Matrix: Water
Date Received: 03/08/13 09:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	93		1.0	0.13	ug/L			03/11/13 17:55	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 17:55	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 17:55	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 17:55	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 17:55	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 17:55	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*70 - 130*		*03/11/13 17:55*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*03/11/13 17:55*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*03/11/13 17:55*	*1*

Client Sample ID: WP-16-68.0

Lab Sample ID: 680-88114-6

Date Collected: 03/07/13 09:20
Matrix: Water
Date Received: 03/08/13 09:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 18:24	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 18:24	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 18:24	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 18:24	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 18:24	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 18:24	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 18:24	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 18:24	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 18:24	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 18:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 18:24	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 18:24	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 18:24	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 18:24	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 18:24	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 18:24	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/11/13 18:24	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 18:24	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 18:24	1
trans-1,3-Dichloropropene	0.25	U Q	1.0	0.21	ug/L			03/11/13 18:24	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 18:24	1
2-Hexanone	1.0	U Q	10	1.0	ug/L			03/11/13 18:24	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 18:24	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP-16-68.0

Lab Sample ID: 680-88114-6

Date Collected: 03/07/13 09:20

Matrix: Water

Date Received: 03/08/13 09:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 18:24	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 18:24	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 18:24	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 18:24	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 18:24	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 18:24	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 18:24	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 18:24	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/11/13 18:24	1
Trichloroethene	**61**		1.0	0.13	ug/L			03/11/13 18:24	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 18:24	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 18:24	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 18:24	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 18:24	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 18:24	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*70 - 130*		*03/11/13 18:24*	*1*
Dibromofluoromethane	*99*		*70 - 130*		*03/11/13 18:24*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*03/11/13 18:24*	*1*

Client Sample ID: WP-16-73.0

Lab Sample ID: 680-88114-7

Date Collected: 03/07/13 09:52

Matrix: Water

Date Received: 03/08/13 09:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 18:54	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 18:54	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 18:54	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 18:54	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 18:54	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 18:54	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 18:54	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 18:54	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 18:54	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 18:54	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 18:54	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 18:54	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 18:54	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1

Client Sample ID: WP-16-73.0

Lab Sample ID: 680-88114-7

Date Collected: 03/07/13 09:52

Matrix: Water

Date Received: 03/08/13 09:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 18:54	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 18:54	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 18:54	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/11/13 18:54	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 18:54	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 18:54	1
trans-1,3-Dichloropropene	0.25	U Q	1.0	0.21	ug/L			03/11/13 18:54	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 18:54	1
2-Hexanone	1.0	U Q	10	1.0	ug/L			03/11/13 18:54	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 18:54	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 18:54	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 18:54	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 18:54	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 18:54	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 18:54	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 18:54	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 18:54	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 18:54	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/11/13 18:54	1
Trichloroethene	**43**		1.0	0.13	ug/L			03/11/13 18:54	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 18:54	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 18:54	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 18:54	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 18:54	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 18:54	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*03/11/13 18:54*	*1*
Dibromofluoromethane	*98*		*70 - 130*		*03/11/13 18:54*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*03/11/13 18:54*	*1*

Client Sample ID: TB-030713

Lab Sample ID: 680-88114-8

Date Collected: 03/07/13 08:00

Matrix: Water

Date Received: 03/08/13 09:21

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 13:58	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 13:58	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 13:58	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 13:58	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 13:58	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 13:58	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 13:58	1

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: TB-030713
Date Collected: 03/07/13 08:00
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-8
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 13:58	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 13:58	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 13:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 13:58	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 13:58	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 13:58	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 13:58	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 13:58	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 13:58	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/11/13 13:58	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 13:58	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 13:58	1
trans-1,3-Dichloropropene	0.25	U Q	1.0	0.21	ug/L			03/11/13 13:58	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 13:58	1
2-Hexanone	1.0	U Q	10	1.0	ug/L			03/11/13 13:58	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 13:58	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 13:58	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 13:58	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 13:58	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 13:58	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 13:58	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 13:58	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 13:58	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 13:58	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/11/13 13:58	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			03/11/13 13:58	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 13:58	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 13:58	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 13:58	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 13:58	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 13:58	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*70 - 130*		*03/11/13 13:58*	*1*
Dibromofluoromethane	*102*		*70 - 130*		*03/11/13 13:58*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*03/11/13 13:58*	*1*

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

Lab Sample ID: MB 680-268899/10
Matrix: Water
Analysis Batch: 268899

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.0	U	25	5.0	ug/L			03/11/13 12:45	1
Benzene	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
Bromodichloromethane	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
Bromoform	0.50	U	1.0	0.50	ug/L			03/11/13 12:45	1
Bromomethane	0.80	U	1.0	0.80	ug/L			03/11/13 12:45	1
2-Butanone	1.0	U	10	1.0	ug/L			03/11/13 12:45	1
Carbon disulfide	0.60	U	2.0	0.60	ug/L			03/11/13 12:45	1
Carbon tetrachloride	0.50	U	1.0	0.50	ug/L			03/11/13 12:45	1
Chlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
Chloroethane	1.0	U	1.0	1.0	ug/L			03/11/13 12:45	1
Chloroform	0.25	U	1.0	0.14	ug/L			03/11/13 12:45	1
Chloromethane	0.33	U	1.0	0.33	ug/L			03/11/13 12:45	1
Dibromochloromethane	0.25	U	1.0	0.10	ug/L			03/11/13 12:45	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.44	ug/L			03/11/13 12:45	1
1,2-Dibromoethane	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
1,2-Dichlorobenzene	0.25	U	1.0	0.21	ug/L			03/11/13 12:45	1
1,3-Dichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
cis-1,2-Dichloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 12:45	1
1,4-Dichlorobenzene	0.28	U	1.0	0.28	ug/L			03/11/13 12:45	1
Dichlorodifluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
1,1-Dichloroethane	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
1,2-Dichloroethane	0.25	U	1.0	0.10	ug/L			03/11/13 12:45	1
cis-1,3-Dichloropropene	0.25	U	1.0	0.11	ug/L			03/11/13 12:45	1
1,1-Dichloroethene	0.25	U	1.0	0.11	ug/L			03/11/13 12:45	1
1,2-Dichloropropane	0.25	U	1.0	0.13	ug/L			03/11/13 12:45	1
Ethylbenzene	0.25	U	1.0	0.11	ug/L			03/11/13 12:45	1
2-Hexanone	1.0	U	10	1.0	ug/L			03/11/13 12:45	1
Isopropylbenzene	0.25	U	1.0	0.10	ug/L			03/11/13 12:45	1
Methylene Chloride	1.0	U	5.0	1.0	ug/L			03/11/13 12:45	1
4-Methyl-2-pentanone	1.0	U	10	1.0	ug/L			03/11/13 12:45	1
Methyl tert-butyl ether	0.50	U	10	0.20	ug/L			03/11/13 12:45	1
Styrene	0.25	U	1.0	0.11	ug/L			03/11/13 12:45	1
1,1,2,2-Tetrachloroethane	0.25	U	1.0	0.18	ug/L			03/11/13 12:45	1
Tetrachloroethene	0.25	U	1.0	0.15	ug/L			03/11/13 12:45	1
Toluene	0.33	U	1.0	0.33	ug/L			03/11/13 12:45	1
trans-1,2-Dichloroethene	0.25	U	1.0	0.20	ug/L			03/11/13 12:45	1
trans-1,3-Dichloropropene	0.25	U	1.0	0.21	ug/L			03/11/13 12:45	1
1,2,4-Trichlorobenzene	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
1,1,1-Trichloroethane	0.50	U	1.0	0.50	ug/L			03/11/13 12:45	1
1,1,2-Trichloroethane	0.25	U	1.0	0.13	ug/L			03/11/13 12:45	1
Trichloroethene	0.25	U	1.0	0.13	ug/L			03/11/13 12:45	1
Trichlorofluoromethane	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	1.0	0.50	ug/L			03/11/13 12:45	1
Cyclohexane	0.25	U	1.0	0.25	ug/L			03/11/13 12:45	1
Methyl acetate	0.25	U	1.0	0.19	ug/L			03/11/13 12:45	1
Vinyl chloride	0.50	U	1.0	0.18	ug/L			03/11/13 12:45	1
Methylcyclohexane	0.25	U	1.0	0.10	ug/L			03/11/13 12:45	1
Xylenes, Total	0.75	U	2.0	0.20	ug/L			03/11/13 12:45	1

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

Lab Sample ID: MB 680-268899/10
Matrix: Water
Analysis Batch: 268899

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		70 - 130		03/11/13 12:45	1
Dibromofluoromethane	101		70 - 130		03/11/13 12:45	1
Toluene-d8 (Surr)	95		70 - 130		03/11/13 12:45	1

Lab Sample ID: LCS 680-268899/4
Matrix: Water
Analysis Batch: 268899

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	100		ug/L		100	39 - 162
Benzene	50.0	51.0		ug/L		102	74 - 123
Bromodichloromethane	50.0	61.3		ug/L		123	72 - 129
Bromoform	50.0	53.1		ug/L		106	60 - 134
Bromomethane	50.0	17.0		ug/L		34	10 - 171
2-Butanone	100	105		ug/L		105	55 - 142
Carbon disulfide	50.0	52.9		ug/L		106	63 - 142
Carbon tetrachloride	50.0	49.5		ug/L		99	70 - 131
Chlorobenzene	50.0	52.5		ug/L		105	79 - 120
Chloroethane	50.0	40.4		ug/L		81	47 - 148
Chloroform	50.0	52.3		ug/L		105	76 - 128
Chloromethane	50.0	49.6		ug/L		99	47 - 151
Dibromochloromethane	50.0	61.1		ug/L		122	63 - 134
1,2-Dibromo-3-Chloropropane	50.0	63.0		ug/L		126	57 - 126
1,2-Dibromoethane	50.0	57.0		ug/L		114	75 - 127
1,2-Dichlorobenzene	50.0	51.9		ug/L		104	77 - 124
1,3-Dichlorobenzene	50.0	51.9		ug/L		104	79 - 123
cis-1,2-Dichloroethene	50.0	51.1		ug/L		102	78 - 127
1,4-Dichlorobenzene	50.0	51.4		ug/L		103	76 - 124
Dichlorodifluoromethane	50.0	61.7		ug/L		123	41 - 165
1,1-Dichloroethane	50.0	52.8		ug/L		106	69 - 132
1,2-Dichloroethane	50.0	57.9		ug/L		116	75 - 120
cis-1,3-Dichloropropene	50.0	61.2		ug/L		122	73 - 128
1,1-Dichloroethene	50.0	50.9		ug/L		102	73 - 134
1,2-Dichloropropane	50.0	55.0		ug/L		110	71 - 126
Ethylbenzene	50.0	55.5		ug/L		111	78 - 125
2-Hexanone	100	161	Q	ug/L		161	52 - 149
Isopropylbenzene	50.0	55.6		ug/L		111	72 - 129
Methylene Chloride	50.0	50.1		ug/L		100	79 - 124
4-Methyl-2-pentanone	100	132		ug/L		132	51 - 143
Methyl tert-butyl ether	100	104		ug/L		104	76 - 126
Styrene	50.0	56.4		ug/L		113	75 - 129
1,1,2,2-Tetrachloroethane	50.0	57.7		ug/L		115	71 - 127
Tetrachloroethene	50.0	51.1		ug/L		102	77 - 128
Toluene	50.0	55.1		ug/L		110	77 - 125
trans-1,2-Dichloroethene	50.0	49.3		ug/L		99	78 - 130
trans-1,3-Dichloropropene	50.0	67.8	Q	ug/L		136	72 - 127
1,2,4-Trichlorobenzene	50.0	50.9		ug/L		102	67 - 134
1,1,1-Trichloroethane	50.0	57.3		ug/L		115	76 - 126

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

Lab Sample ID: LCS 680-268899/4
Matrix: Water
Analysis Batch: 268899

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	50.0	58.1		ug/L		116	69 - 127
Trichloroethene	50.0	55.2		ug/L		110	80 - 120
Trichlorofluoromethane	50.0	58.9		ug/L		118	66 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.2		ug/L		110	72 - 139
Cyclohexane	50.0	54.8		ug/L		110	68 - 137
Methyl acetate	50.0	57.9		ug/L		116	26 - 182
Vinyl chloride	50.0	54.7		ug/L		109	58 - 141
Methylcyclohexane	50.0	55.0		ug/L		110	72 - 133
Xylenes, Total	150	167		ug/L		111	80 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*70 - 130*
Dibromofluoromethane	*105*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 680-268899/5
Matrix: Water
Analysis Batch: 268899

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
Acetone	100	79.7		ug/L		80	39 - 162	23	50
Benzene	50.0	43.2		ug/L		86	74 - 123	17	30
Bromodichloromethane	50.0	49.6		ug/L		99	72 - 129	21	30
Bromoform	50.0	41.9		ug/L		84	60 - 134	24	30
Bromomethane	50.0	17.9		ug/L		36	10 - 171	6	50
2-Butanone	100	89.3		ug/L		89	55 - 142	16	30
Carbon disulfide	50.0	45.4		ug/L		91	63 - 142	15	30
Carbon tetrachloride	50.0	41.8		ug/L		84	70 - 131	17	30
Chlorobenzene	50.0	44.1		ug/L		88	79 - 120	17	30
Chloroethane	50.0	35.0		ug/L		70	47 - 148	14	40
Chloroform	50.0	44.3		ug/L		89	76 - 128	17	30
Chloromethane	50.0	41.9		ug/L		84	47 - 151	17	30
Dibromochloromethane	50.0	49.0		ug/L		98	63 - 134	22	50
1,2-Dibromo-3-Chloropropane	50.0	51.6		ug/L		103	57 - 126	20	50
1,2-Dibromoethane	50.0	46.9		ug/L		94	75 - 127	19	30
1,2-Dichlorobenzene	50.0	42.8		ug/L		86	77 - 124	19	30
1,3-Dichlorobenzene	50.0	43.2		ug/L		86	79 - 123	18	30
cis-1,2-Dichloroethene	50.0	42.9		ug/L		86	78 - 127	18	30
1,4-Dichlorobenzene	50.0	43.0		ug/L		86	76 - 124	18	30
Dichlorodifluoromethane	50.0	53.4		ug/L		107	41 - 165	14	50
1,1-Dichloroethane	50.0	44.5		ug/L		89	69 - 132	17	30
1,2-Dichloroethane	50.0	47.5		ug/L		95	75 - 120	20	30
cis-1,3-Dichloropropene	50.0	50.0		ug/L		100	73 - 128	20	30
1,1-Dichloroethene	50.0	43.6		ug/L		87	73 - 134	15	30
1,2-Dichloropropane	50.0	45.5		ug/L		91	71 - 126	19	30
Ethylbenzene	50.0	46.7		ug/L		93	78 - 125	17	30
2-Hexanone	100	132		ug/L		132	52 - 149	20	30

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

Lab Sample ID: LCSD 680-268899/5
Matrix: Water
Analysis Batch: 268899

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
Isopropylbenzene			50.0	47.0		ug/L		94	72 - 129	17	30
Methylene Chloride			50.0	41.5		ug/L		83	79 - 124	19	30
4-Methyl-2-pentanone			100	108		ug/L		108	51 - 143	21	30
Methyl tert-butyl ether			100	86.1		ug/L		86	76 - 126	19	30
Styrene			50.0	47.2		ug/L		94	75 - 129	18	30
1,1,2,2-Tetrachloroethane			50.0	47.0		ug/L		94	71 - 127	20	30
Tetrachloroethene			50.0	43.9		ug/L		88	77 - 128	15	30
Toluene			50.0	46.5		ug/L		93	77 - 125	17	30
trans-1,2-Dichloroethene			50.0	42.8		ug/L		86	78 - 130	14	30
trans-1,3-Dichloropropene			50.0	54.1		ug/L		108	72 - 127	23	50
1,2,4-Trichlorobenzene			50.0	42.3		ug/L		85	67 - 134	18	30
1,1,1-Trichloroethane			50.0	48.4		ug/L		97	76 - 126	17	30
1,1,2-Trichloroethane			50.0	47.5		ug/L		95	69 - 127	20	30
Trichloroethene			50.0	47.5		ug/L		95	80 - 120	15	30
Trichlorofluoromethane			50.0	51.2		ug/L		102	66 - 144	14	30
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	47.5		ug/L		95	72 - 139	15	30
Cyclohexane			50.0	47.7		ug/L		95	68 - 137	14	30
Methyl acetate			50.0	48.1		ug/L		96	26 - 182	19	30
Vinyl chloride			50.0	47.2		ug/L		94	58 - 141	15	30
Methylcyclohexane			50.0	47.6		ug/L		95	72 - 133	15	30
Xylenes, Total			150	141		ug/L		94	80 - 124	17	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*70 - 130*
Dibromofluoromethane	*86*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-269064/1-A
Matrix: Water
Analysis Batch: 269621

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269064

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.0	U	10	1.2	ug/L		03/12/13 12:57	03/16/13 00:25	1
Iron	50	U	100	50	ug/L		03/12/13 12:57	03/16/13 00:25	1
Magnesium	20	U	500	9.9	ug/L		03/12/13 12:57	03/16/13 00:25	1
Manganese	2.0	U	10	2.0	ug/L		03/12/13 12:57	03/16/13 00:25	1
Titanium	1.0	U	10	1.0	ug/L		03/12/13 12:57	03/16/13 00:25	1

Lab Sample ID: LCS 680-269064/3-A
Matrix: Water
Analysis Batch: 269621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269064

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium			200	210		ug/L		105	75 - 125		
Iron			20000	21400		ug/L		107	75 - 125		

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 680-269064/3-A
Matrix: Water
Analysis Batch: 269621

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	20000	20700		ug/L		103	75 - 125
Manganese	2000	2130		ug/L		107	75 - 125
Titanium	200	211		ug/L		105	75 - 125

Method: 6010C - Metals, Silica (ICP)

Lab Sample ID: MB 680-269405/1-A
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	23	U	230	23	ug/L			03/14/13 10:41	1

Lab Sample ID: LCS 680-269405/2-A
Matrix: Water
Analysis Batch: 269417

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silicon	4680	4720		ug/L		101	75 - 125

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 680-269790/21
Matrix: Water
Analysis Batch: 269790

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	2.0	U	5.0	1.4	mg/L			03/19/13 09:15	1

Lab Sample ID: LCS 680-269790/22
Matrix: Water
Analysis Batch: 269790

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	44.0		mg/L		110	78 - 114

Lab Sample ID: LCSD 680-269790/23
Matrix: Water
Analysis Batch: 269790

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
HEM (Oil & Grease)	40.0	41.2		mg/L		103	78 - 114	7	18

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-268805/2
Matrix: Water
Analysis Batch: 268805

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.075	U	0.25	0.075	mg/L			03/09/13 02:34	5
Nitrite as N	0.075	U	0.25	0.075	mg/L			03/09/13 02:34	5

Lab Sample ID: LCS 680-268805/3
Matrix: Water
Analysis Batch: 268805

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	4.99	4.72	D	mg/L		94	90 - 110
Nitrite as N	4.99	4.72	D	mg/L		95	90 - 110

Lab Sample ID: LCSD 680-268805/4
Matrix: Water
Analysis Batch: 268805

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
Nitrate as N	4.99	4.69	D	mg/L		94	90 - 110	1	30
Nitrite as N	4.99	4.69	D	mg/L		94	90 - 110	1	30

Lab Sample ID: 680-88114-1 MS
Matrix: Water
Analysis Batch: 268805

Client Sample ID: WP02-105.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.17	J D	4.99	4.84	D	mg/L		93	90 - 110
Nitrite as N	0.075	U	4.99	4.60	D	mg/L		92	90 - 110

Lab Sample ID: 680-88114-1 MSD
Matrix: Water
Analysis Batch: 268805

Client Sample ID: WP02-105.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.17	J D	4.99	4.88	D	mg/L		94	90 - 110	1	30
Nitrite as N	0.075	U	4.99	4.64	D	mg/L		93	90 - 110	1	30

Lab Sample ID: MB 680-269709/2
Matrix: Water
Analysis Batch: 269709

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.6	U	5.0	2.6	mg/L			03/16/13 21:00	5

Lab Sample ID: LCS 680-269709/3
Matrix: Water
Analysis Batch: 269709

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	50.0	51.7	D	mg/L		103	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 680-269709/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269709

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			50.0	51.8	D	mg/L		104	90 - 110	0	30

Lab Sample ID: MB 680-270003/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 270003

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.6	U	5.0	2.6	mg/L			03/19/13 10:53	5

Lab Sample ID: LCS 680-270003/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 270003

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			50.0	54.8	D	mg/L		110	90 - 110		

Lab Sample ID: LCSD 680-270003/4 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 270003

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			50.0	55.2	D	mg/L		110	90 - 110	1	30

Lab Sample ID: 680-88114-1 MS — **Client Sample ID: WP02-105.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 270003

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	17	D	50.0	69.9	D	mg/L		105	90 - 110		

Lab Sample ID: 680-88114-1 MSD — **Client Sample ID: WP02-105.0-GW**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 270003

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	17	D	50.0	68.0	D	mg/L		101	90 - 110	3	30

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 680-268775/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268775

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	0.0030	U	0.010	0.0030	mg/L			03/08/13 10:07	1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCS 680-268775/1
Matrix: Water
Analysis Batch: 268775

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.200	0.196		mg/L		98	85 - 115

Lab Sample ID: 680-88114-1 MS
Matrix: Water
Analysis Batch: 268775

Client Sample ID: WP02-105.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.0030	U H	0.200	0.180		mg/L		90	85 - 115

Lab Sample ID: 680-88114-1 MSD
Matrix: Water
Analysis Batch: 268775

Client Sample ID: WP02-105.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.0030	U H	0.200	0.179		mg/L		89	85 - 115	1	20

Lab Sample ID: 680-88114-2 MS
Matrix: Water
Analysis Batch: 268775

Client Sample ID: WP02-105.0-GW-D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	0.0030	U H	0.200	0.177		mg/L		89	85 - 115

Lab Sample ID: 680-88114-2 MSD
Matrix: Water
Analysis Batch: 268775

Client Sample ID: WP02-105.0-GW-D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	0.0030	U H	0.200	0.179		mg/L		89	85 - 115	1	20

Method: 9040C - pH

Lab Sample ID: LCS 680-268755/1
Matrix: Water
Analysis Batch: 268755

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.010		SU		100	63 - 158

Method: 9060 - Organic Carbon, Total (TOC)

Lab Sample ID: MB 680-269677/2
Matrix: Water
Analysis Batch: 269677

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	0.50	U	1.0	0.50	mg/L			03/17/13 05:46	1

Method: 9060 - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 680-269677/3
Matrix: Water
Analysis Batch: 269677

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	20.0	20.7		mg/L		103	80 - 120

Method: 9060 - Organic Carbon, Dissolved (DOC)

Lab Sample ID: 680-88114-2 DU
Matrix: Water
Analysis Batch: 269144

Client Sample ID: WP02-105.0-GW-D
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Dissolved Organic Carbon	0.50	U	0.50	U	mg/L		NC	30

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-165391/6
Matrix: Water
Analysis Batch: 165391

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	2.0	U	5.0	1.1	mg/L			03/18/13 13:45	1
Bicarbonate Alkalinity as CaCO3	2.0	U	5.0	1.1	mg/L			03/18/13 13:45	1
Carbonate Alkalinity as CaCO3	2.0	U	5.0	1.1	mg/L			03/18/13 13:45	1
Hydroxide Alkalinity	2.0	U	5.0	1.1	mg/L			03/18/13 13:45	1
Phenolphthalein Alkalinity	2.0	U	5.0	1.1	mg/L			03/18/13 13:45	1

Lab Sample ID: LCS 280-165391/4
Matrix: Water
Analysis Batch: 165391

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity	200	203		mg/L		102	90 - 110

Lab Sample ID: LCSD 280-165391/5
Matrix: Water
Analysis Batch: 165391

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
Alkalinity	200	200		mg/L		100	90 - 110	1	10

Method: SM 2340C - Hardness, Total

Lab Sample ID: MB 680-269647/1
Matrix: Water
Analysis Batch: 269647

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	10	U	10	10	mg/L			03/16/13 15:11	1

Method: SM 2340C - Hardness, Total (Continued)

Lab Sample ID: LCS 680-269647/2
Matrix: Water
Analysis Batch: 269647

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	400	396		mg/L		99	75 - 125

Lab Sample ID: LCSD 680-269647/3
Matrix: Water
Analysis Batch: 269647

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
Hardness as calcium carbonate	400	394		mg/L		99	75 - 125	1	30

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 680-268706/1
Matrix: Water
Analysis Batch: 268706

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			03/08/13 12:38	1

Lab Sample ID: LCS 680-268706/2
Matrix: Water
Analysis Batch: 268706

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	370	361		mg/L		98	80 - 120

Lab Sample ID: LCSD 680-268706/3
Matrix: Water
Analysis Batch: 268706

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
Total Dissolved Solids	370	355		mg/L		96	80 - 120	2	25

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 680-269078/1
Matrix: Water
Analysis Batch: 269078

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	5.0	U	5.0	5.0	mg/L			03/12/13 14:12	1

Lab Sample ID: LCS 680-269078/2
Matrix: Water
Analysis Batch: 269078

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	100	90.5		mg/L		91	80 - 120

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCSD 680-269078/3
Matrix: Water
Analysis Batch: 269078

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
Total Suspended Solids			100	90.5		mg/L		91	80 - 120	0	25

Method: SM 3500 FE D - Iron, Ferrous

Lab Sample ID: MB 680-268778/2
Matrix: Water
Analysis Batch: 268778

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	0.025	U	0.10	0.025	mg/L			03/08/13 15:51	1

Lab Sample ID: LCS 680-268778/1
Matrix: Water
Analysis Batch: 268778

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron			2.00	2.03		mg/L		102	80 - 120		

Lab Sample ID: 680-88114-1 MS
Matrix: Water
Analysis Batch: 268778

Client Sample ID: WP02-105.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron	0.025	U HF	2.00	2.03		mg/L		101	80 - 120		

Lab Sample ID: 680-88114-1 MSD
Matrix: Water
Analysis Batch: 268778

Client Sample ID: WP02-105.0-GW
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	0.025	U HF	2.00	2.03		mg/L		102	80 - 120	0	20

GC/MS VOA

Analysis Batch: 268899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	8260B	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	8260B	
680-88114-3	WP-14-98.0	Total/NA	Water	8260B	
680-88114-4	WP-14-103.0	Total/NA	Water	8260B	
680-88114-5	WP-15-75.4	Total/NA	Water	8260B	
680-88114-6	WP-16-68.0	Total/NA	Water	8260B	
680-88114-7	WP-16-73.0	Total/NA	Water	8260B	
680-88114-8	TB-030713	Total/NA	Water	8260B	
LCS 680-268899/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-268899/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 680-268899/10	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 269064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	3010A	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	3010A	
LCS 680-269064/3-A	Lab Control Sample	Total/NA	Water	3010A	
MB 680-269064/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 269417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Dissolved	Water	6010C	
680-88114-2	WP02-105.0-GW-D	Dissolved	Water	6010C	
LCS 680-269405/2-A	Lab Control Sample	Dissolved	Water	6010C	
MB 680-269405/1-A	Method Blank	Dissolved	Water	6010C	

Analysis Batch: 269621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	6010C	269064
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	6010C	269064
LCS 680-269064/3-A	Lab Control Sample	Total/NA	Water	6010C	269064
MB 680-269064/1-A	Method Blank	Total/NA	Water	6010C	269064

General Chemistry

Analysis Batch: 165391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	SM 2320B	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	SM 2320B	
LCS 280-165391/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-165391/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
MB 280-165391/6	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 268706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	SM 2540C	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	SM 2540C	
LCS 680-268706/2	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 268706 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 680-268706/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
MB 680-268706/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 268755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	9040C	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	9040C	
LCS 680-268755/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 268775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	7196A	
680-88114-1 MS	WP02-105.0-GW	Total/NA	Water	7196A	
680-88114-1 MSD	WP02-105.0-GW	Total/NA	Water	7196A	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	7196A	
680-88114-2 MS	WP02-105.0-GW-D	Total/NA	Water	7196A	
680-88114-2 MSD	WP02-105.0-GW-D	Total/NA	Water	7196A	
LCS 680-268775/1	Lab Control Sample	Total/NA	Water	7196A	
MB 680-268775/2	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 268778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	SM 3500 FE D	
680-88114-1 MS	WP02-105.0-GW	Total/NA	Water	SM 3500 FE D	
680-88114-1 MSD	WP02-105.0-GW	Total/NA	Water	SM 3500 FE D	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	SM 3500 FE D	
LCS 680-268778/1	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 680-268778/2	Method Blank	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 268805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	300.0	
680-88114-1 MS	WP02-105.0-GW	Total/NA	Water	300.0	
680-88114-1 MSD	WP02-105.0-GW	Total/NA	Water	300.0	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	300.0	
LCS 680-268805/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-268805/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-268805/2	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 268885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	SM 3500 FE D	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 268886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	7196A	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	7196A	

General Chemistry (Continued)

Analysis Batch: 269078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	SM 2540D	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	SM 2540D	
LCS 680-269078/2	Lab Control Sample	Total/NA	Water	SM 2540D	
LCSD 680-269078/3	Lab Control Sample Dup	Total/NA	Water	SM 2540D	
MB 680-269078/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 269144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Dissolved	Water	9060	
680-88114-2	WP02-105.0-GW-D	Dissolved	Water	9060	
680-88114-2 DU	WP02-105.0-GW-D	Dissolved	Water	9060	

Analysis Batch: 269647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	SM 2340C	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	SM 2340C	
LCS 680-269647/2	Lab Control Sample	Total/NA	Water	SM 2340C	
LCSD 680-269647/3	Lab Control Sample Dup	Total/NA	Water	SM 2340C	
MB 680-269647/1	Method Blank	Total/NA	Water	SM 2340C	

Analysis Batch: 269677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	9060	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	9060	
LCS 680-269677/3	Lab Control Sample	Total/NA	Water	9060	
MB 680-269677/2	Method Blank	Total/NA	Water	9060	

Analysis Batch: 269709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	300.0	
LCS 680-269709/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-269709/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-269709/2	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 269790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	1664A	
680-88114-2	WP02-105.0-GW-D	Total/NA	Water	1664A	
LCS 680-269790/22	Lab Control Sample	Total/NA	Water	1664A	
LCSD 680-269790/23	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 680-269790/21	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 270003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-88114-1	WP02-105.0-GW	Total/NA	Water	300.0	
680-88114-1 MS	WP02-105.0-GW	Total/NA	Water	300.0	
680-88114-1 MSD	WP02-105.0-GW	Total/NA	Water	300.0	
LCS 680-270003/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-270003/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-270003/2	Method Blank	Total/NA	Water	300.0	

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP02-105.0-GW

Lab Sample ID: 680-88114-1

Date Collected: 03/07/13 09:33

Matrix: Water

Date Received: 03/08/13 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268899	03/11/13 15:56	AJMC	TAL SAV
Dissolved	Analysis	6010C		1	269417	03/14/13 10:54	BCB	TAL SAV
Total/NA	Prep	3010A			269064	03/12/13 12:57	JKL	TAL SAV
Total/NA	Analysis	6010C		1	269621	03/16/13 02:19	BCB	TAL SAV
Total/NA	Analysis	SM 2320B		1	165391	03/18/13 14:25	AK	TAL DEN
Total/NA	Analysis	SM 2540C		1	268706	03/08/13 12:38	LE	TAL SAV
Total/NA	Analysis	9040C		1	268755	03/08/13 15:51	LE	TAL SAV
Total/NA	Analysis	7196A		1	268775	03/08/13 10:11	RW	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	268778	03/08/13 15:51	RW	TAL SAV
Total/NA	Analysis	300.0		5	268805	03/09/13 04:37	PAT	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	268885	03/11/13 10:48	JR	TAL SAV
Total/NA	Analysis	7196A		1	268886	03/11/13 10:50	JR	TAL SAV
Total/NA	Analysis	SM 2540D		1	269078	03/12/13 14:27	LE	TAL SAV
Dissolved	Analysis	9060		1	269144	03/12/13 10:31	JR	TAL SAV
Total/NA	Analysis	SM 2340C		1	269647	03/16/13 15:11	AJO	TAL SAV
Total/NA	Analysis	9060		1	269677	03/17/13 07:05	JR	TAL SAV
Total/NA	Analysis	1664A		1	269790	03/19/13 09:15	JS	TAL SAV
Total/NA	Analysis	300.0		5	270003	03/19/13 17:07	PAT	TAL SAV

Client Sample ID: WP02-105.0-GW-D

Lab Sample ID: 680-88114-2

Date Collected: 03/07/13 09:33

Matrix: Water

Date Received: 03/08/13 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268899	03/11/13 16:26	AJMC	TAL SAV
Dissolved	Analysis	6010C		1	269417	03/14/13 10:57	BCB	TAL SAV
Total/NA	Prep	3010A			269064	03/12/13 12:57	JKL	TAL SAV
Total/NA	Analysis	6010C		1	269621	03/16/13 02:35	BCB	TAL SAV
Total/NA	Analysis	SM 2320B		1	165391	03/18/13 14:29	AK	TAL DEN
Total/NA	Analysis	SM 2540C		1	268706	03/08/13 12:38	LE	TAL SAV
Total/NA	Analysis	9040C		1	268755	03/08/13 15:51	LE	TAL SAV
Total/NA	Analysis	7196A		1	268775	03/08/13 10:07	RW	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	268778	03/08/13 15:51	RW	TAL SAV
Total/NA	Analysis	300.0		5	268805	03/09/13 05:24	PAT	TAL SAV
Total/NA	Analysis	SM 3500 FE D		1	268885	03/11/13 10:48	JR	TAL SAV
Total/NA	Analysis	7196A		1	268886	03/11/13 10:50	JR	TAL SAV
Total/NA	Analysis	SM 2540D		1	269078	03/12/13 14:26	LE	TAL SAV
Dissolved	Analysis	9060		1	269144	03/12/13 10:51	JR	TAL SAV
Total/NA	Analysis	SM 2340C		1	269647	03/16/13 15:11	AJO	TAL SAV
Total/NA	Analysis	9060		1	269677	03/17/13 07:23	JR	TAL SAV

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: WP02-105.0-GW-D
Lab Sample ID: 680-88114-2
Date Collected: 03/07/13 09:33
Matrix: Water
Date Received: 03/08/13 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	269709	03/17/13 01:21	PAT	TAL SAV
Total/NA	Analysis	1664A		1	269790	03/19/13 09:15	JS	TAL SAV

Client Sample ID: WP-14-98.0
Lab Sample ID: 680-88114-3
Date Collected: 03/06/13 08:27
Matrix: Water
Date Received: 03/08/13 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268899	03/11/13 16:55	AJMC	TAL SAV

Client Sample ID: WP-14-103.0
Lab Sample ID: 680-88114-4
Date Collected: 03/06/13 09:21
Matrix: Water
Date Received: 03/08/13 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268899	03/11/13 17:25	AJMC	TAL SAV

Client Sample ID: WP-15-75.4
Lab Sample ID: 680-88114-5
Date Collected: 03/06/13 10:40
Matrix: Water
Date Received: 03/08/13 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268899	03/11/13 17:55	AJMC	TAL SAV

Client Sample ID: WP-16-68.0
Lab Sample ID: 680-88114-6
Date Collected: 03/07/13 09:20
Matrix: Water
Date Received: 03/08/13 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268899	03/11/13 18:24	AJMC	TAL SAV

Client Sample ID: WP-16-73.0
Lab Sample ID: 680-88114-7
Date Collected: 03/07/13 09:52
Matrix: Water
Date Received: 03/08/13 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268899	03/11/13 18:54	AJMC	TAL SAV

Lab Chronicle

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Client Sample ID: TB-030713
Date Collected: 03/07/13 08:00
Date Received: 03/08/13 09:21

Lab Sample ID: 680-88114-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	268899	03/11/13 13:58	AJMC	TAL SAV

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NY Site GW	680/1020	NY
TAL (LAB) PROJECT MANAGER: Betsy Beauchamp	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Joe Schmidt	CLIENT PHONE: 802-229-4541	CLIENT FAX
CLIENT NAME: STONE ENV.	CLIENT E-MAIL: jschmidt@stone-env.com	
CLIENT ADDRESS: 535 STONE Cutters Way, Montpelier, VT 05602		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ○
DATE DUE
EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	8260B 6013	8260B Total 8260B Diss.	8270C Total 8270C Diss	1664A 9040B	SM2340C	SM23 or B	300.0	SM3500-Fe D	7196A	8260B VOC	REMARKS
								HCl NaOH	HCl NaOH	None None	Unpres None	H2SO4 None	None	None	None	None	HCl	NUMBER OF CONTAINERS SUBMITTED
3/7/13	9:33	WP02-105.0-GW	G	X				3	3	3	2	1	1	1	1	1		
3/7/13	9:33	WP02-105.0-GW-D						3	3	3	2	1	1	1	1	1		
3/6/13	8:27	WP-14-98.0															3	
3/6/13	9:21	WP-14-103.0															3	
3/6/13	10:40	WP-15-75.4															3	
3/7/13	9:20	WP-16-68.0															3	
3/7/13	9:52	WP-16-73.0															3	
3/7/13	8:00	TB-030713	G	X													3	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	3/7/13	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	03/08/13	0921	YES ○ NO ○		680 88114	4.2 °C

TAL8240-680 (1008)

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Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-88114-1
SDG Number: 68088114

Login Number: 88114
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received and the COC.	False	500ml unpreserved volume not received for sample -1
Samples are received within Holding Time.	False	-3 through -8 are unpreserved vials, though the COC lists them as HCL
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	-2B, -1K, & -2K pH out of range.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-88114-1
SDG Number: 68088114

Login Number: 88114
List Number: 1
Creator: Laspe, Laura

List Source: TestAmerica Denver
List Creation: 03/15/13 03:04 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	03-31-13
A2LA	ISO/IEC 17025		399.01	03-31-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	03-31-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

Laboratory: TestAmerica Denver

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13

Certification Summary

Client: Stone Environmental
Project/Site: Scotia NY Site

TestAmerica Job ID: 680-88114-1
SDG: 68088114

Laboratory: TestAmerica Denver (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-30	04-05-13
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	06-01-13
California	State Program	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-13
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-13
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-13
Louisiana	NELAP	6	30785	06-30-13
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13
Nevada	State Program	9	CO0026	07-30-13
New Hampshire	NELAP	1	205310	04-28-13
New Jersey	NELAP	2	CO004	06-30-13
New Mexico	State Program	6	CO00026	06-30-13
New York	NELAP	2	11964	04-01-13
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-13
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	07-31-13
South Carolina	State Program	4	72002	06-30-13
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-08-00036	02-08-14
Utah	NELAP	8	QUAN5	06-30-13
Virginia	NELAP	3	460232	06-14-13
Washington	State Program	10	C583	08-03-13
West Virginia DEP	State Program	3	354	11-30-13
Wisconsin	State Program	5	999615430	08-31-13
Wyoming (UST)	A2LA	8		10-31-13

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-88114-2

SDG Number: 68088114

Job Description: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, VT 05602

Attention: Mr. Joseph Schmidl

Approved for release.
Michele Kersey
Project Manager I
3/29/2013 3:58 PM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com
03/29/2013

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN: C-GA-02; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

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SAMPLE SUMMARY

Client: Stone Environmental

Job Number: 680-88114-2
Sdg Number: 68088114

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-88114-1	WP02-105.0-GW	Water	03/07/2013 0933	03/08/2013 0921
680-88114-2	WP02-105.0-GW-D	Water	03/07/2013 0933	03/08/2013 0921

METHOD SUMMARY

Client: Stone Environmental

Job Number: 680-88114-2
Sdg Number: 68088114

Description	Lab Location	Method	Preparation Method
Matrix: Water			
General Sub Contract Method	SC0142	Subcontract	

Lab References:

SC0142 = Brooks Rand LLC

Method References:

March 29, 2013

TestAmerica
Attn: Michelle Kersey
5102 LaRoche Ave.
Savannah, GA 31404
mkersey@testamericainc.com

RE: Brooks Rand Project: TST-SV1301 Client Project: 102305-R-CTask 6A

Dear Ms. Kersey,

On March 8, 2013, Brooks Rand Labs (BRL) received two (2) water samples. The samples were logged-in for analyses manganese speciation contractually defined as total recoverable manganese (Mn), Mn(II) and Mn(IV) determined by difference (see speciation note below). The samples were received, prepared, analyzed, and stored according to BRL SOP(s) and EPA methodology.

Manganese Speciation Note: This is an operationally defined method where the manganese (Mn) species are determined by the physical separation using filtration through 0.45-µm filters. Reduced manganese (Mn^{2+}) is soluble and oxidized manganese (Mn^{4+}) is not. Therefore, determinations on a sample that is filtered prior to any exposure to oxygen yields concentrations of reduced species, and determinations on an unfiltered sample yield a measurement of oxidized (or reduced and oxidized) species. For this Mn speciation method, samples are field-filtered using ventable in-line filters with no exposure to the air prior to filtration. Due to the chemical properties described above, the filtered sample is defined as Mn(II). An additional unfiltered sample is collected and analyzed for total recoverable Mn. Mn(IV) is calculated by the difference of total recoverable Mn minus Mn(II).

The results may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* for sample-specific MDL, MRL, and other details.

All results have been reported to the concentration of the method detection limit (MDL), referred to as the detection limit (DL) in the DoD QSM. The Limit of Quantitation (LOQ) is defined in this report as the method reporting limit (MRL).

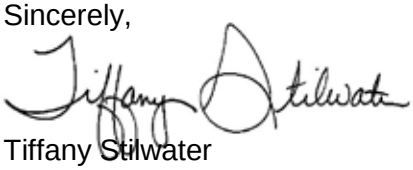
The digestion method used for the samples took place in the original sample container. Therefore, the matrix spikes were prepared at the instrument and would be the same as post-digestion spikes.

The DoD acceptance criteria for the dilution tests state that the diluted result must be ±10% of the native result. Therefore, when the native sample produces a result of 1 (unit independent), the acceptable range for the dilution duplicate is 0.9 - 1.1 units. However, in the upper limit the relative percent difference (RPD) between the two values is 9.5% whereas in the lower limit the RPD is 10.5%. BRL has set the RPD limit to 10% in the report as this is the closest approximation the LIMS is capable of representing.

Per the client's specific request to adhere to the EPA Draft Method 1638 requirement of non-method blank corrected data, the results were not method blank corrected as described in the calculations section of the relevant BRL SOP(s). This deviates from BRL's standard protocol for trace level data quality and BRL believes that all low-level metals analyses should be method blank corrected and that not doing so may lead to less accurate results. The results from the method blanks that were analyzed are listed in the *Method Blanks & Reporting Limits* section of this report.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details, see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Tiffany Stilwater
Project Manager
tiffany@brooksrand.com



Lydia Greaves
Project Manager
lydia@brooksrand.com

Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations /certifications, please visit our website at <http://www.brooksrand.com/default.asp?contentID=586>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	**MS**	matrix spike
BRL	Brooks Rand Labs	**MSD**	matrix spike duplicate
BS	laboratory fortified blank	**ND**	non-detect
CAL	calibration standard	**NR**	non-reportable
CCV	continuing calibration verification	**PS**	post preparation spike
COC	chain of custody record	**REC**	percent recovery
CRM	certified reference material	**RPD**	relative percent difference
D	dissolved fraction	**RSD**	relative standard deviation
DUP	duplicate	**SCV**	secondary calibration verification
ICV	initial calibration verification	**SOP**	standard operating procedure
MDL	method detection limit	**SRM**	standard reference material
MRL	method reporting limit	**T**	total recoverable fraction

Definition of Data Qualifiers

(Effective 9/23/09)

B Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
E An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H Holding time and/or preservation requirements not met. Result is estimated.
J Estimated value. A full explanation is presented in the narrative.
J-M Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
J-N Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
M Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
N Spike recovery was not within acceptance criteria. Result is estimated.
R Rejected, unusable value. A full explanation is presented in the narrative.
U Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BRL.

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
WP02-105.0-GW	1310027-01	Ground Water	Sample	03/07/2013	03/08/2013
WP02-105.0-GW-D	1310027-02	Ground Water	Sample	03/07/2013	03/08/2013

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Mn	Water	EPA 1638	03/20/2013	03/21/2013	B130443	1300197
Mn(II)	Water	EPA 1638	03/20/2013	03/21/2013	B130442	1300197

Sample Results

Sample	Analyte	Basis	Result	Qualifier	MDL	LOD	MRL	Unit	Batch	Sequence
WP02-105.0-GW										
1310027-01	Mn	T	2340		1.05	3.16	3.16	µg/L	B130443	1300197
1310027-01	Mn(II)	D	54.2		0.021	0.063	0.063	µg/L	B130442	1300197
1310027-01	Mn(IV)	N/A	2290		1.07	6.36	3.22	µg/L	[CALC]	N/A
WP02-105.0-GW-D										
1310027-02	Mn	T	2370		1.05	3.16	3.16	µg/L	B130443	1300197
1310027-02	Mn(II)	D	53.6		0.021	0.063	0.063	µg/L	B130442	1300197
1310027-02	Mn(IV)	N/A	2320		1.07	9.52	3.22	µg/L	[CALC]	N/A

Accuracy & Precision Summary

Batch: B130442
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130442-BS2	**Laboratory Fortified Blank (1311005)**						
	Mn(II)		1.053	1.076	µg/L	102% 80-120	
B130442-SRM1	**Certified Reference Material (1202032, NIST 1643e)**						
	Mn(II)		38.97	39.78	µg/L	102% 75-125	
B130442-DUP1	**Duplicate (1309028-01)**						
	Mn(II)	40.26		40.42	µg/L		0.4% 20
B130442-DUP2	**Duplicate (1309028-01)**						
	Mn(II)	40.26		42.03	µg/L		4% 10
B130442-MS1	**Matrix Spike (1309028-01)**						
	Mn(II)	40.26	52.63	94.40	µg/L	103% 80-120	
B130442-MSD1	**Matrix Spike Duplicate (1309028-01)**						
	Mn(II)	40.26	52.63	90.48	µg/L	95% 80-120	4% 20

Batch: B130443
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130443-BS2	**Laboratory Fortified Blank (1311005)**						
	Mn		1.053	1.08	µg/L	102% 80-120	
B130443-SRM1	**Certified Reference Material (1202032, NIST 1643e)**						
	Mn		38.97	39.78	µg/L	102% 75-125	
B130443-DUP3	**Duplicate (1309028-01)**						
	Mn	1017		1048	µg/L		3% 20

Accuracy & Precision Summary

Batch: B130443
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130443-DUP4	**Duplicate (1309028-01)**						
	Mn	1017		1062	µg/L		4% 20
B130443-MS2	**Matrix Spike (1309028-01)**						
	Mn	1017	21050	22000	µg/L	100% 80-120	
B130443-MSD2	**Matrix Spike Duplicate (1309028-01)**						
	Mn	1017	21050	22970	µg/L	104% 80-120	4% 20

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Method Blanks & Reporting Limits

Batch: B130442
Matrix: Water
Method: EPA 1638
Analyte: Mn(II)

Sample	Result	Units
B130442-BLK5	0.0002	µg/L
B130442-BLK6	0.003	µg/L
B130442-BLK7	-0.002	µg/L
B130442-BLK8	-0.0009	µg/L

DoD QSEM Limit: 0.032

MDL: 0.021
MRL: 0.063

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Method Blanks & Reporting Limits

Batch: B130443
Matrix: Water
Method: EPA 1638
Analyte: Mn

Sample	Result	Units
B130443-BLK5	0.0002	µg/L
B130443-BLK6	0.003	µg/L
B130443-BLK7	-0.002	µg/L
B130443-BLK8	-0.0009	µg/L

DoD QSEM Limit: 0.03

MDL: 0.01
MRL: 0.05

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Sample Containers

Lab ID: 1310027-01
Sample: WP02-105.0-GW

Report Matrix: Ground Water
Sample Type: Sample

Collected: 03/07/2013
Received: 03/08/2013

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W-D	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler
B	Bottle HDPE ICP-W	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler

Lab ID: 1310027-02
Sample: WP02-105.0-GW-D

Report Matrix: Ground Water
Sample Type: Sample

Collected: 03/07/2013
Received: 03/08/2013

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Bottle HDPE ICP-W-D	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler
B	Bottle HDPE ICP-W	125mL	13-0022	0.1% HNO3 (BRL)	1306044	<2	Cooler

Shipping Containers

Cooler

Received: March 8, 2013 9:00
Tracking No: 802639396657 via FedEx
Coolant Type: Ice
Temperature: 1.5 °C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? No
Custody seals intact? No
COC present? Yes

BROOKS RAND LABS
MEANINGFUL METALS DATA
3958 6th Avenue NW
Seattle, WA 98107
Phone: 206-632-6206
Fax: 206-632-6017
samples@brooksrand.com
www.brooksrand.com

Chain of Custody Record

BRL Report 1310027

1310027

White: LAB COPY
Yellow: CUSTOMER COPY

03/29/2013

Client: STONE ENV.	Address: 535 STONE Cutters Way	COC receipt confirmation? (Y) / N	
Contact: Joe Schmidl		If so, by: email / fax (circle one)	
Client project ID: 102305-R-C Task 6A		Email: jschmidl@stone-env.com	
PO #:	Phone #: 802-229-4541	Fax #:	

Requested TAT in business days:
- ☐ 20 (standard)
- ☐ 15
- ☐ 10
- ☐ 5
- ☐ Other ____

Surcharges apply for expedited turn around times.

	Sample ID	Collection: Date	Collection: Time	Miscellaneous: Sampler (initials)	Miscellaneous: Matrix type	Miscellaneous: # of containers	Miscellaneous: Field filtered? (Y/N)	Field Preservation: Unpreserved / ice only	Field Preservation: HCl / HNO3 (circle one)	Field Preservation: Other (specify)	Analyses required: Total Hg, EPA 1631	Analyses required: Methyl Hg, EPA 1630	Analyses required: ICP-MS Metals (specify)	Analyses required: As / Se species (specify)	Analyses required: % Solids	Analyses required: Filtration	Analyses required: Other (specify) 1638 mod: Ni,Cd	Analyses required: Other (specify)	Comments
1	WP02-105.0-GW	3/7/13	9:33	DSL	GW	1	Y		X								X		
2	WP02-105.0-GW	3/7/13	↓	↓	↓	↓	N		↓								↓		
3	WP02-105.0-GW-D	3/7/13					Y												
4	WP02-105.0-GW-D	3/7/13	↓	↓	↓	↓	N		↓								↓		
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date: 3/7/13	Time: 17:00	Relinquished by:
Received by:	Date:	Time:	Received at BRL by:
Shipping carrier:	# of coolers:		BRL work order ID:

Date:	Time:
Date: 3/8/13	Time: 0900
BRL project ID:	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-88345-1

SDG Number: 68088345

Job Description: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, VT 05602

Attention: Mr. Joseph Schmidl

Approved for release.
Michele Kersey
Project Manager I
3/28/2013 3:04 PM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com
03/28/2013

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Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN: C-GA-02; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

EXECUTIVE SUMMARY - Detections

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
680-88345-1	**MW26-76.5-S**					
In Place Density		1.74			g/cc	D2937
Sieve Size 3 inch - Percent Finer		100.0			% Passing	D422
Gravel		3.8			%	D422
Hydrometer Reading 1 - Particle Size		33.2			um	D422
Sieve Size 2 inch - Percent Finer		100.0			% Passing	D422
Sand		83.6			%	D422
Hydrometer Reading 2 - Particle Size		21.2			um	D422
Sieve Size 1.5 inch - Percent Finer		100.0			% Passing	D422
Coarse Sand		2.6			%	D422
Hydrometer Reading 3 - Particle Size		12.4			um	D422
Sieve Size 1 inch - Percent Finer		100.0			% Passing	D422
Medium Sand		39.5			%	D422
Hydrometer Reading 4 - Particle Size		8.9			um	D422
Sieve Size 0.75 inch - Percent Finer		100.0			% Passing	D422
Fine Sand		41.5			%	D422
Hydrometer Reading 5 - Particle Size		6.4			um	D422
Sieve Size 0.375 inch - Percent Finer		98.5			% Passing	D422
Silt		7.7			%	D422
Hydrometer Reading 6 - Particle Size		3.1			um	D422
Sieve Size #4 - Percent Finer		96.2			% Passing	D422
Clay		5.0			%	D422
Hydrometer Reading 7 - Particle Size		1.3			um	D422
Sieve Size #10 - Percent Finer		93.6			% Passing	D422
Sieve Size #20 - Percent Finer		89.5			% Passing	D422
Sieve Size #40 - Percent Finer		54.1			% Passing	D422
Sieve Size #60 - Percent Finer		23.6			% Passing	D422
Sieve Size #80 - Percent Finer		17.3			% Passing	D422
Sieve Size #100 - Percent Finer		15.9			% Passing	D422
Sieve Size #200 - Percent Finer		12.6			% Passing	D422
Hydrometer Reading 1 - Percent Finer		8.6			% Passing	D422
Hydrometer Reading 2 - Percent Finer		7.7			% Passing	D422
Hydrometer Reading 3 - Percent Finer		6.3			% Passing	D422
Hydrometer Reading 4 - Percent Finer		5.4			% Passing	D422
Hydrometer Reading 5 - Percent Finer		5.0			% Passing	D422
Hydrometer Reading 6 - Percent Finer		3.5			% Passing	D422
Hydrometer Reading 7 - Percent Finer		2.6			% Passing	D422
Specific Gravity at 20 deg Celsius		2.69			NONE	D854
Porosity		35.4			%	LAB-BUR
Void Ratio		0.5			NONE	LAB-BUR

EXECUTIVE SUMMARY - Detections

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
680-88345-2	**MW26-107.5-S**					
In Place Density		1.55			g/cc	D2937
Sieve Size 3 inch - Percent Finer		100.0			% Passing	D422
Gravel		0.0			%	D422
Hydrometer Reading 1 - Particle Size		34.3			um	D422
Sieve Size 2 inch - Percent Finer		100.0			% Passing	D422
Sand		82.7			%	D422
Hydrometer Reading 2 - Particle Size		21.8			um	D422
Sieve Size 1.5 inch - Percent Finer		100.0			% Passing	D422
Coarse Sand		0.9			%	D422
Hydrometer Reading 3 - Particle Size		12.8			um	D422
Sieve Size 1 inch - Percent Finer		100.0			% Passing	D422
Medium Sand		0.4			%	D422
Hydrometer Reading 4 - Particle Size		9.3			um	D422
Sieve Size 0.75 inch - Percent Finer		100.0			% Passing	D422
Fine Sand		81.4			%	D422
Hydrometer Reading 5 - Particle Size		6.6			um	D422
Sieve Size 0.375 inch - Percent Finer		100.0			% Passing	D422
Silt		14.4			%	D422
Hydrometer Reading 6 - Particle Size		3.2			um	D422
Sieve Size #4 - Percent Finer		100.0			% Passing	D422
Clay		2.9			%	D422
Hydrometer Reading 7 - Particle Size		1.4			um	D422
Sieve Size #10 - Percent Finer		99.1			% Passing	D422
Sieve Size #20 - Percent Finer		98.8			% Passing	D422
Sieve Size #40 - Percent Finer		98.7			% Passing	D422
Sieve Size #60 - Percent Finer		93.6			% Passing	D422
Sieve Size #80 - Percent Finer		73.2			% Passing	D422
Sieve Size #100 - Percent Finer		54.2			% Passing	D422
Sieve Size #200 - Percent Finer		17.3			% Passing	D422
Hydrometer Reading 1 - Percent Finer		6.3			% Passing	D422
Hydrometer Reading 2 - Percent Finer		5.8			% Passing	D422
Hydrometer Reading 3 - Percent Finer		4.4			% Passing	D422
Hydrometer Reading 4 - Percent Finer		3.4			% Passing	D422
Hydrometer Reading 5 - Percent Finer		2.9			% Passing	D422
Hydrometer Reading 6 - Percent Finer		2.8			% Passing	D422
Hydrometer Reading 7 - Percent Finer		1.8			% Passing	D422
Specific Gravity at 20 deg Celsius		2.69			NONE	D854
Porosity		42.6			%	LAB-BUR
Void Ratio		0.7			NONE	LAB-BUR

METHOD SUMMARY

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Description	Lab Location	Method	Preparation Method
Matrix Solid			
Density of Soil in Place by the Drive-Cylinder Method	TAL BUR	ASTM D2937	
Grain Size	TAL BUR	ASTM D422	
Specific Gravity of Soils	TAL BUR	ASTM D854	
Porosity	TAL BUR	ASTM LAB-BUR	

Lab References:

TAL BUR = TestAmerica Burlington

Method References:

ASTM = ASTM International

METHOD / ANALYST SUMMARY

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Method	Analyst	Analyst ID
ASTM D2937	Peterson, Mark A	MAP
ASTM D422	Peterson, Mark A	MAP
ASTM D854	Peterson, Mark A	MAP
ASTM LAB-BUR	Peterson, Mark A	MAP

SAMPLE SUMMARY

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-88345-1	MW26-76.5-S	Solid	03/14/2013 0950	03/15/2013 0924
680-88345-2	MW26-107.5-S	Solid	03/14/2013 1515	03/15/2013 0924

SAMPLE RESULTS

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-76.5-S**

Lab Sample ID: 680-88345-1
Client Matrix: Solid

Date Sampled: 03/14/2013 0950
Date Received: 03/15/2013 0924

D2937 Density of Soil in Place by the Drive-Cylinder Method

Analysis Method:	D2937	Analysis Batch:	200-53100	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	03/18/2013 1650			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (g/cc)	Qualifier	DL	LOQ
In Place Density		1.74			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-107.5-S**

Lab Sample ID: 680-88345-2
Client Matrix: Solid

Date Sampled: 03/14/2013 1515
Date Received: 03/15/2013 0924

D2937 Density of Soil in Place by the Drive-Cylinder Method

Analysis Method:	D2937	Analysis Batch:	200-53100	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	03/18/2013 1650			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (g/cc)	Qualifier	DL	LOQ
In Place Density		1.55			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-76.5-S**

Lab Sample ID: 680-88345-1
Client Matrix: Solid

Date Sampled: 03/14/2013 0950
Date Received: 03/15/2013 0924

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	200-53233	Instrument ID:	D422_import
	N/A	Prep Batch:	N/A	Lab File ID:	680-88345-A-1.txt
Dilution:	1.0			Initial Weight/Volume:	212.58 g
Analysis Date:	03/18/2013 1621			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	DL	LOQ
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		98.5			
Sieve Size #4 - Percent Finer		96.2			
Sieve Size #10 - Percent Finer		93.6			
Sieve Size #20 - Percent Finer		89.5			
Sieve Size #40 - Percent Finer		54.1			
Sieve Size #60 - Percent Finer		23.6			
Sieve Size #80 - Percent Finer		17.3			
Sieve Size #100 - Percent Finer		15.9			
Sieve Size #200 - Percent Finer		12.6			
Hydrometer Reading 1 - Percent Finer		8.6			
Hydrometer Reading 2 - Percent Finer		7.7			
Hydrometer Reading 3 - Percent Finer		6.3			
Hydrometer Reading 4 - Percent Finer		5.4			
Hydrometer Reading 5 - Percent Finer		5.0			
Hydrometer Reading 6 - Percent Finer		3.5			
Hydrometer Reading 7 - Percent Finer		2.6			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-76.5-S**

Lab Sample ID: 680-88345-1
Client Matrix: Solid

Date Sampled: 03/14/2013 0950
Date Received: 03/15/2013 0924

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	200-53233	Instrument ID:	D422_import
	N/A	Prep Batch:	N/A	Lab File ID:	680-88345-A-1.txt
Dilution:	1.0			Initial Weight/Volume:	212.58 g
Analysis Date:	03/18/2013 1621			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	DL	LOQ
Gravel		3.8			
Sand		83.6			
Coarse Sand		2.6			
Medium Sand		39.5			
Fine Sand		41.5			
Silt		7.7			
Clay		5.0			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-76.5-S**

Lab Sample ID: 680-88345-1
Client Matrix: Solid

Date Sampled: 03/14/2013 0950
Date Received: 03/15/2013 0924

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	200-53233	Instrument ID:	D422_import
	N/A	Prep Batch:	N/A	Lab File ID:	680-88345-A-1.txt
Dilution:	1.0			Initial Weight/Volume:	212.58 g
Analysis Date:	03/18/2013 1621			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (um)	Qualifier	DL	LOQ
Hydrometer Reading 1 - Particle Size		33.2			
Hydrometer Reading 2 - Particle Size		21.2			
Hydrometer Reading 3 - Particle Size		12.4			
Hydrometer Reading 4 - Particle Size		8.9			
Hydrometer Reading 5 - Particle Size		6.4			
Hydrometer Reading 6 - Particle Size		3.1			
Hydrometer Reading 7 - Particle Size		1.3			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-107.5-S**

Lab Sample ID: 680-88345-2
Client Matrix: Solid

Date Sampled: 03/14/2013 1515
Date Received: 03/15/2013 0924

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	200-53233	Instrument ID:	D422_import
	N/A	Prep Batch:	N/A	Lab File ID:	680-88345-B-2.txt
Dilution:	1.0			Initial Weight/Volume:	195.89 g
Analysis Date:	03/18/2013 1623			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (% Passing)	Qualifier	DL	LOQ
Sieve Size 3 inch - Percent Finer		100.0			
Sieve Size 2 inch - Percent Finer		100.0			
Sieve Size 1.5 inch - Percent Finer		100.0			
Sieve Size 1 inch - Percent Finer		100.0			
Sieve Size 0.75 inch - Percent Finer		100.0			
Sieve Size 0.375 inch - Percent Finer		100.0			
Sieve Size #4 - Percent Finer		100.0			
Sieve Size #10 - Percent Finer		99.1			
Sieve Size #20 - Percent Finer		98.8			
Sieve Size #40 - Percent Finer		98.7			
Sieve Size #60 - Percent Finer		93.6			
Sieve Size #80 - Percent Finer		73.2			
Sieve Size #100 - Percent Finer		54.2			
Sieve Size #200 - Percent Finer		17.3			
Hydrometer Reading 1 - Percent Finer		6.3			
Hydrometer Reading 2 - Percent Finer		5.8			
Hydrometer Reading 3 - Percent Finer		4.4			
Hydrometer Reading 4 - Percent Finer		3.4			
Hydrometer Reading 5 - Percent Finer		2.9			
Hydrometer Reading 6 - Percent Finer		2.8			
Hydrometer Reading 7 - Percent Finer		1.8			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-107.5-S**

Lab Sample ID: 680-88345-2
Client Matrix: Solid

Date Sampled: 03/14/2013 1515
Date Received: 03/15/2013 0924

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	200-53233	Instrument ID:	D422_import
	N/A	Prep Batch:	N/A	Lab File ID:	680-88345-B-2.txt
Dilution:	1.0			Initial Weight/Volume:	195.89 g
Analysis Date:	03/18/2013 1623			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	DL	LOQ
Gravel		0.0			
Sand		82.7			
Coarse Sand		0.9			
Medium Sand		0.4			
Fine Sand		81.4			
Silt		14.4			
Clay		2.9			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-107.5-S**

Lab Sample ID: 680-88345-2
Client Matrix: Solid

Date Sampled: 03/14/2013 1515
Date Received: 03/15/2013 0924

D422 Grain Size

Analysis Method:	D422	Analysis Batch:	200-53233	Instrument ID:	D422_import
	N/A	Prep Batch:	N/A	Lab File ID:	680-88345-B-2.txt
Dilution:	1.0			Initial Weight/Volume:	195.89 g
Analysis Date:	03/18/2013 1623			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (um)	Qualifier	DL	LOQ
Hydrometer Reading 1 - Particle Size		34.3			
Hydrometer Reading 2 - Particle Size		21.8			
Hydrometer Reading 3 - Particle Size		12.8			
Hydrometer Reading 4 - Particle Size		9.3			
Hydrometer Reading 5 - Particle Size		6.6			
Hydrometer Reading 6 - Particle Size		3.2			
Hydrometer Reading 7 - Particle Size		1.4			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-76.5-S**

Lab Sample ID: 680-88345-1
Client Matrix: Solid

Date Sampled: 03/14/2013 0950
Date Received: 03/15/2013 0924

D854 Specific Gravity of Soils

Analysis Method:	D854	Analysis Batch:	200-53101	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	03/18/2013 1651			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (NONE)	Qualifier	DL	LOQ
Specific Gravity at 20 deg Celsius		2.69			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-107.5-S**

Lab Sample ID: 680-88345-2
Client Matrix: Solid

Date Sampled: 03/14/2013 1515
Date Received: 03/15/2013 0924

D854 Specific Gravity of Soils

Analysis Method:	D854	Analysis Batch:	200-53101	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	03/18/2013 1651			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (NONE)	Qualifier	DL	LOQ
Specific Gravity at 20 deg Celsius		2.69			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-76.5-S**

Lab Sample ID: 680-88345-1
Client Matrix: Solid

Date Sampled: 03/14/2013 0950
Date Received: 03/15/2013 0924

LAB-BUR Porosity

Analysis Method:	LAB-BUR	Analysis Batch:	200-53102	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	03/18/2013 1652			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	DL	LOQ
Porosity		35.4			

Analyte	DryWt Corrected: N	Result (NONE)	Qualifier	DL	LOQ
Void Ratio		0.5			

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Client Sample ID: **MW26-107.5-S**

Lab Sample ID: 680-88345-2
Client Matrix: Solid

Date Sampled: 03/14/2013 1515
Date Received: 03/15/2013 0924

LAB-BUR Porosity

Analysis Method:	LAB-BUR	Analysis Batch:	200-53102	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	03/18/2013 1652			Final Weight/Volume:	
Prep Date:	N/A				

Analyte	DryWt Corrected: N	Result (%)	Qualifier	DL	LOQ
Porosity		42.6			

Analyte	DryWt Corrected: N	Result (NONE)	Qualifier	DL	LOQ
Void Ratio		0.7			

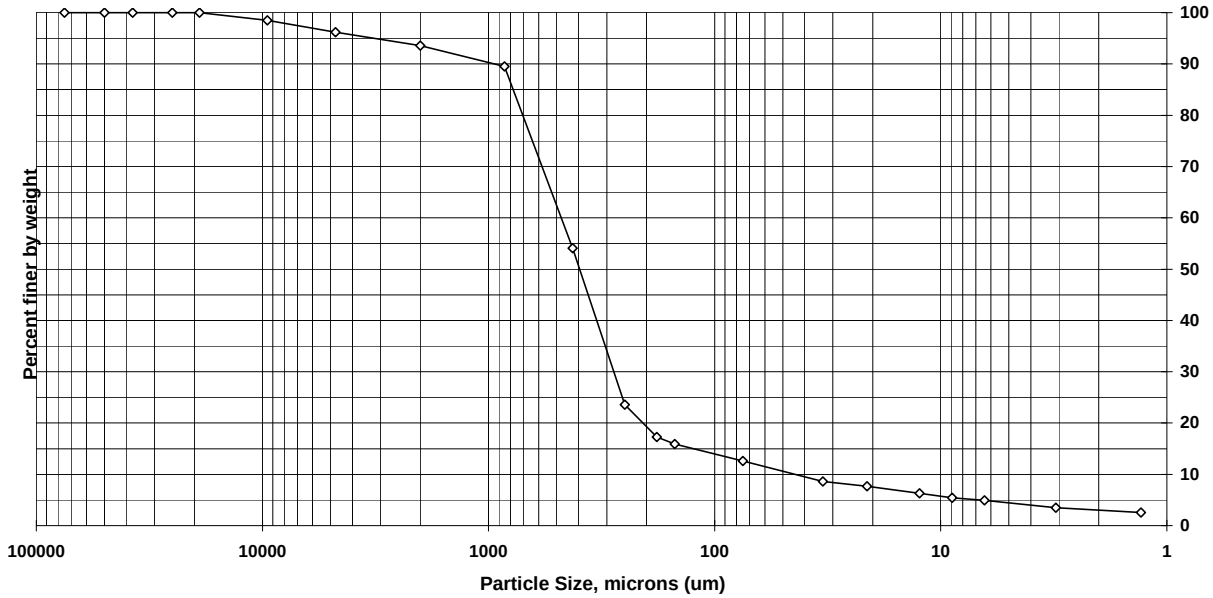
Particle Size of Soils by ASTM D422

				Date Received:	3/15/2013
Sample ID:	MW26-76.5-S	**Percent Solids:**	83.1%	**Start Date:**	3/18/2013
Lab ID:	680-88345-A-1	**Specific Gravity:**	2.650	**End Date:**	3/21/2013

Shape (> #10): rounded

Non-soil material: n/a

Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	98.5	1.5
#4	4750	96.2	2.3
#10	2000	93.6	2.6
#20	850	89.5	4.1
#40	425	54.1	35.4
#60	250	23.6	30.5
#80	180	17.3	6.3
#100	150	15.9	1.4
#200	75	12.6	3.3
Hyd1	33.2	8.6	4.0
Hyd2	21.2	7.7	0.9
Hyd3	12.4	6.3	1.4
Hyd4	8.9	5.4	0.9
Hyd5	6.4	5.0	0.5
Hyd6	3.1	3.5	1.4
Hyd7	1.3	2.6	1.0

Soil Classification	Percent of sample
Gravel	3.8
Sand	83.6
Coarse Sand	2.6
Medium Sand	39.5
Fine Sand	41.5
Silt	7.7
Clay	5.0

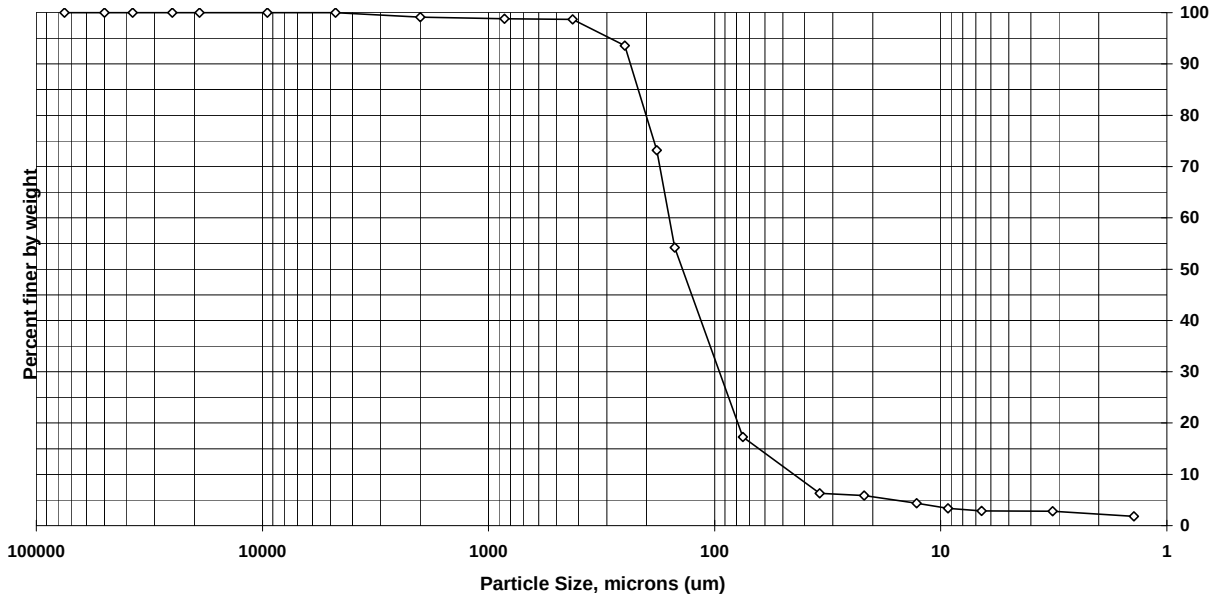
Particle Size of Soils by ASTM D422

				Date Received:	3/15/2013
Sample ID:	MW26-107.5-S	**Percent Solids:**	83.9%	**Start Date:**	3/18/2013
Lab ID:	680-88345-B-2	**Specific Gravity:**	2.650	**End Date:**	3/21/2013

Shape (> #10): subangular

Non-soil material: n/a

Hardness (> #10): hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	100.0	0.0
#10	2000	99.1	0.9
#20	850	98.8	0.3
#40	425	98.7	0.1
#60	250	93.6	5.1
#80	180	73.2	20.4
#100	150	54.2	19.0
#200	75	17.3	36.9
Hyd1	34.3	6.3	11.0
Hyd2	21.8	5.8	0.5
Hyd3	12.8	4.4	1.5
Hyd4	9.3	3.4	1.0
Hyd5	6.6	2.9	0.5
Hyd6	3.2	2.8	0.0
Hyd7	1.4	1.8	1.0

Soil Classification	Percent of sample
Gravel	0.0
Sand	82.7
Coarse Sand	0.9
Medium Sand	0.4
Fine Sand	81.4
Silt	14.4
Clay	2.9

Sediment Grain Size - D422

Client	
Client Sample ID	MW26-76.5-S
Lab Sample ID	680-88345-A-1

Date Received	3/15/2013
Start Date	03/18/2013 16:21
End Date	03/21/2013 11:39

Dry Weight Determination

Tin Weight	0.95	g
Wet Sample + Tin	32.39	g
Dry Sample + Tin	27.08	g
% Moisture	16.89	%

Non-soil material:	n/a
Shape (> #10):	rounded
Hardness (> #10):	hard

Date/Time in oven	03/18/2013 16:23
Date/Time out of oven	03/19/2013 19:08

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)		212.58	212.58
Sample Weight (Oven Dried)			177

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			11.3
Sample <#10			166
% Passing #10			78.1

Hydrometer Data

Serial Number	540519
Calib. Date (mm/dd/yyyy)	05/06/2010
Low Temp (C)	17.0
Reading at Low Temp	1.0050
High Temp (C)	23.0
Reading at High Temp	1.0045
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.006416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample		% Finer	Classification	Sub Class
3 inch	75000			0.00	g	100.0	Gravel	
2 inch	50000			0.00	g	100.0	Gravel	
1.5 inch	37500			0.00	g	100.0	Gravel	
1 inch	25000			0.00	g	100.0	Gravel	
3/4 inch	19000			0.00	g	100.0	Gravel	
3/8 inch	9500	447.34	450.08	2.74	g	98.5	Gravel	
#4	4750	488.10	492.11	4.01	g	96.2	Gravel	
#10	2000	462.77	467.35	4.58	g	93.6	Sand	Coarse
#20	850	381.74	388.94	7.20	g	89.5	Sand	Medium
#40	425	352.96	415.56	62.60	g	54.1	Sand	Medium
#60	250	340.83	394.85	54.02	g	23.6	Sand	Fine
#80	180	330.03	341.17	11.14	g	17.3	Sand	Fine
#100	150	327.05	329.54	2.49	g	15.9	Sand	Fine
#200	75	306.51	312.30	5.79	g	12.6	Sand	Fine
				0.00	g	12.6		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	177

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0140	22.5	33.2	8.58	Silt	
5	5	1.0130	22.5	21.2	7.67	Silt	
15	15	1.0115	22.5	12.4	6.31	Silt	
30	30	1.0105	22.5	8.9	5.41	Silt	
60	58	1.0100	22.5	6.4	4.95	Silt	
250	256	1.0085	21.5	3.1	3.52	Clay	
1440	1440	1.0075	21.0	1.3	2.57	Clay	

Sediment Grain Size - D422

Client	
Client Sample ID	MW26-107.5-S
Lab Sample ID	680-88345-B-2

Date Received	3/15/2013
Start Date	03/18/2013 16:23
End Date	03/21/2013 11:41

Dry Weight Determination

Tin Weight	0.98	g
Wet Sample + Tin	30.98	g
Dry Sample + Tin	26.14	g
% Moisture	16.13	%

Non-soil material:	n/a
Shape (> #10):	subangular
Hardness (> #10):	hard

Date/Time in oven	03/18/2013 16:27
Date/Time out of oven	03/19/2013 19:08

Sample Weights	Tare (g)	Pan+Samp (g)	Samp (g)
Sample Weight (Wet)		195.89	195.89
Sample Weight (Oven Dried)			164

Sample Split (oven dried)	Tare (g)	Pan+Samp (g)	Samp (g)
Sample >=#10			1.49
Sample <#10			163
% Passing #10			83.2

Hydrometer Data

Serial Number	540519
Calib. Date (mm/dd/yyyy)	05/06/2010
Low Temp (C)	17.0
Reading at Low Temp	1.0050
High Temp (C)	23.0
Reading at High Temp	1.0045
Hydrometer Cal Slope	-8.33333E-05
Hydrometer Cal Intercept	1.006416667
Default Soil Gravity	2.6500

Gravel/Sand Fraction (Sieves)

Sample Fraction	Size (um)	Pan Tare (g)	Pan+Sample (g)	Sample		% Finer	Classification	Sub Class
3 inch	75000			0.00	g	100.0	Gravel	
2 inch	50000			0.00	g	100.0	Gravel	
1.5 inch	37500			0.00	g	100.0	Gravel	
1 inch	25000			0.00	g	100.0	Gravel	
3/4 inch	19000			0.00	g	100.0	Gravel	
3/8 inch	9500			0.00	g	100.0	Gravel	
#4	4750			0.00	g	100.0	Gravel	
#10	2000	462.77	464.26	1.49	g	99.1	Sand	Coarse
#20	850	381.74	382.21	0.47	g	98.8	Sand	Medium
#40	425	352.96	353.15	0.19	g	98.7	Sand	Medium
#60	250	340.83	349.27	8.44	g	93.6	Sand	Fine
#80	180	330.03	363.41	33.38	g	73.2	Sand	Fine
#100	150	327.05	358.22	31.17	g	54.2	Sand	Fine
#200	75	306.51	366.98	60.47	g	17.3	Sand	Fine
				0.00	g	17.3		

Adjusted Hydrometer Sample Mass

Hydrometer Sample Mass (g)	164

Silt/Clay Fraction (Hydrometer Test)

Hydrometer Test Time (min)	Actual	Spec. Gravity	Temp C	Particle Size (Micron)	% Finer	Classification	Sub Class
2	2	1.0110	22.5	34.3	6.32	Silt	
5	5	1.0105	22.5	21.8	5.84	Silt	
15	15	1.0090	22.5	12.8	4.37	Silt	
30	29	1.0080	22.5	9.3	3.39	Silt	
60	58	1.0075	22.0	6.6	2.86	Silt	
250	250	1.0075	21.5	3.2	2.82	Clay	
1440	1434	1.0065	21.0	1.4	1.8	Clay	

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

QUALITY CONTROL RESULTS

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Geotechnical					
Analysis Batch:200-53100					
680-88345-1	MW26-76.5-S	T	Solid	D2937	
680-88345-2	MW26-107.5-S	T	Solid	D2937	
Analysis Batch:200-53101					
680-88345-1	MW26-76.5-S	T	Solid	D854	
680-88345-2	MW26-107.5-S	T	Solid	D854	
Analysis Batch:200-53102					
680-88345-1	MW26-76.5-S	T	Solid	LAB-BUR	
680-88345-2	MW26-107.5-S	T	Solid	LAB-BUR	
Analysis Batch:200-53233					
680-88345-1	MW26-76.5-S	T	Solid	D422	
680-88345-2	MW26-107.5-S	T	Solid	D422	

Report Basis

T = Total

TestAmerica Savannah
5102 LaRoche Avenue

Savannah, GA 31404
phone 912.354.7858 fax 912.352.0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Joseph Schmidl	Site Contact: J. Schmidl	Date: 3/14/13	COC No:
Stone Environmental, Inc.	Tel/Fax: (802) 229-5377	Lab Contact: M. Kersey	Carrier: FedEx	1 of 1 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-4541 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☑ 2 weeks			
Project Name: Scotia Naval Depot	☐ 1 week			Job / SDG No.:
Site:	☐ 2 days			
P O #: 102305-R-C / Task 5B	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	Porosity	Bulk Density	Grain Size	Sample Specific Notes:
MW26-76.5-S	3/14/13	09:50	Soil	Soil	2	F	G	✓	✓	✓	
MW26-107.5-S	3/14/13	15:15	Soil	Soil	2	F	G	✓	✓	✓	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

1.4°C 680-88345

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Stone Environmental, Inc	3/14/13 17:30			
Relinquished by:	Company:	Date/Time:	Received by:	Company: TH	Date/Time: 03/15/13 0924
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-88345-1
SDG Number: 68088345

Login Number: 88345
List Number: 1
Creator: Barnett, Eddie T

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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?	N/A	
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Stone Environmental

Job Number: 680-88345-1
SDG Number: 68088345

Login Number: 88345
List Number: 1
Creator: Marion, Greg T

List Source: TestAmerica Burlington
List Creation: 03/16/13 02:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	430806
Sample custody seals, if present, are intact.	N/A	
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	4.8ºC IR GUN ID 181/CF=0
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

DATA VALIDATION
(Tier II Stage 2B-Electronic and Manual)
FOR

Contract No. W912WJ-11-D-0001
CERCLIS Number: NYN000204534
P2 Project Number: 397651
DEFENSE NATIONAL STOCKPILE CENTER SCOTIA DEPOT SITE

February 2013 Sampling Round

ANALYSIS DATA
Inorganic Chemistry, VOAs in Water Samples
and Miscellaneous Parameters in Soil Samples

Sample Delivery Group (SDG) Nos. J87268-1-3, J87439-1, J87793-1, J87828-1-2, J87900-1-2, J88114-1-2, J88345-1 and J89687-1

Chemical Analyses Performed By:

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA
Subcontracted Services: Brooks Rand Laboratory
and TestAmerica Burlington

For:

Joseph Schmidl
Stone Environmental Inc
535 Stone Cutters Way
Montpelier, VT 05602

Data Validation Report By:

Kim B. Watson
Stone Environmental, Inc.
535 Stone Cutters Way
Montpelier, VT 05602

November 6, 2013 (revised)

Reference #102305-07
Inorganic and physical/kbw

EXECUTIVE SUMMARY

Stone Environmental, Inc. (Stone) has completed the validation of the inorganic chemistry and physical chemistry analysis data prepared by TestAmerica Savannah from the Scotia Depot Site in Glenville, New York. The laboratory reported the data under Sample Delivery Group (SDG) Nos. J87268-1-3, J87439-1, J87793-1, J87828-1-2, J87900-1-2, J88114-1-2, J88345-1 and J89687-1 that was submitted as thirteen data packages. Attached are the SDG Narratives, Chain of Custodies along with the electronic data validation printouts indicating the qualifications based on the data validation efforts.

Validation codes are assigned during the electronic ADR.net validation process and the manual validation process and are based on the electronic and manual data review of the results, the supporting materials, and documentation provided from the laboratory. The reviewed electronic data deliverables (EDDs) contains all data generated by the laboratory and flagged as a result of the data validation effort. Attachment A contains the Data Review Outlier Summaries as generated by the ADR.net review software. All reviewed EDDs are submitted electronically. Due to the limitiations in the ADR software, the subcontracted data for manganese speciation and physical properties were not put through the ADR data review process and were reviewed manually.

The Overall Evaluation of Data (Section XI) presents the rationale for the decisions that have been implemented and are summarized above. The validation findings and conclusions for each analytical parameter are detailed in the remaining sections of this report and are based on the following information.

QC Criteria	Were acceptance criteria met for Contaminates of Concern?		
	Yes	No	NA
Chain of custody (COC)/sample integrity/holding times	√		
Data completeness	√		
Holding times and sample preservation		√	
Calibrations and Instrument Performance		√	
Blanks (Field, Prep, Instrument)	√		
Surrogate analytes		√	
Matrix spike/matrix spike duplicate (MS/MSD) results		√	
Field Duplicates	√		
Laboratory Duplicates	√		
Sensitivity Check	√		
Laboratory control samples/Accuracy Check		√	
Target Analyte Identification	√		
Analyte quantitation and Reported Quantitation Limits* (no calculations in Tier II)	√		√ - Tier II (calculations)
System Performance	√		√ - Tier II (chromatograms)
NA- *Not applicable indicates that either the QC is not applicable to this data set or not required by the method.*			

This validation report shall be considered part of the data package for all future distributions of the inorganic chemistry and VOA in water, and physical parameters in soils analysis data.

INTRODUCTION

Analyses were performed according to the TestAmerica's SOPs and SW846 Methodologies. The target compound lists were limited to the standard lists as specified in the Quality Assurance Project Plan, April 2013.

To the extent possible, Stone's validation was performed in conformance with Tier II (Stage 2b electronic and manual for calibrations) guidelines as defined by EPA Region I, "Region I EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses", March 1996, and Region I EPA-NE Inorganic Data Validation Functional Guidelines" (11/2008). EPA's National Functional Guidelines for Inorganic Data Review (EPA 540-R-04-004, October 2004 and EPA's National Functional Guidelines for Organic Data Review (EPA 540/R-99/008, 10/99) were also considered during the evaluation, and professional judgment was applied as necessary and appropriate.

The data validation process evaluates data on a technical basis for chemical analyses conducted under the CLP or other well-defined methods. Contract compliance is evaluated only in specific situations. Issues pertaining to contractual compliance are noted where applicable. It is assumed that the data package is presented in accordance with the CLP requirements. It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. During the validation process, laboratory data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data validator. Raw data is **not** examined in detail to check calculations, compound identification, and/or transcription errors in a Tier II evaluation unless otherwise noted. The validation effort was limited to review of the QC summary forms submitted (i.e., Calibrations (initial and continuing) summaries, laboratory control samples, laboratory/field duplicates, matrix spike summaries and %D for positive hits on the two columns). Validated results are either qualified or unqualified; if results are unqualified, this means that the reported values may be used without reservation. Final validated results are annotated with the following codes, as defined in the EPA National and Region I Functional Guidelines:

U - The analyte was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit. The sample quantitation limit accounts for sample specific dilution factors and percent solids corrections or sample sizes that deviate from those required by the method.

J - The associated numerical value is an estimated quantity.

UJ - The analyte was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

R - The data are unusable (analyte may or may not be present). Resampling and reanalysis is necessary for verification. The R replaces the numerical value or sample quantitation limit. In some instances (e.g., a dilution) a result may be indicated as “rejected” to avoid confusion when a more quantitatively accurate result is available.

EB, TB, BB - An analyte that was identified in an aqueous equipment (field) blank, trip blank, or bottle blank that was used to assess field contamination associated with air/sediment samples. These qualifiers are to be applied to air/sediment sample results only.

These codes are assigned during the electronic ADR.net validation data review and the manual validation process, and are based on the electronic and manual data review of the results, the supporting materials and documentation provided from the laboratory. The EDD contains all data generated by the laboratory and flagged as a result of the data validation effort. Attachment A contains the Data Review Summaries as generated by the ADR.net review software. All reviewed EDDs are submitted electronically.

All data users should note two facts. First, **the "R" qualifier means that the laboratory-reported value is completely unusable.** The analysis is invalid due to significant quality control problems, and provides no information as to whether the compound is present or not. Rejected values should not appear on data tables because they have no useful purpose under any circumstances. Second, **no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable.** While strict quality control conformance provides well-defined confidence in the reported results, any analytical result will always contain some uncertainty as demonstrated in the laboratory derived control limits.

The user is also cautioned that the validation effort is based on the materials provided by the laboratory. Software manipulation, resulting in misleading raw data printouts, cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

ATTACHMENT A

ADR Electronic Data Validation Summaries
SDG Nos. J87268-1-3, J87439-1, J87793-1, J87828-1-2, J87900-1-2, J88114-1-2, J88345-1 and J89687-1
Inorganic Chemistry, VOAs in Water Samples and Miscellaneous Parameters in Soil Samples

(also, submitted electronically)

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: NYSDOH

Client Contact	Project Manager: JOSEPH SCHMIDL	Site Contact: David Lisi	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802/229-5977	Lab Contact: M. Kersey	Carrier: Fed Ex	1 of 5 COCs
535 Stone Cutters Way	**Analysis Turnaround Time**			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) W			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below (3 days)			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			Job / SDG No.:
Project Name: SCATANAVAL DEPOT	☒ 1 week			
Site:	☐ 2 days			Sampler:
PO# 102305-R-C/TASK 5D	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260B	Sample Specific Notes:
WP01-70.0-GW	2/5/13	14:06	Grab	GW	2	N	G	✓	these samples are 3-day TAT
WP01-91.5-GW	2/6/13	10:09						✓	
WP01-100.0-GW	2/6/13	14:15						✓	
WP01-1750-1100-GW	2/6/13	17:11						✓	
WP02-75.0-GW	2/6/13	10:07						✓	
WP02-87.5-GW	2/6/13	13:44						✓	
WP02-96.4-GW	2/6/13	17:26						✓	
TB-20130713	2/7/13	10:00	↓	↓	↓	↓	↓	✓	
WP-02-110.2-GW	2/7/13	12:50							

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-97263
2.6°C

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Stone Environmental	2/7/13 1730			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA SBV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

Client Contact	Project Manager: Joseph Schmidl	Site Contact: David Linaci	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 603-455-0946	Lab Contact: M. Kersey	Carrier: Fed Ex	2 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W) _____			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below _____			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			Job / SDG No.:
Project Name: DNS Center Scatia Depot	☒ 1 week			
Site: Scatia Depot Site, Glenville, NY	☐ 2 days			Sampler: LSP
PO # 102305-RC	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260 - VOC	Sample Specific Notes:
MW12-78.0-GW	2/6/13	15:20	Grab	GW	3	N	G	X	
MW6EP1-73.0-GW	2/7/13	11:50							
MW6EP2-76.0-GW	2/7/13	10:37							
MW6EP2-76.0-MS	2/7/13	10:37							
MW6EP2-76.0-MSD	2/7/13	10:37							
MW23-x-EB	2/5/13	16:40	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

630-37263

Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time:
	Stone Environmental	2/7/13 17:30			
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time	Received in Laboratory by:	Company:	Date/Time:
				TA SV	2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica
THE ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joseph Schmidl	Site Contact:	Date:	COC No:
Stone Environmental, Inc.	Tel/Fax: 603-455-0946	Lab Contact:	Carrier:	2 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W)			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: FNS Center Scotia Depot	☒ 1 week			Job / SDG No.:
Site: Scotia Depot Site, Glenville, NY	☐ 2 days			
PO# 102305-RC	☐ 1 day			Sampler: DC

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y/N)	Composite = C / Grab = G	8260C-VOC	Sample Specific Notes:
MW21-72.0-GW	2/7/13	09:11	Grab	GW	3	N	G	X	
MW21-72.0-D	2/7/13	09:11							
MW21-X-EB	2/7/13	09:30							
MWGEP4-73.0-GW	2/6/13	16:15							
MWGEP4-73.0-D	2/6/13	16:15							
MW7-70.5-GW	2/5/13	13:50							
MW5-72.0-GW	2/5/13	10:28							
MW17-75.0-GW	2/6/13	14:45							
MW23-80.0-GW	2/6/13	13:31							
MW31-64.0-GW	2/6/13	11:57							
MW33-62.0-GW	2/6/13	08:35							
MW32-66.0-GW	2/6/13	09:53	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

680-8726.8

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:30	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAL BV	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other NYSDOH

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Joseph Schmidl	Site Contact: David Linasi	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802-229-5377	Lab Contact: M. Kersey	Carrier: FedEx	4 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W)			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: Seneca Naval Depot	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C/Task 5D	☐ 1 day			Sampler: DTL

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	8260B - VOCs	Sample Specific Notes:
MW13-78-GW	2/7/13	1240	Grab	GW	3	N	G	X	
TB-020713B	2/7/13	1400	↓	↓	↓	↓	↓	↓	
MW6-71-GW	2/7/13	1405	↓	↓	↓	↓	↓	↓	

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

630 97268

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Stone Environmental	2/7/13 17:30			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TAW	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802.660.1990 fax 802.660.1919

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other: NYSDOH

Client Contact	Project Manager: Joseph Schmidt	Site Contact: David Linart	Date: 2/7/13	COC No: 1
Stone Environmental, Inc.	Tel/Fax: 802-229-5377	Lab Contact: M. Kersey	Carrier: FedEx	5 of 5 COCs
535 Stone Cutters Way	Analysis Turnaround Time			For Lab Use Only:
Montpelier, VT 05602	Calendar (C) or Work Days (W)			Walk-in Client:
(802) 229-5377 Phone	TAT if different from Below			Lab Sampling:
(802) 229-5417 FAX	☐ 2 weeks			
Project Name: Scotia Naval Depot	☒ 1 week			Job / SDG No.:
Site:	☐ 2 days			
PO# 102305-R-C / Task 5D	☐ 1 day			Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	8260															Sample Specific Notes:
MW9-110-GW	2/5/13	1040	GW	GW	3	N	G																
MW16-67-GW		1415																					
PMW-3-76-GW		1620																					
MW20-78-GW	2/6/13	0910																					
MW22-73-GW		1205																					
MW19-75-GW		1345																					
MW18-75-GW		1510																					
MW15-79-GW		1625																					
MW15-X-EB		1700																					
MW14-76-GW	2/7/13	0910																					
MW14-76-MS		0910																					
MW14-76-MSD		0910																					

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

680-37268

Relinquished by:	Company: Stone Environmental	Date/Time: 2/7/13 17:36	Received by:	Company	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA W	Date/Time: 2/8/13 0816

Form No. CA-C-WI-002, Rev. 4, dated 10/25/2012

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87268-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/08/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP01-70.0-GW (680-87268-1), WP01-91.5-GW (680-87268-2), WP01-100.0-GW (680-87268-3), WP01-110.0-GW (680-87268-4), WP02-75.0-GW (680-87268-5), WP02-87.15-GW (680-87268-6), WP02-96.4-GW (680-87268-7), TB-020713 (680-87268-8) and WP-02-110.2-GW (680-87268-9) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/08/2013.

EDD Summary Report by Analysis Method

Lab Reporting Batch ID: 680-87268-1 **Laboratory: TAL SAV**

Client Sample ID	*Lab Sample ID*	*Analysis Type*	*Preparation Method*	*Matrix*	*Collection Date*	*Preparation Date*	*Analysis Date*
Method: 8260B							
TB-020713	680-87268-8		8260B	AQ	2/7/2013	2/8/2013 1:13:00 PM	2/8/2013 1:13:00
WP01-100.0-GW	680-87268-3		8260B	AQ	2/6/2013 2:15:00	2/8/2013 2:25:00 PM	2/8/2013 2:25:00
WP01-110.0-GW	680-87268-4		8260B	AQ	2/6/2013 5:11:00	2/8/2013 2:53:00 PM	2/8/2013 2:53:00
WP01-70.0-GW	680-87268-1		8260B	AQ	2/5/2013 2:06:00	2/8/2013 1:27:00 PM	2/8/2013 1:27:00
WP01-91.5-GW	680-87268-2		8260B	AQ	2/6/2013	2/8/2013 1:56:00 PM	2/8/2013 1:56:00
WP-02-110.2-GW	680-87268-9		8260B	AQ	2/7/2013	2/8/2013 4:48:00 PM	2/8/2013 4:48:00
WP02-75.0-GW	680-87268-5		8260B	AQ	2/6/2013	2/8/2013 3:51:00 PM	2/8/2013 3:51:00
WP02-87.15-GW	680-87268-6		8260B	AQ	2/6/2013 1:44:00	2/8/2013 3:22:00 PM	2/8/2013 3:22:00
WP02-96.4-GW	680-87268-7		8260B	AQ	2/6/2013 5:26:00	2/8/2013 4:20:00 PM	2/8/2013 4:20:00

Field QC Assignments and Associated Samples

EDD File Name: 680-87268-1
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date
Field QC Sample: TB-020713 **QC Type:** Trip_Blank		
	WP01-91.5-GW	2/6/2013 10:09:00 AM
	WP02-96.4-GW	2/6/2013 5:26:00 PM
	WP02-75.0-GW	2/6/2013 10:07:00 AM
	WP01-100.0-GW	2/6/2013 2:15:00 PM
	WP01-110.0-GW	2/6/2013 5:11:00 PM
	WP01-70.0-GW	2/5/2013 2:06:00 PM
	WP-02-110.2-GW	2/7/2013 12:50:00 PM
	WP02-87.15-GW	2/6/2013 1:44:00 PM

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-1 **Laboratory: TAL SAV**

EDD Filename: 680-87268-1_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **TB-020713** ***Collected:*** **2/7/2013 10:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **WP01-100.0-GW** ***Collected:*** **2/6/2013 2:15:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.94	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CHLOROFORM	0.43	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **WP01-110.0-GW** ***Collected:*** **2/6/2013 5:11:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **WP01-70.0-GW** ***Collected:*** **2/5/2013 2:06:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
TETRACHLOROETHENE	0.39	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **WP01-91.5-GW** ***Collected:*** **2/6/2013 10:09:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **WP-02-110.2-GW** ***Collected:*** **2/7/2013 12:50:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **WP02-75.0-GW** ***Collected:*** **2/6/2013 10:07:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-1 **Laboratory: TAL SAV**

EDD Filename: 680-87268-1_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **WP02-87.15-GW** ***Collected:*** **2/6/2013 1:44:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **WP02-96.4-GW** ***Collected:*** **2/6/2013 5:26:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-1 **Laboratory: TAL SAV**

EDD Filename: 680-87268-1_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
RI	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87268-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/8/2013 8:13 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW12-78.0-GW (680-87268-10), MWGEP1-73.0-GW (680-87268-11), MWGEP2-76.0-GW (680-87268-12), MW83-X-EB (680-87268-13), MW21-72.0-GW (680-87268-14), MW21-72.0-D (680-87268-15), MW-21-X-EB (680-87268-16), MWGEP4-73.0-GW (680-87268-17), MWGEP4-73.0-D (680-87268-18), MW7-70.5-GW (680-87268-19), MW5-72.0-GW (680-87268-20), MW17-75.0-GW (680-87268-21), MW23-80.0-GW (680-87268-22), MWB1-64.0-GW (680-87268-23), MWB3-62.0-GW (680-87268-24), MWB2-66.0-GW (680-87268-25), MW13-78-GW (680-87268-26) and TB-02071313 (680-87268-27) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/08/2013 and 02/09/2013.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

EDD Summary Report by Analysis Method

Lab Reporting Batch ID: 680-87268-2 **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Analysis Type	Preparation Method	Matrix	Collection Date	Preparation Date	Analysis Date
Method: 8260B							
MW12-78.0-GW	680-87268-10		8260B	AQ	2/5/2013 3:20:00	2/8/2013 5:17:00 PM	2/8/2013 5:17:00
MW13-78-GW	680-87268-26		8260B	AQ	2/7/2013	2/9/2013 4:29:00 PM	2/9/2013 4:29:00
MW17-75.0-GW	680-87268-21		8260B	AQ	2/6/2013 2:45:00	2/8/2013 6:58:00 PM	2/8/2013 6:58:00
MW21-72.0-D	680-87268-15		8260B	AQ	2/7/2013 9:11:00	2/8/2013 5:32:00 PM	2/8/2013 5:32:00
MW21-72.0-GW	680-87268-14		8260B	AQ	2/7/2013 9:11:00	2/8/2013 6:44:00 PM	2/8/2013 6:44:00
MW-21-X-EB	680-87268-16		8260B	AQ	2/7/2013 9:30:00	2/8/2013 3:08:00 PM	2/8/2013 3:08:00
MW23-80.0-GW	680-87268-22		8260B	AQ	2/6/2013 1:31:00	2/8/2013 7:27:00 PM	2/8/2013 7:27:00
MW5-72.0-GW	680-87268-20		8260B	AQ	2/5/2013	2/8/2013 7:41:00 PM	2/8/2013 7:41:00
MW7-70.5-GW	680-87268-19		8260B	AQ	2/5/2013 1:50:00	2/8/2013 7:12:00 PM	2/8/2013 7:12:00
MW83-X-EB	680-87268-13		8260B	AQ	2/5/2013 4:40:00	2/8/2013 2:39:00 PM	2/8/2013 2:39:00
MWB1-64.0-GW	680-87268-23		8260B	AQ	2/6/2013	2/8/2013 7:55:00 PM	2/8/2013 7:55:00
MWB2-66.0-GW	680-87268-25		8260B	AQ	2/6/2013 9:53:00	2/9/2013 4:09:00 PM	2/9/2013 4:09:00
MWB3-62.0-GW	680-87268-24		8260B	AQ	2/6/2013 8:35:00	2/9/2013 3:48:00 PM	2/9/2013 3:48:00
MWGEP1-73.0-GW	680-87268-11		8260B	AQ	2/7/2013	2/8/2013 5:46:00 PM	2/8/2013 5:46:00
MWGEP2-76.0-GW	680-87268-12		8260B	AQ	2/7/2013	2/8/2013 6:15:00 PM	2/8/2013 6:15:00
MWGEP4-73.0-D	680-87268-18		8260B	AQ	2/6/2013 4:15:00	2/8/2013 6:29:00 PM	2/8/2013 6:29:00
MWGEP4-73.0-GW	680-87268-17		8260B	AQ	2/6/2013 4:15:00	2/8/2013 6:00:00 PM	2/8/2013 6:00:00
TB-02071313	680-87268-27		8260B	AQ	2/7/2013 2:00:00	2/8/2013 1:41:00 PM	2/8/2013 1:41:00

Field QC Assignments and Associated Samples

EDD File Name: 680-87268-2
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date
Field QC Sample: MW21-72.0-D **QC Type:** Field_Duplicate		
	MW21-72.0-GW	2/7/2013 9:11:00 AM
Field QC Sample: MW-21-X-EB **QC Type:** Equipment_Blank		
	MW12-78.0-GW	2/5/2013 3:20:00 PM
	MWB1-64.0-GW	2/6/2013 11:57:00 AM
	MW7-70.5-GW	2/5/2013 1:50:00 PM
	MWGEP2-76.0-GW	2/7/2013 10:37:00 AM
	MW17-75.0-GW	2/6/2013 2:45:00 PM
	MWGEP4-73.0-GW	2/6/2013 4:15:00 PM
	MWGEP1-73.0-GW	2/7/2013 11:50:00 AM
	MW23-80.0-GW	2/6/2013 1:31:00 PM
	MWGEP4-73.0-D	2/6/2013 4:15:00 PM
	MW5-72.0-GW	2/5/2013 10:28:00 AM
	MWB3-62.0-GW	2/6/2013 8:35:00 AM
	MWB2-66.0-GW	2/6/2013 9:53:00 AM
	MW21-72.0-GW	2/7/2013 9:11:00 AM
	MW21-72.0-D	2/7/2013 9:11:00 AM
	MW13-78-GW	2/7/2013 12:40:00 PM
Field QC Sample: MW83-X-EB **QC Type:** Equipment_Blank		
	MW12-78.0-GW	2/5/2013 3:20:00 PM
	MWB1-64.0-GW	2/6/2013 11:57:00 AM
	MW7-70.5-GW	2/5/2013 1:50:00 PM
	MWGEP2-76.0-GW	2/7/2013 10:37:00 AM
	MW17-75.0-GW	2/6/2013 2:45:00 PM
	MWGEP4-73.0-GW	2/6/2013 4:15:00 PM
	MWGEP1-73.0-GW	2/7/2013 11:50:00 AM
	MW23-80.0-GW	2/6/2013 1:31:00 PM
	MWGEP4-73.0-D	2/6/2013 4:15:00 PM
	MW5-72.0-GW	2/5/2013 10:28:00 AM
	MWB3-62.0-GW	2/6/2013 8:35:00 AM

	Associated Samples	Sample Collection Date
	MWB2-66.0-GW	2/6/2013 9:53:00 AM
	MW21-72.0-GW	2/7/2013 9:11:00 AM
	MW21-72.0-D	2/7/2013 9:11:00 AM
	MW13-78-GW	2/7/2013 12:40:00 PM
Field QC Sample: MWGEP4-73.0-D **QC Type:** Field_Duplicate		
	MWGEP4-73.0-GW	2/6/2013 4:15:00 PM
Field QC Sample: TB-02071313 **QC Type:** Trip_Blank		
	MW12-78.0-GW	2/5/2013 3:20:00 PM
	MWB1-64.0-GW	2/6/2013 11:57:00 AM
	MW7-70.5-GW	2/5/2013 1:50:00 PM
	MWGEP2-76.0-GW	2/7/2013 10:37:00 AM
	MW17-75.0-GW	2/6/2013 2:45:00 PM
	MWGEP4-73.0-GW	2/6/2013 4:15:00 PM
	MWGEP1-73.0-GW	2/7/2013 11:50:00 AM
	MW23-80.0-GW	2/6/2013 1:31:00 PM
	MWGEP4-73.0-D	2/6/2013 4:15:00 PM
	MW5-72.0-GW	2/5/2013 10:28:00 AM
	MWB3-62.0-GW	2/6/2013 8:35:00 AM
	MWB2-66.0-GW	2/6/2013 9:53:00 AM
	MW21-72.0-GW	2/7/2013 9:11:00 AM
	MW21-72.0-D	2/7/2013 9:11:00 AM
	MW13-78-GW	2/7/2013 12:40:00 PM

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-2 **Laboratory: TAL SAV**

EDD Filename: 680-87268-2_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **MW12-78.0-GW** ***Collected:*** **2/5/2013 3:20:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	0.18	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMODICHLOROMETHANE	0.35	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CHLOROFORM	0.82	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW13-78-GW** ***Collected:*** **2/7/2013 12:40:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.27	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
TETRACHLOROETHENE	0.53	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW17-75.0-GW** ***Collected:*** **2/6/2013 2:45:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MW21-72.0-D** ***Collected:*** **2/7/2013 9:11:00 AM** ***Analysis Type:*** **Initial/TOT-** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	0.77	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
1,2-DICHLOROETHANE	0.17	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CHLOROFORM	0.45	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
ETHYLBENZENE	0.62	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
METHYL CYCLOHEXANE	0.77	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
TRICHLOROETHENE	0.71	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW21-72.0-GW** ***Collected:*** **2/7/2013 9:11:00 AM** ***Analysis Type:*** **Initial/TOT-** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.27	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
1,2-DICHLOROBENZENE	0.65	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CHLOROFORM	0.38	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-2 **Laboratory: TAL SAV**

EDD Filename: 680-87268-2_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **MW21-72.0-GW** ***Collected:*** **2/7/2013 9:11:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.62	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
METHYL CYCLOHEXANE	0.77	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
TRICHLOROETHENE	0.76	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
Xylene (Total)	0.21	J	0.75	LOD	2.0	LOQ	ug/L	J	RI

Sample ID: **MW-21-X-EB** ***Collected:*** **2/7/2013 9:30:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MW23-80.0-GW** ***Collected:*** **2/6/2013 1:31:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MW5-72.0-GW** ***Collected:*** **2/5/2013 10:28:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
TRICHLOROETHENE	0.38	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW7-70.5-GW** ***Collected:*** **2/5/2013 1:50:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MW83-X-EB** ***Collected:*** **2/5/2013 4:40:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MWB2-66.0-GW** ***Collected:*** **2/6/2013 9:53:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-2 **Laboratory: TAL SAV**

EDD Filename: 680-87268-2_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: MWB3-62.0-GW **Collected:** 2/6/2013 8:35:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: MWGEP1-73.0-GW **Collected:** 2/7/2013 11:50:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: MWGEP2-76.0-GW **Collected:** 2/7/2013 10:37:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: MWGEP4-73.0-D **Collected:** 2/6/2013 4:15:00 PM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
TETRACHLOROETHENE	0.42	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: MWGEP4-73.0-GW **Collected:** 2/6/2013 4:15:00 PM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.14	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: TB-02071313 **Collected:** 2/7/2013 2:00:00 PM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-2 **Laboratory: TAL SAV**

EDD Filename: 680-87268-2_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
RI	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87268-3

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/8/2013 8:13 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW6-71-GW (680-87268-28), MW9-110-GW (680-87268-29), MW16-67-GW (680-87268-30), PMW-3-82-GW (680-87268-31), MW20-78-GW (680-87268-32), MW22-73-GW (680-87268-33), MW19-75-GW (680-87268-34), MW18-75-GW (680-87268-35), MW15-79-GW (680-87268-36), MW15-X-EB (680-87268-37), MW14-76-GW (680-87268-38) and GEP3-73-GW (680-87268-39) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/08/2013 and 02/09/2013.

Sample MW22-73-GW (680-87268-33)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

EDD Summary Report by Analysis Method

Lab Reporting Batch ID: 680-87268-3 **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Analysis Type	Preparation Method	Matrix	Collection Date	Preparation Date	Analysis Date
Method: 8260B							
GEP3-73-GW	680-87268-39		8260B	AQ	2/7/2013	2/9/2013 7:54:00 PM	2/9/2013 7:54:00
MW14-76-GW	680-87268-38		8260B	AQ	2/7/2013 9:10:00	2/9/2013 7:33:00 PM	2/9/2013 7:33:00
MW15-79-GW	680-87268-36		8260B	AQ	2/6/2013 4:25:00	2/9/2013 7:13:00 PM	2/9/2013 7:13:00
MW15-X-EB	680-87268-37		8260B	AQ	2/6/2013 5:00:00	2/8/2013 2:10:00 PM	2/8/2013 2:10:00
MW16-67-GW	680-87268-30		8260B	AQ	2/5/2013 2:15:00	2/9/2013 5:31:00 PM	2/9/2013 5:31:00
MW18-75-GW	680-87268-35		8260B	AQ	2/6/2013 3:10:00	2/9/2013 6:52:00 PM	2/9/2013 6:52:00
MW19-75-GW	680-87268-34		8260B	AQ	2/6/2013 1:45:00	2/9/2013 6:32:00 PM	2/9/2013 6:32:00
MW20-78-GW	680-87268-32		8260B	AQ	2/6/2013 9:10:00	2/9/2013 6:12:00 PM	2/9/2013 6:12:00
MW22-73-GW	680-87268-33		8260B	AQ	2/6/2013	2/9/2013 3:28:00 PM	2/9/2013 3:28:00
MW6-71-GW	680-87268-28		8260B	AQ	2/7/2013 2:05:00	2/9/2013 4:50:00 PM	2/9/2013 4:50:00
MW9-110-GW	680-87268-29		8260B	AQ	2/5/2013	2/9/2013 5:10:00 PM	2/9/2013 5:10:00
PMW-3-82-GW	680-87268-31		8260B	AQ	2/5/2013 4:20:00	2/9/2013 5:51:00 PM	2/9/2013 5:51:00

Field QC Assignments and Associated Samples

EDD File Name: 680-87268-3
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date
Field QC Sample: MW15-X-EB **QC Type:** Equipment_Blank		
	MW14-76-GW	2/7/2013 9:10:00 AM
	MW15-79-GW	2/6/2013 4:25:00 PM
	MW20-78-GW	2/6/2013 9:10:00 AM
	GEP3-73-GW	2/7/2013 11:00:00 AM
	PMW-3-82-GW	2/5/2013 4:20:00 PM
	MW19-75-GW	2/6/2013 1:45:00 PM
	MW22-73-GW	2/6/2013 12:05:00 PM
	MW18-75-GW	2/6/2013 3:10:00 PM
	MW16-67-GW	2/5/2013 2:15:00 PM
	MW9-110-GW	2/5/2013 10:40:00 AM
	MW6-71-GW	2/7/2013 2:05:00 PM

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-3 **Laboratory: TAL SAV**

EDD Filename: 680-87268-3_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **GEP3-73-GW** ***Collected:*** **2/7/2013 11:00:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,1-TRICHLOROETHANE	0.97	J	0.50	LOD	1.0	LOQ	ug/L	J	RI
1,1-DICHLOROETHENE	0.54	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CARBON TETRACHLORIDE	0.52	J	0.50	LOD	1.0	LOQ	ug/L	J	RI
TETRACHLOROETHENE	0.67	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
TOLUENE	0.38	J	0.33	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW14-76-GW** ***Collected:*** **2/7/2013 9:10:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.27	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CARBON TETRACHLORIDE	0.65	J	0.50	LOD	1.0	LOQ	ug/L	J	RI
CHLOROFORM	0.14	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW15-79-GW** ***Collected:*** **2/6/2013 4:25:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,1-TRICHLOROETHANE	0.51	J	0.50	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
TETRACHLOROETHENE	0.88	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW15-X-EB** ***Collected:*** **2/6/2013 5:00:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MW16-67-GW** ***Collected:*** **2/5/2013 2:15:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-3 **Laboratory: TAL SAV**

EDD Filename: 680-87268-3_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **MW18-75-GW** ***Collected:*** **2/6/2013 3:10:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MW19-75-GW** ***Collected:*** **2/6/2013 1:45:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CHLOROFORM	0.33	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW20-78-GW** ***Collected:*** **2/6/2013 9:10:00 AM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MW22-73-GW** ***Collected:*** **2/6/2013 12:05:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2,2-TETRACHLOROETHANE	1.6	J D	1.3	LOD	5.0	LOQ	ug/L	J	RI
1,1,2-TRICHLOROETHANE	0.85	J D	1.3	LOD	5.0	LOQ	ug/L	J	RI
1,1-DICHLOROETHENE	0.78	J D	1.3	LOD	5.0	LOQ	ug/L	J	RI
1,2,4-TRICHLOROBENZENE	3.8	J D	1.3	LOD	5.0	LOQ	ug/L	J	RI
1,2-DIBROMOETHANE	1.3	J D	1.3	LOD	5.0	LOQ	ug/L	J	RI
1,4-DICHLOROBENZENE	1.6	J D	1.4	LOD	5.0	LOQ	ug/L	J	RI
BROMOMETHANE	4.0	U	4.0	LOD	5.0	LOQ	ug/L	UJ	Ccv

Sample ID: **MW6-71-GW** ***Collected:*** **2/7/2013 2:05:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CIS-1,2-DICHLOROETHENE	0.90	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
TETRACHLOROETHENE	0.91	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **MW9-110-GW** ***Collected:*** **2/5/2013 10:40:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-3 **Laboratory: TAL SAV**

EDD Filename: 680-87268-3_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **MW9-110-GW** ***Collected:*** **2/5/2013 10:40:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
TOLUENE	0.43	J	0.33	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: **PMW-3-82-GW** ***Collected:*** **2/5/2013 4:20:00 PM** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87268-3 **Laboratory: TAL SAV**

EDD Filename: 680-87268-3_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
RI	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Serial Number 000084

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
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Savannah, GA 31404
Website: www.testamericainc.com
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Fax: (912) 352-0165

Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)	PAGE	OF
132 SCOTIA NAVAL DEPOT	102305-R-C	NY	1	1
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.		
M. Kersey				
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX		
Joseph Schmidl	802/229-5377	802/229-5417		
CLIENT NAME	CLIENT E-MAIL			
Stone Environmental	JSchmidl@Stone-Env.com			
CLIENT ADDRESS				
535 Stone Cutters Way, Montpelier VT 05602				
COMPANY CONTRACTING THIS WORK (if applicable)				

MATRIX TYPE (COMPOSITE (C) OR GRAB (G) INDICATE; AQUEOUS (WATER); SOLID OR SEMISOLID; AIR; NONAQUEOUS LIQUID (OIL, SOLVENT, ...))

REQUIRED ANALYSIS: 8260B

PRESERVATIVE

STANDARD REPORT DELIVERY ✓
DATE DUE 2/20/13
EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G)	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	NUMBER OF CONTAINERS SUBMITTED	REMARKS
2/8/13	15:01	WP03-87.5-GW	G	A				3	
2/8/13	12:44	WP04-72.7-GW	G	A				3	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	2/13/13	17:20						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	2/14/13	0946	YES ○ NO ○		87439	1.8°C

TAL8240-680 (1207)

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02/25/2013

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87439-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/14/2013 8:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP03-87.5-GW (680-87439-1) and WP04-72.7-GW (680-87439-2) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/14/2013.

Samples WP03-87.5-GW (680-87439-1)[2X] and WP04-72.7-GW (680-87439-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

EDD Summary Report by Analysis Method

Lab Reporting Batch ID: 680-87439-1 **Laboratory: TAL SAV**

Client Sample ID	*Lab Sample ID*	*Analysis Type*	*Preparation Method*	*Matrix*	*Collection Date*	*Preparation Date*	*Analysis Date*
Method: 8260B							
WP03-87.5-GW	680-87439-1		8260B	AQ	2/8/2013 3:01:00	2/14/2013 1:25:00 PM	2/14/2013
WP04-72.7-GW	680-87439-2		8260B	AQ	2/8/2013	2/14/2013 1:54:00 PM	2/14/2013

Data Qualifier Summary

Lab Reporting Batch ID: 680-87439-1 **Laboratory: TAL SAV**

EDD Filename: 680-87439-1_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **WP03-87.5-GW** ***Collected:*** **2/8/2013 3:01:00 PM** ***Analysis Type:*** **Initial/TOT-** ***Dilution:*** **2**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,4-TRICHLOROBENZENE	0.51	J	0.50	LOD	2.0	LOQ	ug/L	J	RI
BROMOMETHANE	1.6	U	1.6	LOD	2.0	LOQ	ug/L	UJ	Ccv

Sample ID: **WP04-72.7-GW** ***Collected:*** **2/8/2013 12:44:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **2**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,1-DICHLOROETHANE	1.3	J	0.50	LOD	2.0	LOQ	ug/L	J	RI
1,1-DICHLOROETHENE	0.77	J	0.50	LOD	2.0	LOQ	ug/L	J	RI
BROMOMETHANE	1.6	U	1.6	LOD	2.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87439-1 **Laboratory: TAL SAV**

EDD Filename: 680-87439-1_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
RI	Reporting Limit Trace Value

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Field QC Assignments and Associated Samples

EDD File Name: 680-87439-1
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

◯ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NYS.tk Gw	68011020	NY
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Michele Kersey	Betsy Beauchamp	
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Joe Schmidt	802-229-4541	
CLIENT NAME	CLIENT E-MAIL	
STONE ENV	jschmidt@stone-env.com	
CLIENT ADDRESS		
535 STONE cutters way, Montpelier, VT		
COMPANY CONTRACTING THIS WORK (if applicable)		
CENAE/CENAN		

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SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX TYPE: AQUEOUS (WATER)	MATRIX TYPE: SOLID OR SEMISOLID	MATRIX TYPE: AIR	MATRIX TYPE: NONAQUEOUS LIQUID (OIL, SOLVENT...)	REQUIRED ANALYSIS: 8260B Total HCL	8260B Total HCL	8260B Diss HCL	8260B Total None	8260B Diss None	8260B H2SO4	8260B None	SM2320B HNO3	SM2320B None	300.0 None	SM3500-Fe-D None	7196A None	NUMBER OF CONTAINERS SUBMITTED	REMARKS
2/26/13	1132	WP04-76.0-Gw	G	X				3	6	3	3	3	3	3	3	3	3	3	3	42	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	2/26/13	17.00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
Mark C	2/27/13	0936	YES ◯ NO ◯		680-87823	0.8°C

STANDARD REPORT DELIVERY ◯

DATE DUE

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯

DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 1

68011020

03/15/2013

TAL 8240 680 (1008)

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87828-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/27/2013 11:57 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP04-76.0-GW (680-87828-1) and Trip Blank lot # 020113 (680-87828-2) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/04/2013.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 267744 exceeded control limits for the following analytes:methylcyclohexane and 1,2-dichloropropane.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 4 analytes to recover outside criteria for this method when a full list spike is utilized. The LCSD associated with batch 267744 had 1 analyte outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

METALS (ICP)

Sample WP04-76.0-GW (680-87828-1) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 03/05/2013 and analyzed on 03/06/2013.

The post digestion spike % recovery for calcium and magnesium associated with batch 680-268182 was outside of control limits.

Due to the high concentration of calcium and magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for batch 680-268182 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

SILICA BY ICP

Sample WP04-76.0-GW (680-87828-1) was analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were analyzed on 03/14/2013.

HEXAVALENT CHROMIUM

Sample WP04-76.0-GW (680-87828-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 02/27/2013.

To verify the absence of an interference, EPA Method 7196A requires the sample to be diluted until the matrix spike (MS) recovery is within 85-115%. For this reason, the following sample(s) was diluted: (680-87802-1 MS), (680-87802-1 MSD), Colonial G (680-87802-1). Elevated reporting limits (RLs) are provided.

The following sample(s) was received outside of holding time: WP04-76.0-GW (680-87828-1).

OIL AND GREASE AND TPH

Sample WP04-76.0-GW (680-87828-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 03/09/2013.

ALKALINITY
Sample WP04-76.0-GW (680-87828-1) was analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 02/28/2013.

HARDNESS
Sample WP04-76.0-GW (680-87828-1) was analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 02/28/2013.

TOTAL DISSOLVED SOLIDS
Sample WP04-76.0-GW (680-87828-1) was analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 02/27/2013.

TOTAL SUSPENDED SOLIDS
Sample WP04-76.0-GW (680-87828-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/01/2013.

ANIONS BY IC
Sample WP04-76.0-GW (680-87828-1) was analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 03/08/2013.

Sample WP04-76.0-GW (680-87828-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

ANIONS (NITRATE/NITRITE)
Sample WP04-76.0-GW (680-87828-1) was analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 02/28/2013.

Sample WP04-76.0-GW (680-87828-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Sample WP04-76.0-GW (680-87828-1) was analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 02/27/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

FERROUS IRON
Sample WP04-76.0-GW (680-87828-1) was analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 03/11/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM
Sample WP04-76.0-GW (680-87828-1) was analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 03/11/2013.

PH
Sample WP04-76.0-GW (680-87828-1) was analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 02/28/2013.

The following sample was received outside of holding time: WP04-76.0-GW (680-87828-1).

TOTAL ORGANIC CARBON
Sample WP04-76.0-GW (680-87828-1) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/02/2013.

DISSOLVED ORGANIC CARBON
Sample WP04-76.0-GW (680-87828-1) was analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/09/2013.

March 28, 2013

TestAmerica
Attn: Michelle Kersey
5102 LaRoche Ave.
Savannah, GA 31404
mkersey@testamericainc.com

RE: Brooks Rand Project: TST-SV1301 Client Project: 102305-R-CTask 6A

Dear Ms. Kersey,

On February 27, 2013, Brooks Rand Labs (BRL) received one (1) water sample. The sample was logged-in for analyses manganese speciation contractually defined as total recoverable manganese (Mn), Mn(II) and Mn(IV) determined by difference (see speciation note below). The samples were received, prepared, analyzed, and stored according to BRL SOP(s) and EPA methodology.

Manganese Speciation Note: This is an operationally defined method where the manganese (Mn) species are determined by the physical separation using filtration through 0.45-µm filters. Reduced manganese (Mn^{2+}) is soluble and oxidized manganese (Mn^{4+}) is not. Therefore, determinations on a sample that is filtered prior to any exposure to oxygen yields concentrations of reduced species, and determinations on an unfiltered sample yield a measurement of oxidized (or reduced and oxidized) species. For this Mn speciation method, samples are field-filtered using ventable in-line filters with no exposure to the air prior to filtration. Due to the chemical properties described above, the filtered sample is defined as Mn(II). An additional unfiltered sample is collected and analyzed for total recoverable Mn. Mn(IV) is calculated by the difference of total recoverable Mn minus Mn(II).

The results may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* for sample-specific MDL, MRL, and other details.

All results have been reported to the concentration of the method detection limit (MDL), referred to as the detection limit (DL) in the DoD QSM. The Limit of Quantitation (LOQ) is defined in this report as the method reporting limit (MRL).

The digestion method used for the samples took place in the original sample container. Therefore, the matrix spikes were prepared at the instrument and would be the same as post-digestion spikes.

The DoD acceptance criteria for the dilution tests state that the diluted result must be ±10% of the native result. Therefore, when the native sample produces a result of 1 (unit independent), the acceptable range for the dilution duplicate is 0.9 - 1.1 units. However, in the upper limit the relative percent difference (RPD) between the two values is 9.5% whereas in the lower limit the RPD is 10.5%. BRL has set the RPD limit to 10% in the report as this is the closest approximation the LIMS is capable of representing.

Per the client's specific request to adhere to the EPA Draft Method 1638 requirement of non-method blank corrected data, the results were not method blank corrected as described in the calculations section of the relevant BRL SOP(s). This deviates from BRL's standard protocol for trace level data quality and BRL believes that all low-level metals analyses should be method blank corrected and that not doing so may lead to less accurate results. The results from the method blanks that were analyzed are listed in the *Method Blanks & Reporting Limits* section of this report.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details, see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Tiffany Stilwater
Project Manager
tiffany@brooksrand.com

Lydia Greaves
Project Manager
lydia@brooksrand.com

Sample Results

Sample	Analyte	Basis	Result	Qualifier	MDL	LOD	MRL	Unit	Batch	Sequence
WP04-760-GW										
1309014-01	Mn	T	1500		0.21	0.63	0.63	µg/L	B130483	1300203
1309014-01	Mn(II)	D	110		0.211	0.632	0.632	µg/L	B130483	1300203
1309014-01	Mn(IV)	N/A	1390		0.421	0.632	1.26	µg/L	[CALC]	N/A

Accuracy & Precision Summary

Batch: B130483
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B130483-BS1	**Laboratory Fortified Blank (1240040)**						
	Mn		1.053	1.10	µg/L	104% 80-120	
B130483-SRM1	**Certified Reference Material (1202032, NIST 1643e)**						
	Mn		38.97	39.48	µg/L	101% 75-125	
B130483-DUP1	**Duplicate (1309014-01)**						
	Mn	1503		1497	µg/L		0.4% 20
B130483-DUP2	**Duplicate (1309014-01)**						
	Mn	1503		1544	µg/L		3% 10
B130483-MS1	**Matrix Spike (1309014-01)**						
	Mn	1503	4211	5795	µg/L	102% 80-120	
B130483-MSD1	**Matrix Spike Duplicate (1309014-01)**						
	Mn	1503	4211	5788	µg/L	102% 80-120	0.1% 20

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Lab Reporting Batch: 680-87828-1						
Method: 1664A						
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
Method: 2340B						
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
Method: 300.0						
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1 MS	AQ	Matrix_Spike	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
Method: 3500_FE_D						
WP04-76.0-GW	680-87828-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1 MS	AQ	Matrix_Spike	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
Method: 6010C						
WP04-76.0-GW	680-87828-1 MS	AQ	Matrix_Spike	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1 MSD	AQ	Matrix_Spike_Duplicate	3010A	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1	AQ	N	3010A	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1 MS	AQ	Matrix_Spike	3010A	2/26/2013 11:32:00 AM	S2BVEM
Method: 7196A						
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
Method: 8260B						
WP04-76.0-GW	680-87828-1	AQ	N	8260B	2/26/2013 11:32:00 AM	S2BVEM
Trip Blank lot # 020113	680-87828-2	AQ	Trip_Blank	8260B	2/26/2013	S2BVEM

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Method: 9040C						
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
Method: 9060A						
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1 MS	AQ	Matrix_Spike	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
Method: SM 2320B						
WP04-76.0-GW	680-87828-1	AQ	N	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM
WP04-76.0-GW	680-87828-1 DUP	AQ	Duplicate	Gen Prep	2/26/2013 11:32:00 AM	S2BVEM

Validation Label Legend

Label Code	Label Decription	EPA Level
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with
S2BVM	Stage_2B_Validation_Manual	Level 3 with
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	*Lab Sample ID*	*Matrix*	*Sample Type*	*Preparation Method*	*Collection Date*	*Validation Code*
S4VM	Stage_4_Validation_Manual		Level 4			
S4VEM	Stage_4_Validation_Electronic_and_Manual		Level 4			
NV	Not_Validated		N/A			

Field QC Assignments and Associated Samples

EDD File Name: 680-87828-1
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date
Field QC Sample: Trip Blank lot # 020113 **QC Type:** Trip_Blank		
	WP04-76.0-GW	2/26/2013 11:32:00 AM

Data Qualifier Summary

Lab Reporting Batch ID: 680-87828-1 **Laboratory: TAL SAV**

EDD Filename: 680-87828-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: EM

Method: 9040C **Matrix: AQ**

Sample ID: WP04-76.0-GW **Collected:** 2/26/2013 11:32:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	7.87	H	_	LOD	_	LOQ	S.U.	J	StoA

Method Category: GENCHEM

Method: 9060A **Matrix: AQ**

Sample ID: WP04-76.0-GW **Collected:** 2/26/2013 11:32:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL ORGANIC CARBON (TOC)	0.92	J	0.50	LOD	1.0	LOQ	mg/L	J	RI

Method Category: METALS

Method: 6010C **Matrix: AQ**

Sample ID: WP04-76.0-GW **Collected:** 2/26/2013 11:32:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	11000		50	LOD	100	LOQ	ug/L	J	Ms

Method Category: METALS

Method: 7196A **Matrix: AQ**

Sample ID: WP04-76.0-GW **Collected:** 2/26/2013 11:32:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.0030	U H	0.0030	LOD	0.010	LOQ	mg/L	UJ	StoA

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: Trip Blank lot # 020113 **Collected:** 2/26/2013 12:00:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87828-1 **Laboratory: TAL SAV**

EDD Filename: 680-87828-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **WP04-76.0-GW** ***Collected:*** **2/26/2013 11:32:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,1-DICHLOROETHANE	0.36	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CHLOROFORM	0.19	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87828-1 **Laboratory: TAL SAV**

EDD Filename: 680-87828-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
Ms	Matrix Spike Lower Estimation
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

EDD Warning Log

Lab Reporting Batch ID: 680-87828-1

eQAPP: ScotiaNavyDepot062713

Laboratory: TAL SAV

Table	Line #	Column	Value	Warning	Description
Analytical Results	289	ReportingLimit		12	ReportingLimit is missing a value in this record.
Analytical Results				18	SULFATE AS SO4 (14808-79-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-267760/3.
Analytical Results				18	NITRITE (14797-65-0) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268800/3.
Analytical Results				18	NITRATE (14797-55-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268800/3.
Analytical Results				18	SULFATE AS SO4 (14808-79-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-267760/4.
Analytical Results				18	NITRITE (14797-65-0) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-268800/4.
Analytical Results				18	NITRATE (14797-55-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-268800/4.
Analytical Results				15	SULFATE AS SO4 (14808-79-8) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680 -267760/2.
Analytical Results				15	NITRITE (14797-65-0) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680-268800/2.
Analytical Results				15	NITRATE (14797-55-8) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680-268800/2.
Analytical Results				18	SULFATE AS SO4 (14808-79-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Matrix_Spike', but is not reported for sample WP04-76.0-GW.
Analytical Results				18	Ferric Iron (STL00113) is a required spike compound for Method: '3500_FE_D', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-267676/1.
Analytical Results				15	Ferric Iron (STL00113) is a required target analyte for Method: '3500_FE_D' and Matrix: 'AQ', but is not reported for sample MB 680-267676/2.
Analytical Results				18	Ferric Iron (STL00113) is a required spike compound for Method: '3500_FE_D', Matrix: 'AQ' and QCType: 'Matrix_Spike', but is not reported for sample WP04-76.0-GW.
Analytical Results				18	Cr (III) (16065-83-1) is a required spike compound for Method: '7196A', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-267675/1.
Analytical Results				15	Cr (III) (16065-83-1) is a required target analyte for Method: '7196A' and Matrix: 'AQ', but is not reported for sample MB 680-267675/2.
Analytical Results				18	CALCIUM (7440-70-2) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268182/3-A.
Analytical Results				18	Silicon (7440-21-3) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268182/3-A.
Analytical Results				18	CALCIUM (7440-70-2) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	CHROMIUM (7440-47-3) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	MANGANESE (7439-96-5) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	MAGNESIUM (7439-95-4) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	IRON (7439-89-6) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.

EDD Warning Log

Lab Reporting Batch ID: 680-87828-1

eQAPP: ScotiaNavyDepot062713

Laboratory: TAL SAV

Table	Line #	Column	Value	Warning	Description
Analytical Results				18	TITANIUM (7440-32-6) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-268182/1-A.
Analytical Results				15	Silicon (7440-21-3) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-268182/1-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	CHROMIUM (7440-47-3) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	MANGANESE (7439-96-5) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	MAGNESIUM (7439-95-4) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	IRON (7439-89-6) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	TITANIUM (7440-32-6) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample WP04-76.0-GW.
Analytical Results				18	CALCIUM (7440-70-2) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Matrix_Spike', but is not reported for sample WP04-76.0-GW.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-268800' for Method '300.0' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Method_Blank' is not reported for PreparationBatch '680-268885' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Method_Blank' sample for this method and matrix.
Sample Methods				9	A 'Laboratory_Control_Sample' is not reported for PreparationBatch '680-268885' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Laboratory_Control_Sample' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-267675' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Method_Blank' is not reported for PreparationBatch '680-268886' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Method_Blank' sample for this method and matrix.
Sample Methods				9	A 'Laboratory_Control_Sample' is not reported for PreparationBatch '680-268886' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Laboratory_Control_Sample' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-268062' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

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Phone: (912) 354-7858
Fax: (912) 352-0165

◯ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NY SiteGW	680/1020	NY
TAL (LAB) PROJECT MANAGER: Michele Kersey	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Joe Schmidl	CLIENT PHONE: 802-229-4541	CLIENT FAX
CLIENT NAME: STONE ENV.	CLIENT E-MAIL: jschmidl@	
CLIENT ADDRESS: 535 STONE Cutters Way, Montpelier, VT		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE: Page 179 of 179 | OF

STANDARD REPORT DELIVERY ◯
DATE DUE:
EXPEDITED REPORT DELIVERY (SURCHARGE) ◯
DATE DUE:
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: Grain size ASTM D422-63	REQUIRED ANALYSIS: Bulk Density ASTM D2937	REQUIRED ANALYSIS: Effective Porosity ASTM D7263	REQUIRED ANALYSIS: VOC 8260B	NUMBER OF CONTAINERS SUBMITTED	REMARKS
2/20/13	9:40	MW24-96-S	G		X			X	X	X			
2/22/13	13:40	WP05-85-S			X			X	X	X			
2/22/13	11:30	WP05-75-S			X			X	X	X			
2/21/13	8:52	WP08-113.4			X						X		
2/20/13	14:48	WP09-95.0			X						X		
2/22/13	13:19	WP06-72.0			X						X		
2/20/13	11:09	WP07-82.4			X						X		

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	2/25/13	1810						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	02/26/13	0954	YES ◯ NO ◯		680-87793	3.6 °C

03/13/2013

TAL8240-680 (1008)

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87793-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/26/2013 9:54 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples WP08-113.4 (680-87793-4), WP08-95.0 (680-87793-5), WP06-72.0 (680-87793-6) and WP07-82.4 (680-87793-7) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/27/2013.

Sample WP07-82.4 (680-87793-7)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

GRAIN SIZE

Samples MW24-96-S (680-87793-1), WP05-85-S (680-87793-2) and WP05-75-S (680-87793-3) were analyzed for grain size in accordance with ASTM D422. The samples were analyzed on 02/28/2013.

DENSITY OF SOIL IN PLACE BY THE DRIVE CYLINDER METHOD

Samples MW24-96-S (680-87793-1), WP05-85-S (680-87793-2) and WP05-75-S (680-87793-3) were analyzed for Density of Soil in Place by the Drive Cylinder Method in accordance with ASTM D2937. The samples were analyzed on 02/28/2013.

The density results for the following sample(s) do not represent the in-place density of the soil: MW24-96-S (680-87793-1), WP05-75-S (680-87793-3), WP05-85-S (680-87793-2). The soils were received in a disturbed state and were subsequently molded in the laboratory to an approximation of the field environment.

EDD Summary Report by Analysis Method

Lab Reporting Batch ID: 680-87793-1 **Laboratory: TAL SAV**

Client Sample ID	*Lab Sample ID*	*Analysis Type*	*Preparation Method*	*Matrix*	*Collection Date*	*Preparation Date*	*Analysis Date*
Method: 8260B							
WP06-72.0	680-87793-6		8260B	AQ	2/22/2013	2/27/2013 3:35:00 PM	2/27/2013
WP07-82.4	680-87793-7		8260B	AQ	2/20/2013	2/27/2013 2:37:00 PM	2/27/2013
WP08-113.4	680-87793-4		8260B	AQ	2/21/2013	2/27/2013 3:06:00 PM	2/27/2013
WP08-95.0	680-87793-5		8260B	AQ	2/20/2013	2/27/2013 6:27:00 PM	2/27/2013

Field QC Assignments and Associated Samples

EDD File Name: 680-87793-1
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date

Data Qualifier Summary

Lab Reporting Batch ID: 680-87793-1 **Laboratory: TAL SAV**

EDD Filename: 680-87793-1_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: WP06-72.0 **Collected:** 2/22/2013 1:19:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHANE	0.54	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
CHLOROFORM	0.75	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
CIS-1,2-DICHLOROETHENE	0.80	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
TOLUENE	0.60	J	0.33	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: WP07-82.4 **Collected:** 2/20/2013 11:04:00 **Analysis Type:** Initial/TOT **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	1.6	U	1.6	LOD	2.0	LOQ	ug/L	UJ	Ccv

Sample ID: WP08-113.4 **Collected:** 2/21/2013 8:52:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
TOLUENE	0.58	J	0.33	LOD	1.0	LOQ	ug/L	J	RI
TRICHLOROETHENE	0.20	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: WP08-95.0 **Collected:** 2/20/2013 2:48:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Ccv
TRICHLOROETHENE	170		0.25	LOD	1.0	LOQ	ug/L	J	Surr

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87793-1 **Laboratory: TAL SAV**

EDD Filename: 680-87793-1_SEDD **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Ccv	Continuing Calibration Verification Percent Difference Lower Estimation
RI	Reporting Limit Trace Value
Surr	Surrogate/Tracer Recovery Upper Estimation

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Serial Number 63782

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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Savannah, GA 31404

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◯ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NY Site GW	68011020	NY
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Betsy Beauchamp		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Joe Schmidl	802-229-4541	
CLIENT NAME	CLIENT E-MAIL	
Joe Schmidl / Stone Env.	jschmidl@stone-env.com	
CLIENT ADDRESS		
STONE Envtrs Way, Montpelier, VT		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ◯
DATE DUE _____
EXPEDITED REPORT DELIVERY (SURCHARGE) ◯
DATE DUE _____

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260C HCl	6013 HNO3	9060 Total HCl	9060 Diss. None	2540C Total None	2540C Dis H2SO4	1664A None	9040B None	SM2340C HNO3	SM2320B None	300.0 None	SM3500-Fe-D None	7196A None	8260B VOC HCl	REMARKS
								NUMBER OF CONTAINERS SUBMITTED														
2/28/13	1122	WP05-95.0-GW	G	X				X	X	X	X	X	X	X	X	X	X	X	X	X		
2/27/13	1142	WP-11-76.9																			X	
2/27/13	12:48	WP-11-81.9																			X	
2/27/13	13:50	WP-11-87.0																			X	
2/28/13	9:05	WP-12-78.0																			X	
2/28/13	11:53	WP-12-93.0																			X	

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

REMARKS

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	2/28/13	17:00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	3/1/13	0935	YES ◯ NO ◯		680-87900	4.8°C

TAL8240-680 (1008)

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-87900-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 3/1/2013 9:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples WP05-95.0-GW (680-87900-1), WP-11-76.9 (680-87900-2), WP-11-81.9 (680-87900-3), WP-11-87.0 (680-87900-4), WP-12-78.0 (680-87900-5) and WP-12-93.0 (680-87900-6) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/05/2013.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

METALS (ICP)
Sample WP05-95.0-GW (680-87900-1) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 03/05/2013 and analyzed on 03/06/2013.

SILICA BY ICP
Sample WP05-95.0-GW (680-87900-1) was analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were analyzed on 03/14/2013.

HEXAVALENT CHROMIUM
Sample WP05-95.0-GW (680-87900-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 03/01/2013.

OIL AND GREASE AND TPH
Sample WP05-95.0-GW (680-87900-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 03/13/2013.

ALKALINITY
Sample WP05-95.0-GW (680-87900-1) was analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 03/14/2013.

HARDNESS
Sample WP05-95.0-GW (680-87900-1) was analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 03/11/2013.

TOTAL DISSOLVED SOLIDS
Sample WP05-95.0-GW (680-87900-1) was analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 03/01/2013.

TOTAL SUSPENDED SOLIDS
Sample WP05-95.0-GW (680-87900-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/05/2013.

ANIONS BY IC
Sample WP05-95.0-GW (680-87900-1) was analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 03/12/2013.

Sample WP05-95.0-GW (680-87900-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

ANIONS (NITRATE/NITRITE)
Sample WP05-95.0-GW (680-87900-1) was analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 03/01/2013.

Sample WP05-95.0-GW (680-87900-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Sample WP05-95.0-GW (680-87900-1) was analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 03/01/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

FERROUS IRON
Sample WP05-95.0-GW (680-87900-1) was analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 03/11/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM
Sample WP05-95.0-GW (680-87900-1) was analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 03/11/2013.

PH
Sample WP05-95.0-GW (680-87900-1) was analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 03/06/2013.

TOTAL ORGANIC CARBON
Sample WP05-95.0-GW (680-87900-1) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/02/2013.

DISSOLVED ORGANIC CARBON
Sample WP05-95.0-GW (680-87900-1) was analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/12/2013.

March 29, 2013

TestAmerica
Attn: Michelle Kersey
5102 LaRoche Ave.
Savannah, GA 31404
mkersey@testamericainc.com

RE: Brooks Rand Project: TST-SV1301 Client Project: 102305-R-CTask 6A

Dear Ms. Kersey,

On March 1, 2013, Brooks Rand Labs (BRL) received one (1) water sample. The sample was logged-in for analyses manganese speciation contractually defined as total recoverable manganese (Mn), Mn(II) and Mn(IV) determined by difference (see speciation note below). The samples were received, prepared, analyzed, and stored according to BRL SOP(s) and EPA methodology.

Manganese Speciation Note: This is an operationally defined method where the manganese (Mn) species are determined by the physical separation using filtration through 0.45-µm filters. Reduced manganese (Mn^{2+}) is soluble and oxidized manganese (Mn^{4+}) is not. Therefore, determinations on a sample that is filtered prior to any exposure to oxygen yields concentrations of reduced species, and determinations on an unfiltered sample yield a measurement of oxidized (or reduced and oxidized) species. For this Mn speciation method, samples are field-filtered using ventable in-line filters with no exposure to the air prior to filtration. Due to the chemical properties described above, the filtered sample is defined as Mn(II). An additional unfiltered sample is collected and analyzed for total recoverable Mn. Mn(IV) is calculated by the difference of total recoverable Mn minus Mn(II).

The results may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* for sample-specific MDL, MRL, and other details.

All results have been reported to the concentration of the method detection limit (MDL), referred to as the detection limit (DL) in the DoD QSM. The Limit of Quantitation (LOQ) is defined in this report as the method reporting limit (MRL).

The digestion method used for the samples took place in the original sample container. Therefore, the matrix spikes were prepared at the instrument and would be the same as post-digestion spikes.

The DoD acceptance criteria for the dilution tests state that the diluted result must be ±10% of the native result. Therefore, when the native sample produces a result of 1 (unit independent), the acceptable range for the dilution duplicate is 0.9 - 1.1 units. However, in the upper limit the relative percent difference (RPD) between the two values is 9.5% whereas in the lower limit the RPD is 10.5%. BRL has set the RPD limit to 10% in the report as this is the closest approximation the LIMS is capable of representing.

Per the client's specific request to adhere to the EPA Draft Method 1638 requirement of non-method blank corrected data, the results were not method blank corrected as described in the calculations section of the relevant BRL SOP(s). This deviates from BRL's standard protocol for trace level data quality and BRL believes that all low-level metals analyses should be method blank corrected and that not doing so may lead to less accurate results. The results from the method blanks that were analyzed are listed in the *Method Blanks & Reporting Limits* section of this report.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details, see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Tiffany Stilwater
Project Manager
tiffany@brooksrand.com

Lydia Greaves
Project Manager
lydia@brooksrand.com

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Sample Results

Sample	Analyte	Basis	Result	Qualifier	MDL	LOD	MRL	Unit	Batch	Sequence
WP05-95.0-GW										
1309028-01	Mn	T	1020		1.05	3.16	3.16	µg/L	B130443	1300197
1309028-01	Mn(II)	D	40.3		0.021	0.063	0.063	µg/L	B130442	1300197
1309028-01	Mn(IV)	N/A	977		1.07	3.18	3.22	µg/L	[CALC]	N/A

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Lab Reporting Batch: 680-87900-1						
Method: 1664A						
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
Method: 2340B						
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
Method: 300.0						
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
WP05-95.0-GW	680-87900-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
WP05-95.0-GW	680-87900-1 MS	AQ	Matrix_Spike	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
Method: 3500_FE_D						
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
Method: 6010C						
WP05-95.0-GW	680-87900-1	AQ	N	3010A	2/28/2013 11:22:00 AM	S2BVEM
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
Method: 7196A						
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
WP05-95.0-GW	680-87900-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
WP05-95.0-GW	680-87900-1 MS	AQ	Matrix_Spike	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
Method: 8260B						
WP-11-76.9	680-87900-2	AQ	N	8260B	2/27/2013 11:42:00 AM	S2BVEM
WP-12-78.0	680-87900-5	AQ	N	8260B	2/28/2013 9:05:00 AM	S2BVEM
WP05-95.0-GW	680-87900-1	AQ	N	8260B	2/28/2013 11:22:00 AM	S2BVEM
WP-11-87.0	680-87900-4	AQ	N	8260B	2/27/2013 1:50:00 PM	S2BVEM
WP-11-81.9	680-87900-3	AQ	N	8260B	2/27/2013 12:48:00 PM	S2BVEM
WP-12-93.0	680-87900-6	AQ	N	8260B	2/28/2013 11:55:00 AM	S2BVEM

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Method: 9040C						
WP05-95.0-GW	680-87900-1 DUP	AQ	Duplicate	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
Method: 9060A						
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
WP05-95.0-GW	680-87900-1 DUP	AQ	Duplicate	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM
Method: SM 2320B						
WP05-95.0-GW	680-87900-1	AQ	N	Gen Prep	2/28/2013 11:22:00 AM	S2BVEM

Validation Label Legend

Label Code	Label Decription	EPA Level
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with
S2BVM	Stage_2B_Validation_Manual	Level 3 with
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	*Lab Sample ID*	*Matrix*	*Sample Type*	*Preparation Method*	*Collection Date*	*Validation Code*
S4VEM	Stage_4_Validation_Electronic_and_Manual		Level 4			
NV	Not_Validated		N/A			

Field QC Assignments and Associated Samples

EDD File Name: 680-87900-1
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date

Data Qualifier Summary

Lab Reporting Batch ID: 680-87900-1 **Laboratory: TAL SAV**

EDD Filename: 680-87900-1_Scotia_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: EM

Method: 9040C **Matrix: AQ**

Sample ID: WP05-95.0-GW **Collected:** 2/28/2013 11:22:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	8.09	H	_	LOD	_	LOQ	S.U.	J	StoA

Method Category: GENCHEM

Method: 300.0 **Matrix: AQ**

Sample ID: WP05-95.0-GW **Collected:** 2/28/2013 11:22:00 **Analysis Type:** Initial/TOT **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.22	J D	0.075	LOD	0.25	LOQ	mg/L	J	RI

Method Category: GENCHEM

Method: 3500_FE_D **Matrix: AQ**

Sample ID: WP05-95.0-GW **Collected:** 2/28/2013 11:22:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Ferrous Iron	0.033	J HF	0.025	LOD	0.10	LOQ	mg/L	J	RI

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: WP05-95.0-GW **Collected:** 2/28/2013 11:22:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Icv
TRANS-1,2-DICHLOROETHENE	0.26	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: WP-11-76.9 **Collected:** 2/27/2013 11:42:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.22	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Icv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87900-1 **Laboratory: TAL SAV**

EDD Filename: 680-87900-1_Scotia_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: WP-11-81.9 **Collected:** 2/27/2013 12:48:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.41	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Icv
CHLOROFORM	0.16	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: WP-11-87.0 **Collected:** 2/27/2013 1:50:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1-DICHLOROETHENE	0.25	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Icv

Sample ID: WP-12-78.0 **Collected:** 2/28/2013 9:05:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.18	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
1,1-DICHLOROETHENE	0.16	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Icv

Sample ID: WP-12-93.0 **Collected:** 2/28/2013 11:55:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.36	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
1,1-DICHLOROETHENE	0.42	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	Icv

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-87900-1 **Laboratory: TAL SAV**

EDD Filename: 680-87900-1_Scotia_rev **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Icv	Initial Calibration Verification Percent Recovery Upper Estimation
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Rejection

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

EDD Warning Log

Lab Reporting Batch ID: 680-87900-1

eQAPP: ScotiaNavyDepot062713

Laboratory: TAL SAV

Table	Line #	Column	Value	Warning	Description
Analytical Results	648	ReportingLimit		12	ReportingLimit is missing a value in this record.
Analytical Results	649	ReportingLimit		12	ReportingLimit is missing a value in this record.
Analytical Results				18	SULFATE AS SO4 (14808-79-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268079/3.
Analytical Results				18	NITRITE (14797-65-0) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269199/3.
Analytical Results				18	NITRATE (14797-55-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269199/3.
Analytical Results				18	SULFATE AS SO4 (14808-79-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-268079/4.
Analytical Results				18	NITRITE (14797-65-0) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-269199/4.
Analytical Results				18	NITRATE (14797-55-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-269199/4.
Analytical Results				15	SULFATE AS SO4 (14808-79-8) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680 -268079/2.
Analytical Results				15	NITRITE (14797-65-0) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680-269199/2.
Analytical Results				15	NITRATE (14797-55-8) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680-269199/2.
Analytical Results				18	SULFATE AS SO4 (14808-79-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Matrix_Spike', but is not reported for sample WP05-95.0-GW.
Analytical Results				18	Ferric Iron (STL00113) is a required spike compound for Method: '3500_FE_D', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-267966/1.
Analytical Results				15	Ferric Iron (STL00113) is a required target analyte for Method: '3500_FE_D' and Matrix: 'AQ', but is not reported for sample MB 680-267966/2.
Analytical Results				18	Cr (III) (16065-83-1) is a required spike compound for Method: '7196A', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-267965/1.
Analytical Results				15	Cr (III) (16065-83-1) is a required target analyte for Method: '7196A' and Matrix: 'AQ', but is not reported for sample MB 680-267965/2.
Analytical Results				18	Cr (III) (16065-83-1) is a required spike compound for Method: '7196A', Matrix: 'AQ' and QCType: 'Matrix_Spike', but is not reported for sample WP05-95.0-GW.
Analytical Results				18	CALCIUM (7440-70-2) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268182/3-A.
Analytical Results				18	Silicon (7440-21-3) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268182/3-A.
Analytical Results				18	CALCIUM (7440-70-2) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	CHROMIUM (7440-47-3) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	MANGANESE (7439-96-5) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	MAGNESIUM (7439-95-4) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.

EDD Warning Log

Lab Reporting Batch ID: 680-87900-1

eQAPP: ScotiaNavyDepot062713

Laboratory: TAL SAV

Table	Line #	Column	Value	Warning	Description
Analytical Results				18	IRON (7439-89-6) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	TITANIUM (7440-32-6) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-268182/1-A.
Analytical Results				15	Silicon (7440-21-3) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-268182/1-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	CHROMIUM (7440-47-3) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	MANGANESE (7439-96-5) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	MAGNESIUM (7439-95-4) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	IRON (7439-89-6) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	TITANIUM (7440-32-6) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample WP05-95.0-GW.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-269199' for Method '300.0' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-267966' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Method_Blank' is not reported for PreparationBatch '680-268885' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Method_Blank' sample for this method and matrix.
Sample Methods				9	A 'Laboratory_Control_Sample' is not reported for PreparationBatch '680-268885' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Laboratory_Control_Sample' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-268885' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Method_Blank' is not reported for PreparationBatch '680-268886' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Method_Blank' sample for this method and matrix.
Sample Methods				9	A 'Laboratory_Control_Sample' is not reported for PreparationBatch '680-268886' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Laboratory_Control_Sample' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-268886' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-268062' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Method_Blank' is not reported for PreparationBatch '680-269144' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Method_Blank' sample for this method and matrix.
Sample Methods				9	A 'Laboratory_Control_Sample' is not reported for PreparationBatch '680-269144' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Laboratory_Control_Sample' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-269144' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

EDD Warning Log

Lab Reporting Batch ID: 680-87900-1

eQAPP: ScotiaNavyDepot062713

Laboratory: TAL SAV

Table	Line #	Column	Value	Warning	Description
Sample Methods				9	A 'Duplicate' is not reported for MethodBatch '280-164897' for Method 'SM 2320B' and Matrix 'AQ'. The project eQapp requires a 'Duplicate' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-268182' for Method '6010C' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-269417' for Method '6010C' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

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THE LEADER IN ENVIRONMENTAL TESTING

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◯ Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NY Site GW	68011020	NY
TAL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Betsy Beauchamp		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Joe Schmidl	802-229-4541	
CLIENT NAME	CLIENT E-MAIL	
STONE ENV.	jschmidl@stone-env.com	
CLIENT ADDRESS		
535 Stone Cutters Way, Montpelier, VT		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ◯
DATE DUE
EXPEDITED REPORT DELIVERY (SURCHARGE) ◯
DATE DUE
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	REQUIRED ANALYSIS: 8260C 6013	8260 Total 8260 Diss.	2540C Total 2540C Diss.	1664 A	9040B	SM 2320B	SM 2320B	3500	SM 3500-Fe D	7196A	REMARKS
								HCl HNO3	HCl Hexane	None None	H2SO4	None	HNO3	None	None	None	None	
3/5/13	1008	WP03-95.0-GW	G	X				X	X	X	X	X	X	X	X	X	X	

NUMBER OF CONTAINERS SUBMITTED

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	3/5/13	17:00						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	3/6/13	0917	YES ◯ NO ◯		320-8802-6	13 a c

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-88026-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The sample was received on 3/6/2013 9:17 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample WP03-95.0-GW (680-88026-1) was analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/14/2013.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

METALS (ICP)
Sample WP03-95.0-GW (680-88026-1) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 03/12/2013 and analyzed on 03/16/2013.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 680-269064 were outside control limits for arsenic. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Due to the high concentration of calcium, the matrix spike / matrix spike duplicate (MS/MSD) for batch 680-269064 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

SILICA BY ICP
Sample WP03-95.0-GW (680-88026-1) was analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were analyzed on 03/14/2013.

HEXAVALENT CHROMIUM
Sample WP03-95.0-GW (680-88026-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 03/06/2013.

The following sample(s) was received outside of holding time: WP03-95.0-GW (680-88026-1).

To verify the absence of an interference, EPA Method 7196A requires the sample to be diluted until the matrix spike (MS) recovery is within 85-115%. For this reason, the following sample(s) was diluted: (680-88006-1 MS), (680-88006-1 MSD), 13-0143-1 HICKORY HILL EFFLUENT (680-88006-1). Elevated reporting limits (RLs) are provided.

OIL AND GREASE AND TPH
Sample WP03-95.0-GW (680-88026-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 03/15/2013.

ALKALINITY
Sample WP03-95.0-GW (680-88026-1) was analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 03/15/2013.

HARDNESS
Sample WP03-95.0-GW (680-88026-1) was analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 03/11/2013.

TOTAL DISSOLVED SOLIDS
Sample WP03-95.0-GW (680-88026-1) was analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 03/08/2013.

TOTAL SUSPENDED SOLIDS
Sample WP03-95.0-GW (680-88026-1) was analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/07/2013.

ANIONS BY IC
Sample WP03-95.0-GW (680-88026-1) was analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 03/16/2013.

Sample WP03-95.0-GW (680-88026-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Due to the high concentration of nitrate and non-target analytes, the sample duplicate for batch 268493 could not be evaluated for precision. The matrix spike (MS) was performed in duplicate to provide precision data for this batch.

ANIONS (NITRATE/NITRITE)
Sample WP03-95.0-GW (680-88026-1) was analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 03/06/2013.

Sample WP03-95.0-GW (680-88026-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Sample WP03-95.0-GW (680-88026-1) was analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 03/06/2013.

Sample WP03-95.0-GW (680-88026-1) was analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 03/11/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM
Sample WP03-95.0-GW (680-88026-1) was analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 03/11/2013.

PH
Sample WP03-95.0-GW (680-88026-1) was analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 03/07/2013.

TOTAL ORGANIC CARBON
Sample WP03-95.0-GW (680-88026-1) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/17/2013.

DISSOLVED ORGANIC CARBON
Sample WP03-95.0-GW (680-88026-1) was analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/12/2013.

March 29, 2013

TestAmerica
Attn: Michelle Kersey
5102 LaRoche Ave.
Savannah, GA 31404
mkersey@testamericainc.com

RE: Brooks Rand Project: TST-SV1301 Client Project: 102305-R-CTask 6A

Dear Ms. Kersey,

On March 6, 2013, Brooks Rand Labs (BRL) received one (1) water sample. The sample was logged-in for analyses manganese speciation contractually defined as total recoverable manganese (Mn), Mn(II) and Mn(IV) determined by difference (see speciation note below). The samples were received, prepared, analyzed, and stored according to BRL SOP(s) and EPA methodology.

Manganese Speciation Note: This is an operationally defined method where the manganese (Mn) species are determined by the physical separation using filtration through 0.45-µm filters. Reduced manganese (Mn^{2+}) is soluble and oxidized manganese (Mn^{4+}) is not. Therefore, determinations on a sample that is filtered prior to any exposure to oxygen yields concentrations of reduced species, and determinations on an unfiltered sample yield a measurement of oxidized (or reduced and oxidized) species. For this Mn speciation method, samples are field-filtered using ventable in-line filters with no exposure to the air prior to filtration. Due to the chemical properties described above, the filtered sample is defined as Mn(II). An additional unfiltered sample is collected and analyzed for total recoverable Mn. Mn(IV) is calculated by the difference of total recoverable Mn minus Mn(II).

The results may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* for sample-specific MDL, MRL, and other details.

All results have been reported to the concentration of the method detection limit (MDL), referred to as the detection limit (DL) in the DoD QSM. The Limit of Quantitation (LOQ) is defined in this report as the method reporting limit (MRL).

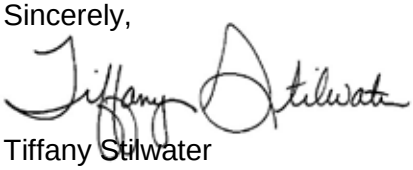
The digestion method used for the samples took place in the original sample container. Therefore, the matrix spikes were prepared at the instrument and would be the same as post-digestion spikes.

The DoD acceptance criteria for the dilution tests state that the diluted result must be ±10% of the native result. Therefore, when the native sample produces a result of 1 (unit independent), the acceptable range for the dilution duplicate is 0.9 - 1.1 units. However, in the upper limit the relative percent difference (RPD) between the two values is 9.5% whereas in the lower limit the RPD is 10.5%. BRL has set the RPD limit to 10% in the report as this is the closest approximation the LIMS is capable of representing.

Per the client's specific request to adhere to the EPA Draft Method 1638 requirement of non-method blank corrected data, the results were not method blank corrected as described in the calculations section of the relevant BRL SOP(s). This deviates from BRL's standard protocol for trace level data quality and BRL believes that all low-level metals analyses should be method blank corrected and that not doing so may lead to less accurate results. The results from the method blanks that were analyzed are listed in the *Method Blanks & Reporting Limits* section of this report.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details, see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,



Tiffany Stilwater
Project Manager
tiffany@brooksrand.com



Lydia Greaves
Project Manager
lydia@brooksrand.com

Project ID: TST-SV1301
PM: Tiffany Stilwater

Client PM: Michelle Kersey

Sample Results

Sample	Analyte	Basis	Result	Qualifier	MDL	LOD	MRL	Unit	Batch	Sequence
WP03-95.0-GW										
1310011-01	Mn	T	115		0.02	0.06	0.06	µg/L	B130416	1300197
1310011-01	Mn(II)	D	39.2		0.021	0.063	0.063	µg/L	B130442	1300197
1310011-01	Mn(IV)	N/A	75.4		0.04	0.15	0.13	µg/L	[CALC]	N/A

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Lab Reporting Batch: 680-88026-1						
Method: 1664A						
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
Method: 2340B						
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
Method: 300.0						
WP03-95.0-GW	680-88026-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1 MS	AQ	Matrix_Spike	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
Method: 3500_FE_D						
WP03-95.0-GW	680-88026-1 MS	AQ	Matrix_Spike	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
Method: 6010C						
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1	AQ	N	3010A	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1 MS	AQ	Matrix_Spike	3010A	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1 MSD	AQ	Matrix_Spike_Duplicate	3010A	3/5/2013 10:08:00 AM	S2BVEM
Method: 7196A						
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
Method: 8260B						
WP03-95.0-GW	680-88026-1	AQ	N	8260B	3/5/2013 10:08:00 AM	S2BVEM
Method: 9040C						
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Method: 9060A						
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
WP03-95.0-GW	680-88026-1 MS	AQ	Matrix_Spike	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM
Method: SM 2320B						
WP03-95.0-GW	680-88026-1	AQ	N	Gen Prep	3/5/2013 10:08:00 AM	S2BVEM

Validation Label Legend

Label Code	Label Decription	EPA Level
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with
S2BVM	Stage_2B_Validation_Manual	Level 3 with
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

Field QC Assignments and Associated Samples

EDD File Name: 680-88026-1
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date

Data Qualifier Summary

Lab Reporting Batch ID: 680-88026-1 **Laboratory: TAL SAV**

EDD Filename: 680-88026-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: EM

Method: 9040C **Matrix: AQ**

Sample ID: WP03-95.0-GW **Collected:** 3/5/2013 10:08:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	7.84	H	_	LOD	_	LOQ	S.U.	J	StoA

Method Category: METALS

Method: 6010C **Matrix: AQ**

Sample ID: WP03-95.0-GW **Collected:** 3/5/2013 10:08:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	9.3	J	2.0	LOD	10	LOQ	ug/L	J	RI

Method Category: METALS

Method: 7196A **Matrix: AQ**

Sample ID: WP03-95.0-GW **Collected:** 3/5/2013 10:08:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.0030	U H	0.0030	LOD	0.010	LOQ	mg/L	UJ	StoA

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: WP03-95.0-GW **Collected:** 3/5/2013 10:08:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,1-TRICHLOROETHANE	0.50	U	0.50	LOD	1.0	LOQ	ug/L	UJ	StoA
1,1,2,2-TETRACHLOROETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.50	U	0.50	LOD	1.0	LOQ	ug/L	UJ	StoA
1,1,2-TRICHLOROETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
1,1-DICHLOROETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
1,1-DICHLOROETHENE	2.0		0.25	LOD	1.0	LOQ	ug/L	J	StoA
1,2,4-TRICHLOROBENZENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
1,2-DIBROMO-3-CHLOROPROPANE	1.0	U	1.0	LOD	1.0	LOQ	ug/L	UJ	StoA
1,2-DIBROMOETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
1,2-DICHLOROBENZENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-88026-1 **Laboratory: TAL SAV**

EDD Filename: 680-88026-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **WP03-95.0-GW** ***Collected:*** **3/5/2013 10:08:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2-DICHLOROETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
1,2-DICHLOROPROPANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
1,3-DICHLOROBENZENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
1,4-DICHLOROBENZENE	0.28	U	0.28	LOD	1.0	LOQ	ug/L	UJ	StoA
2-BUTANONE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	StoA
2-HEXANONE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	StoA
4-METHYL-2-PENTANONE	1.0	U	1.0	LOD	10	LOQ	ug/L	UJ	StoA
ACETONE	5.0	U	5.0	LOD	25	LOQ	ug/L	UJ	StoA
BENZENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
BROMODICHLOROMETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
BROMOFORM	0.50	U	0.50	LOD	1.0	LOQ	ug/L	UJ	StoA
BROMOMETHANE	0.80	U	0.80	LOD	1.0	LOQ	ug/L	UJ	StoA
CARBON DISULFIDE	0.60	U	0.60	LOD	2.0	LOQ	ug/L	UJ	StoA
CARBON TETRACHLORIDE	0.50	U	0.50	LOD	1.0	LOQ	ug/L	UJ	StoA
CHLOROBENZENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
CHLOROETHANE	1.0	U	1.0	LOD	1.0	LOQ	ug/L	UJ	StoA
CHLOROFORM	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
CHLOROMETHANE	0.33	U	0.33	LOD	1.0	LOQ	ug/L	UJ	StoA
CIS-1,2-DICHLOROETHENE	0.17	J	0.25	LOD	1.0	LOQ	ug/L	J	RI, StoA
CIS-1,3-DICHLOROPROPENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
CYCLOHEXANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
DIBROMOCHLOROMETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
DICHLORODIFLUOROMETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
ETHYLBENZENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
ISOPROPYLBENZENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
METHYL ACETATE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
METHYL CYCLOHEXANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
METHYL TERT-BUTYL ETHER	0.50	U	0.50	LOD	10	LOQ	ug/L	UJ	StoA
METHYLENE CHLORIDE	1.0	U	1.0	LOD	5.0	LOQ	ug/L	UJ	StoA
STYRENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
TETRACHLOROETHENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
TOLUENE	3.4		0.33	LOD	1.0	LOQ	ug/L	J	StoA
TRANS-1,2-DICHLOROETHENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
TRANS-1,3-DICHLOROPROPENE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-88026-1 **Laboratory: TAL SAV**

EDD Filename: 680-88026-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **AQ**

Sample ID: **WP03-95.0-GW** ***Collected:*** **3/5/2013 10:08:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
TRICHLOROETHENE	29		0.25	LOD	1.0	LOQ	ug/L	J	StoA
TRICHLOROFLUOROMETHANE	0.25	U	0.25	LOD	1.0	LOQ	ug/L	UJ	StoA
VINYL CHLORIDE	0.50	U	0.50	LOD	1.0	LOQ	ug/L	UJ	StoA
Xylene (Total)	0.75	U	0.75	LOD	2.0	LOQ	ug/L	UJ	StoA

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 680-88026-1 **Laboratory: TAL SAV**

EDD Filename: 680-88026-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Scotia NY Site GW	680l1020	NY
TAL (LAB) PROJECT MANAGER: Betsy Beauchamp	P.O. NUMBER	CONTRACT NO.
CLIENT (SITE) PM: Joe Schmidl	CLIENT PHONE: 802-229-1545 41	CLIENT FAX
CLIENT NAME: STONE ENV.	CLIENT E-MAIL: jschmidl@stone-env.com	
CLIENT ADDRESS: 535 STONE Cutters Way, Montpelier, VT 05602		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ○
DATE DUE
EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	8260C Bulk	8260C Total 8260C Diss.	2540C Total 2540C Diss.	1664A HEM SGT-HEM	9040B	SM4500 NH3	SM4500 NO3	300.0	SM3500-Fe-D	7196A	8260B VOC	REMARKS
								Air Bub. NaHSO3	Nitric NaHSO3	Nitric HCl	None None	H2SO4 None	None	None	None	None	None	HCl	NUMBER OF CONTAINERS SUBMITTED
3/7/13	9:33	WP02-105.0-GW	G	X				X	X	X	X	X	X	X	X	X	X	X	
3/7/13	9:33	WP02-105.0-GW-D						X	X	X	X	X	X	X	X	X	X		
3/6/13	8:27	WP-14-98.0																X	
3/6/13	9:21	WP-14-103.0																X	
3/6/13	10:40	WP-15-75.4																X	
3/7/13	9:20	WP-16-68.0																X	
3/7/13	9:52	WP-16-73.0	↓	↓														X	
3/7/13	8:00	TB-030713	G	X														X	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	3/7/13	1700						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	03/08/13	0921	YES ○ NO ○		680 88114	4.2 °C

TAL8240-680 (1008)

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03/21/2013

BROOKS RAND LABS
MEANINGFUL METALS DATA
3958 6th Avenue NW
Seattle, WA 98107
Phone: 206-632-6206
Fax: 206-632-6017
samples@brooksrand.com
www.brooksrand.com

Chain of Custody Record

BRL Report 1310027

1310027

White: LAB COPY
Yellow: CUSTOMER COPY

03/29/2013

Client: STONE ENV.	Address: 535 STONE Cutters Way	COC receipt confirmation? (Y) / N	
Contact: Joe Schmidl		If so, by: email / fax (circle one)	
Client project ID: 102305-R-C Task 6A		Email: jschmidl@stone-env.com	
PO #:	Phone #: 802-229-4541	Fax #:	

Requested TAT in business days:
- ☐ 20 (standard)
- ☐ 15
- ☐ 10
- ☐ 5
- ☐ Other ____

Surcharges apply for expedited turn around times.

	Sample ID	Collection: Date	Collection: Time	Miscellaneous: Sampler (initials)	Miscellaneous: Matrix type	Miscellaneous: # of containers	Miscellaneous: Field filtered? (Y/N)	Field Preservation: Unpreserved / ice only	Field Preservation: HCl / HNO3 (circle one)	Field Preservation: Other (specify)	Analyses required: Total Hg, EPA 1631	Analyses required: Methyl Hg, EPA 1630	Analyses required: ICP-MS Metals (specify)	Analyses required: As / Se species (specify)	Analyses required: % Solids	Analyses required: Filtration	Analyses required: Other (specify) 1638 mod: Ni,Cd	Analyses required: Other (specify)	Comments
1	wPO2-105.0-GW	3/7/13	9:33	DSL	GW	1	Y		X								X		
2	wPO2-105.0-GW	3/7/13	↓	↓	↓	↓	N		↓								↓		
3	wPO2-105.0-GW-D	3/7/13					Y												
4	wPO2-105.0-GW-D	3/7/13	↓	↓	↓	↓	N		↓								↓		
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by:	Date: 3/7/13	Time: 17:00	Relinquished by:
Received by:	Date:	Time:	Received at BRL by:
Shipping carrier:	# of coolers:		BRL work order ID:

Date:	Time:
Date: 3/8/13	Time: 0900
BRL project ID:	

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-88114-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 3/8/2013 9:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples WP02-105.0-GW (680-88114-1), WP02-105.0-GW-D (680-88114-2), WP-14-98.0 (680-88114-3), WP-14-103.0 (680-88114-4), WP-15-75.4 (680-88114-5), WP-16-68.0 (680-88114-6), WP-16-73.0 (680-88114-7) and TB-030713 (680-88114-8) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/11/2013.

A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for 4 analytes to recover outside criteria for this method when a full list spike is utilized. The LCS associated with batch 268899 had 2 analytes outside control limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

DOD QSM Table F-4 states that all project analytes must be within 20% of the true value in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV). The laboratory requires 95% of analytes in the Second Source Calibration Verification (ICV) and the Continuing Calibration Verification (CCV) to be within 20% of the expected value. Poor performer and/or erratic responders, as outlined in the laboratory's SOP, are exempt from this requirement.

METALS (ICP)
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 03/12/2013 and analyzed on 03/16/2013.

SILICA BY ICP
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were analyzed on 03/14/2013.

HEXAVALENT CHROMIUM
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 03/08/2013.

The following sample(s) was received with insufficient time remaining to perform the analysis within holding time: WP02-105.0-GW (680-88114-1), WP02-105.0-GW-D (680-88114-2).

OIL AND GREASE AND TPH
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 03/19/2013.

ALKALINITY
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 03/18/2013.

HARDNESS
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 03/16/2013.

TOTAL DISSOLVED SOLIDS
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for total dissolved solids in accordance with SM 2540C. The samples were analyzed on 03/08/2013.

TOTAL SUSPENDED SOLIDS
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for total suspended solids in accordance with SM 2540D. The samples were analyzed on 03/12/2013.

ANIONS BY IC
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 03/17/2013 and 03/19/2013.

Samples WP02-105.0-GW (680-88114-1)[5X] and WP02-105.0-GW-D (680-88114-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

ANIONS (NITRATE/NITRITE)
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 03/09/2013.

Samples WP02-105.0-GW (680-88114-1)[5X] and WP02-105.0-GW-D (680-88114-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 03/08/2013.

Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 03/11/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 03/11/2013.

PH
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 03/08/2013.

TOTAL ORGANIC CARBON
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/17/2013.

DISSOLVED ORGANIC CARBON
Samples WP02-105.0-GW (680-88114-1) and WP02-105.0-GW-D (680-88114-2) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 03/12/2013.

March 29, 2013

TestAmerica
Attn: Michelle Kersey
5102 LaRoche Ave.
Savannah, GA 31404
mkersey@testamericainc.com

RE: Brooks Rand Project: TST-SV1301 Client Project: 102305-R-CTask 6A

Dear Ms. Kersey,

On March 8, 2013, Brooks Rand Labs (BRL) received two (2) water samples. The samples were logged-in for analyses manganese speciation contractually defined as total recoverable manganese (Mn), Mn(II) and Mn(IV) determined by difference (see speciation note below). The samples were received, prepared, analyzed, and stored according to BRL SOP(s) and EPA methodology.

Manganese Speciation Note: This is an operationally defined method where the manganese (Mn) species are determined by the physical separation using filtration through 0.45-µm filters. Reduced manganese (Mn^{2+}) is soluble and oxidized manganese (Mn^{4+}) is not. Therefore, determinations on a sample that is filtered prior to any exposure to oxygen yields concentrations of reduced species, and determinations on an unfiltered sample yield a measurement of oxidized (or reduced and oxidized) species. For this Mn speciation method, samples are field-filtered using ventable in-line filters with no exposure to the air prior to filtration. Due to the chemical properties described above, the filtered sample is defined as Mn(II). An additional unfiltered sample is collected and analyzed for total recoverable Mn. Mn(IV) is calculated by the difference of total recoverable Mn minus Mn(II).

The results may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* for sample-specific MDL, MRL, and other details.

All results have been reported to the concentration of the method detection limit (MDL), referred to as the detection limit (DL) in the DoD QSM. The Limit of Quantitation (LOQ) is defined in this report as the method reporting limit (MRL).

The digestion method used for the samples took place in the original sample container. Therefore, the matrix spikes were prepared at the instrument and would be the same as post-digestion spikes.

The DoD acceptance criteria for the dilution tests state that the diluted result must be ±10% of the native result. Therefore, when the native sample produces a result of 1 (unit independent), the acceptable range for the dilution duplicate is 0.9 - 1.1 units. However, in the upper limit the relative percent difference (RPD) between the two values is 9.5% whereas in the lower limit the RPD is 10.5%. BRL has set the RPD limit to 10% in the report as this is the closest approximation the LIMS is capable of representing.

Per the client's specific request to adhere to the EPA Draft Method 1638 requirement of non-method blank corrected data, the results were not method blank corrected as described in the calculations section of the relevant BRL SOP(s). This deviates from BRL's standard protocol for trace level data quality and BRL believes that all low-level metals analyses should be method blank corrected and that not doing so may lead to less accurate results. The results from the method blanks that were analyzed are listed in the *Method Blanks & Reporting Limits* section of this report.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more details, see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Tiffany Stilwater
Project Manager
tiffany@brooksrand.com

Lydia Greaves
Project Manager
lydia@brooksrand.com

Sample Results

Sample	Analyte	Basis	Result	Qualifier	MDL	LOD	MRL	Unit	Batch	Sequence
WP02-105.0-GW										
1310027-01	Mn	T	2340		1.05	3.16	3.16	µg/L	B130443	1300197
1310027-01	Mn(II)	D	54.2		0.021	0.063	0.063	µg/L	B130442	1300197
1310027-01	Mn(IV)	N/A	2290		1.07	6.36	3.22	µg/L	[CALC]	N/A
WP02-105.0-GW-D										
1310027-02	Mn	T	2370		1.05	3.16	3.16	µg/L	B130443	1300197
1310027-02	Mn(II)	D	53.6		0.021	0.063	0.063	µg/L	B130442	1300197
1310027-02	Mn(IV)	N/A	2320		1.07	9.52	3.22	µg/L	[CALC]	N/A

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Lab Reporting Batch: 680-88114-1						
Method: 1664A						
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
Method: 2340B						
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
Method: 300.0						
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1 MS	AQ	Matrix_Spike	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
Method: 3500_FE_D						
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1 MS	AQ	Matrix_Spike	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
Method: 6010C						
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2	AQ	N	3010A	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1	AQ	N	3010A	3/7/2013 9:33:00 AM	S2BVEM
Method: 7196A						
WP02-105.0-GW	680-88114-1 MS	AQ	Matrix_Spike	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2 MS	AQ	Matrix_Spike	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Method: 7196A						
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
Method: 8260B						
WP-16-73.0	680-88114-7	AQ	N	8260B	3/7/2013 9:52:00 AM	S2BVEM
WP-14-103.0	680-88114-4	AQ	N	8260B	3/6/2013 9:21:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1	AQ	N	8260B	3/7/2013 9:33:00 AM	S2BVEM
WP-16-68.0	680-88114-6	AQ	N	8260B	3/7/2013 9:20:00 AM	S2BVEM
WP-14-98.0	680-88114-3	AQ	N	8260B	3/6/2013 8:27:00 AM	S2BVEM
WP-15-75.4	680-88114-5	AQ	N	8260B	3/6/2013 10:40:00 AM	S2BVEM
TB-030713	680-88114-8	AQ	Trip_Blank	8260B	3/7/2013 8:00:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2	AQ	N	8260B	3/7/2013 9:33:00 AM	S2BVEM
Method: 9040C						
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
Method: 9060A						
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW-D	680-88114-2 DUP	AQ	Duplicate	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
Method: SM 2320B						
WP02-105.0-GW-D	680-88114-2	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM
WP02-105.0-GW	680-88114-1	AQ	N	Gen Prep	3/7/2013 9:33:00 AM	S2BVEM

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code

Validation Label Legend

Label Code	Label Decription	EPA Level
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with
S2BVM	Stage_2B_Validation_Manual	Level 3 with
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

Field QC Assignments and Associated Samples

EDD File Name: 680-88114-1
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date
Field QC Sample: TB-030713 **QC Type:** Trip_Blank		
	WP02-105.0-GW	3/7/2013 9:33:00 AM
	WP02-105.0-GW-D	3/7/2013 9:33:00 AM
	WP-16-73.0	3/7/2013 9:52:00 AM
	WP-14-103.0	3/6/2013 9:21:00 AM
	WP-16-68.0	3/7/2013 9:20:00 AM
	WP-14-98.0	3/6/2013 8:27:00 AM
	WP-15-75.4	3/6/2013 10:40:00 AM

Data Qualifier Summary

Lab Reporting Batch ID: 680-88114-1 **Laboratory: TAL SAV**

EDD Filename: 680-88114-1_Scotia_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: EM

Method: 9040C **Matrix: AQ**

Sample ID: WP02-105.0-GW **Collected:** 3/7/2013 9:33:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	7.96	H	_	LOD	_	LOQ	S.U.	J	StoA

Sample ID: WP02-105.0-GW-D **Collected:** 3/7/2013 9:33:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	8.04	H	_	LOD	_	LOQ	S.U.	J	StoA

Method Category: GENCHEM

Method: 300.0 **Matrix: AQ**

Sample ID: WP02-105.0-GW **Collected:** 3/7/2013 9:33:00 AM **Analysis Type:** Initial/TOT **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.17	J D	0.075	LOD	0.25	LOQ	mg/L	J	RI

Sample ID: WP02-105.0-GW-D **Collected:** 3/7/2013 9:33:00 AM **Analysis Type:** Initial/TOT **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRATE	0.18	J D	0.075	LOD	0.25	LOQ	mg/L	J	RI

Method Category: GENCHEM

Method: 9060A **Matrix: AQ**

Sample ID: WP02-105.0-GW **Collected:** 3/7/2013 9:33:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL ORGANIC CARBON (TOC)	0.59	J	0.50	LOD	1.0	LOQ	mg/L	J	RI

Sample ID: WP02-105.0-GW-D **Collected:** 3/7/2013 9:33:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TOTAL ORGANIC CARBON (TOC)	0.60	J	0.50	LOD	1.0	LOQ	mg/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-88114-1 **Laboratory: TAL SAV**

EDD Filename: 680-88114-1_Scotia_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: METALS

Method: 7196A **Matrix: AQ**

Sample ID: WP02-105.0-GW **Collected:** 3/7/2013 9:33:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.0030	U H	0.0030	LOD	0.010	LOQ	mg/L	UJ	StoA

Sample ID: WP02-105.0-GW-D **Collected:** 3/7/2013 9:33:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.0030	U H	0.0030	LOD	0.010	LOQ	mg/L	UJ	StoA

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: WP-14-103.0 **Collected:** 3/6/2013 9:21:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.18	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
1,1-DICHLOROETHENE	0.24	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: WP-14-98.0 **Collected:** 3/6/2013 8:27:00 AM **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.22	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
1,1-DICHLOROETHENE	0.26	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

Sample ID: WP-15-75.4 **Collected:** 3/6/2013 10:40:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2-TRICHLOROETHANE	0.56	J	0.25	LOD	1.0	LOQ	ug/L	J	RI
1,1-DICHLOROETHENE	0.25	J	0.25	LOD	1.0	LOQ	ug/L	J	RI

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: 680-88114-1 **Laboratory: TAL SAV**

EDD Filename: 680-88114-1_Scotia_rev **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Lcs	Laboratory Control Spike Upper Estimation
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

EDD Warning Log

Lab Reporting Batch ID: 680-88114-1

eQAPP: ScotiaNavyDepot062713

Laboratory: TAL SAV

Table	Line #	Column	Value	Warning	Description
Analytical Results	570	ReportingLimit	25	28	This DetectionLimit (LOD) value is greater than the Reporting Limit set in the eQAPP, corrected for dilution and percent moisture if applicable..
Analytical Results	571	ReportingLimit	25	28	This DetectionLimit (LOD) value is greater than the Reporting Limit set in the eQAPP, corrected for dilution and percent moisture if applicable..
Analytical Results	615	ReportingLimit		12	ReportingLimit is missing a value in this record.
Analytical Results	616	ReportingLimit		12	ReportingLimit is missing a value in this record.
Analytical Results				18	SULFATE AS SO4 (14808-79-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268805/3.
Analytical Results				18	NITRITE (14797-65-0) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269709/3.
Analytical Results				18	NITRATE (14797-55-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269709/3.
Analytical Results				18	NITRITE (14797-65-0) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-270003/3.
Analytical Results				18	NITRATE (14797-55-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-270003/3.
Analytical Results				18	SULFATE AS SO4 (14808-79-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-268805/4.
Analytical Results				18	NITRITE (14797-65-0) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-269709/4.
Analytical Results				18	NITRATE (14797-55-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-269709/4.
Analytical Results				18	NITRITE (14797-65-0) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-270003/4.
Analytical Results				18	NITRATE (14797-55-8) is a required spike compound for Method: '300.0', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCSD 680-270003/4.
Analytical Results				15	SULFATE AS SO4 (14808-79-8) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680 -268805/2.
Analytical Results				15	NITRITE (14797-65-0) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680-269709/2.
Analytical Results				15	NITRATE (14797-55-8) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680-269709/2.
Analytical Results				15	NITRITE (14797-65-0) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680-270003/2.
Analytical Results				15	NITRATE (14797-55-8) is a required target analyte for Method: '300.0' and Matrix: 'AQ', but is not reported for sample MB 680-270003/2.
Analytical Results				18	Ferric Iron (STL00113) is a required spike compound for Method: '3500_FE_D', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268778/1.
Analytical Results				15	Ferric Iron (STL00113) is a required target analyte for Method: '3500_FE_D' and Matrix: 'AQ', but is not reported for sample MB 680-268778/2.
Analytical Results				18	Ferric Iron (STL00113) is a required spike compound for Method: '3500_FE_D', Matrix: 'AQ' and QCType: 'Matrix_Spike', but is not reported for sample WP02-105.0-GW.
Analytical Results				18	Cr (III) (16065-83-1) is a required spike compound for Method: '7196A', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-268775/1.
Analytical Results				15	Cr (III) (16065-83-1) is a required target analyte for Method: '7196A' and Matrix: 'AQ', but is not reported for sample MB 680-268775/2.

EDD Warning Log

Lab Reporting Batch ID: 680-88114-1

eQAPP: ScotiaNavyDepot062713

Laboratory: TAL SAV

Table	Line #	Column	Value	Warning	Description
Analytical Results				18	Cr (III) (16065-83-1) is a required spike compound for Method: '7196A', Matrix: 'AQ' and QCType: 'Matrix_Spike', but is not reported for sample WP02-105.0-GW.
Analytical Results				18	Cr (III) (16065-83-1) is a required spike compound for Method: '7196A', Matrix: 'AQ' and QCType: 'Matrix_Spike', but is not reported for sample WP02-105.0-GW-D.
Analytical Results				18	CALCIUM (7440-70-2) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269064/3-A.
Analytical Results				18	Silicon (7440-21-3) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269064/3-A.
Analytical Results				18	CALCIUM (7440-70-2) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	CHROMIUM (7440-47-3) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	MANGANESE (7439-96-5) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	MAGNESIUM (7439-95-4) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	IRON (7439-89-6) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				18	TITANIUM (7440-32-6) is a required spike compound for Method: '6010C', Matrix: 'AQ' and QCType: 'Laboratory_Control_Sample', but is not reported for sample LCS 680-269405/2-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269064/1-A.
Analytical Results				15	Silicon (7440-21-3) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269064/1-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	CHROMIUM (7440-47-3) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	MANGANESE (7439-96-5) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	MAGNESIUM (7439-95-4) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	IRON (7439-89-6) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	TITANIUM (7440-32-6) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample MB 680-269405/1-A.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample WP02-105.0-GW.
Analytical Results				15	CALCIUM (7440-70-2) is a required target analyte for Method: '6010C' and Matrix: 'AQ', but is not reported for sample WP02-105.0-GW-D.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-269709' for Method '300.0' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Method_Blank' is not reported for PreparationBatch '680-268885' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Method_Blank' sample for this method and matrix.
Sample Methods				9	A 'Laboratory_Control_Sample' is not reported for PreparationBatch '680-268885' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Laboratory_Control_Sample' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-268885' for Method '3500_FE_D' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

EDD Warning Log

Lab Reporting Batch ID: 680-88114-1

eQAPP: ScotiaNavyDepot062713

Laboratory: TAL SAV

Table	Line #	Column	Value	Warning	Description
Sample Methods	51	MethodBatch	680-268775	7	More than one record with QC Type 'Matrix_Spike' is reported in Method Batch '680-268775' for Method '7196A' and Matrix 'AQ'.
Sample Methods	55	MethodBatch	680-268775	7	More than one record with QC Type 'Matrix_Spike' is reported in Method Batch '680-268775' for Method '7196A' and Matrix 'AQ'.
Sample Methods	52	MethodBatch	680-268775	7	More than one record with QC Type 'Matrix_Spike_Duplicate' is reported in Method Batch '680-268775' for Method '7196A' and Matrix 'AQ'.
Sample Methods	56	MethodBatch	680-268775	7	More than one record with QC Type 'Matrix_Spike_Duplicate' is reported in Method Batch '680-268775' for Method '7196A' and Matrix 'AQ'.
Sample Methods				9	A 'Method_Blank' is not reported for PreparationBatch '680-268886' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Method_Blank' sample for this method and matrix.
Sample Methods				9	A 'Laboratory_Control_Sample' is not reported for PreparationBatch '680-268886' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Laboratory_Control_Sample' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-268886' for Method '7196A' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-269677' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Method_Blank' is not reported for PreparationBatch '680-269144' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Method_Blank' sample for this method and matrix.
Sample Methods				9	A 'Laboratory_Control_Sample' is not reported for PreparationBatch '680-269144' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Laboratory_Control_Sample' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-269144' for Method '9060A' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Duplicate' is not reported for MethodBatch '280-165391' for Method 'SM 2320B' and Matrix 'AQ'. The project eQapp requires a 'Duplicate' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-269064' for Method '6010C' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.
Sample Methods				9	A 'Matrix_Spike' is not reported for MethodBatch '680-269417' for Method '6010C' and Matrix 'AQ'. The project eQapp requires a 'Matrix_Spike' sample for this method and matrix.

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE: 102305-R-C (Task 6A	PROJECT NO.: Sc'tta Naval Depot	PROJECT LOCATION (STATE): NY	
TAL (LAB) PROJECT MANAGER: Michelle Kerney	P.O. NUMBER:	CONTRACT NO.:	
CLIENT (SITE) PM: Joseph Schmidt	CLIENT PHONE: 802 229-5377	CLIENT FAX:	
CLIENT NAME: Stone Environmental, Inc	CLIENT E-MAIL: JSchmidt@Stone-Env.com		
CLIENT ADDRESS: 535 Stone Cutters Way, Montpelier VT 05602			
COMPANY CONTRACTING THIS WORK (if applicable)			

MATRIX TYPE (COMPOSITE (C) OR GRAB (G) INDICATE): AQUEOUS (WATER); SOLID OR SEMISOLID; AIR; NONAQUEOUS LIQUID (OIL, SOLVENT, ...)

REQUIRED ANALYSIS: Cr, Fe, Mn, Mg, Ti; Hardness; Chromium VI; TAL Metals; Cr3+ by Calculation; pH; Sulfide; Alkalinity; DOC; TOC; Nitrate (as N); Nitrite (as N)

PAGE 1 OF 1

STANDARD REPORT DELIVERY ✓

DATE DUE

EXPEDITED REPORT DELIVERY (SURCHARGE) ○

DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G)	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	NUMBER OF CONTAINERS SUBMITTED	REMARKS
4/24/13	09:17	MW26-105.0-GW	G	X				1 1 1 1 1 2 1 2	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
	4/24/13	15:30						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

LABORATORY USE ONLY

FCP 680 11020

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	SAVANNAH LOG NO.	LABORATORY REMARKS
	4/25/13	0918	YES ○ NO ○		680-89687	3.4°C

TAL8240-680 (1008)

CASE NARRATIVE

Client: Stone Environmental

Project: Scotia NY Site

Report Number: 680-89687-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The sample was received on 4/25/2013 9:18 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9º C.

METALS (ICP)
Sample MW26-105.0-GW (680-89687-1) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 05/02/2013 and analyzed on 05/03/2013.

SILICA BY ICP
Sample MW26-105.0-GW (680-89687-1) was analyzed for Silica by ICP in accordance with EPA SW-846 Method 6010C. The samples were analyzed on 05/07/2013.

HEXAVALENT CHROMIUM
Sample MW26-105.0-GW (680-89687-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 04/25/2013.

Sample MW26-105.0-GW (680-89687-1)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

OIL AND GREASE AND TPH
Sample MW26-105.0-GW (680-89687-1) was analyzed for Oil and Grease and TPH in accordance with EPA Method 1664A. The samples were analyzed on 04/30/2013.

ALKALINITY
Sample MW26-105.0-GW (680-89687-1) was analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 05/07/2013.

HARDNESS
Sample MW26-105.0-GW (680-89687-1) was analyzed for hardness in accordance with SM 2340C. The samples were analyzed on 04/30/2013.

ANIONS BY IC
Sample MW26-105.0-GW (680-89687-1) was analyzed for Anions by IC in accordance with EPA Method 300.0. The samples were analyzed on 05/06/2013.

Sample MW26-105.0-GW (680-89687-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

ANIONS (NITRATE/NITRITE)
Sample MW26-105.0-GW (680-89687-1) was analyzed for Anions (Nitrate/Nitrite) in accordance with EPA Method 300.0. The samples were analyzed on 04/26/2013.

Sample MW26-105.0-GW (680-89687-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

FERROUS IRON
Sample MW26-105.0-GW (680-89687-1) was analyzed for ferrous iron in accordance with SM 3500-Fe-D. The samples were analyzed on 04/25/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

FERROUS IRON
Sample MW26-105.0-GW (680-89687-1) was analyzed for ferrous iron in accordance with SM 3500 FE D. The samples were analyzed on 05/07/2013.

This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. This sample(s) was performed in the laboratory outside the 15 minute timeframe.

TRIVALENT CHROMIUM
Sample MW26-105.0-GW (680-89687-1) was analyzed for trivalent chromium in accordance with EPA SW846 Method 7196A_CR3. The samples were analyzed on 05/04/2013.

PH
Sample MW26-105.0-GW (680-89687-1) was analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 04/30/2013.

TOTAL ORGANIC CARBON
Sample MW26-105.0-GW (680-89687-1) was analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 05/05/2013.

DISSOLVED ORGANIC CARBON
Sample MW26-105.0-GW (680-89687-1) was analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 05/07/2013.

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Lab Reporting Batch: 680-89687-1						
Method: 1664A						
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
Method: 2340B						
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
MW26-105.0-GW	680-89687-1 DUP	AQ	Duplicate	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
Method: 300.0						
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
Method: 3500_FE_D						
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
MW26-105.0-GW	680-89687-1 MS	AQ	Matrix_Spike	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
MW26-105.0-GW	680-89687-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
Method: 6010C						
MW26-105.0-GW	680-89687-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
MW26-105.0-GW	680-89687-1	AQ	N	3010A	4/24/2013 9:17:00 AM	S2BVEM
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
MW26-105.0-GW	680-89687-1 MS	AQ	Matrix_Spike	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
Method: 7196A						
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
Method: 9040C						
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
Method: 9060A						
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
MW26-105.0-GW	680-89687-1 MSD	AQ	Matrix_Spike_Duplicate	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM
MW26-105.0-GW	680-89687-1 MS	AQ	Matrix_Spike	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM

Data Review Sample Summary Report by Analysis Method

Reviewed By: Kim B. Watson (11/6/2013) **Approved By:** **Laboratory: TAL SAV**

Client Sample ID	Lab Sample ID	Matrix	Sample Type	Preparation Method	Collection Date	Validation Code
Method: SM 2320B						
MW26-105.0-GW	680-89687-1	AQ	N	Gen Prep	4/24/2013 9:17:00 AM	S2BVEM

Validation Label Legend

Label Code	Label Decription	EPA Level
S1VE	Stage_1_Validation_Electronic	N/A
S1VM	Stage_1_Validation_Manual	N/A
S1VEM	Stage_1_Validation_Electronic_and_Manual	N/A
S2AVE	Stage_2A_Validation_Electronic	Level 3 w/o calibration
S2AVM	Stage_2A_Validation_Manual	Level 3 w/o calibration
S2AVEM	Stage_2A_Validation_Electronic_and_Manual	Level 3 w/o calibration
S2BVE	Stage_2B_Validation_Electronic	Level 3 with
S2BVM	Stage_2B_Validation_Manual	Level 3 with
S2BVEM	Stage_2B_Validation_Electronic_and_Manual	Level 3 with
S3VE	Stage_3_Validation_Electronic	Level 4
S3VM	Stage_3_Validation_Manual	Level 4
S3VEM	Stage_3_Validation_Electronic_and_Manual	Level 4
S4VE	Stage_4_Validation_Electronic	Level 4
S4VM	Stage_4_Validation_Manual	Level 4
S4VEM	Stage_4_Validation_Electronic_and_Manual	Level 4
NV	Not_Validated	N/A

Field QC Assignments and Associated Samples

EDD File Name: 680-89687-1
eQapp Name: ScotiaNavyDepot062713

	Associated Samples	Sample Collection Date

Data Qualifier Summary

Lab Reporting Batch ID: 680-89687-1 **Laboratory: TAL SAV**

EDD Filename: 680-89687-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: EM
Method: 9040C **Matrix: AQ**

Sample ID: MW26-105.0-GW **Collected:** 4/24/2013 9:17:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	8.08	H	_	LOD	_	LOQ	S.U.	J	StoA

Method Category: GENCHEM
Method: 300.0 **Matrix: AQ**

Sample ID: MW26-105.0-GW **Collected:** 4/24/2013 9:17:00 **Analysis Type:** Initial/TOT **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITRITE	0.097	J D	0.075	LOD	0.25	LOQ	mg/L	J	RI

Method Category: GENCHEM
Method: 3500_FE_D **Matrix: AQ**

Sample ID: MW26-105.0-GW **Collected:** 4/24/2013 9:17:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Ferrous Iron	0.026	J HF	0.025	LOD	0.10	LOQ	mg/L	J	RI

Method Category: GENCHEM
Method: SM 2320B **Matrix: AQ**

Sample ID: MW26-105.0-GW **Collected:** 4/24/2013 9:17:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Carbonate Alkalinity as CaCO3	5.0	U	5.0	LOD	5.0	LOQ	mg/L	UJ	Lcs

Method Category: METALS
Method: 6010C **Matrix: AQ**

Sample ID: MW26-105.0-GW **Collected:** 4/24/2013 9:17:00 **Analysis Type:** Initial/TOT **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	2.3	J	2.0	LOD	10	LOQ	ug/L	J	RI
TITANIUM	4.8	J	1.0	LOD	10	LOQ	ug/L	J	RI

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-89687-1 **Laboratory: TAL SAV**

EDD Filename: 680-89687-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Method Category: **METALS**

Method: **7196A** ***Matrix:*** **AQ**

Sample ID: **MW26-105.0-GW** ***Collected:*** **4/24/2013 9:17:00** ***Analysis Type:*** **Initial/TOT** ***Dilution:*** **2**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
HEXAVALENT CHROMIUM	0.0060	U H	0.0060	LOD	0.020	LOQ	mg/L	UJ	StoA

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

Data Qualifier Summary

Lab Reporting Batch ID: 680-89687-1 **Laboratory: TAL SAV**

EDD Filename: 680-89687-1_BASE_rev **eQAPP Name: ScotiaNavyDepot062713**

Reason Code Legend

Reason Code	*Description*
Lcs	Laboratory Control Spike Lower Estimation
RI	Reporting Limit Trace Value
StoA	Sampling to Analysis Estimation
StoA	Sampling to Analysis Rejection

* denotes a non-reportable result

Project Name and Number: 102305-R-C - Scotia NY Site

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 680-88345-1

SDG Number: 68088345

Job Description: Scotia NY Site

For:
Stone Environmental
535 Stone Cutters Way
Montpelier, VT 05602

Attention: Mr. Joseph Schmidl

Approved for release.
Michele Kersey
Project Manager I
3/28/2013 3:04 PM

Michele Kersey
Project Manager I
michele.kersey@testamericainc.com
03/28/2013

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN: C-GA-02; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

SAMPLE SUMMARY

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-88345-1	MW26-76.5-S	Solid	03/14/2013 0950	03/15/2013 0924
680-88345-2	MW26-107.5-S	Solid	03/14/2013 1515	03/15/2013 0924

EXECUTIVE SUMMARY - Detections

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
680-88345-1	**MW26-76.5-S**					
In Place Density		1.74			g/cc	D2937
Sieve Size 3 inch - Percent Finer		100.0			% Passing	D422
Gravel		3.8			%	D422
Hydrometer Reading 1 - Particle Size		33.2			um	D422
Sieve Size 2 inch - Percent Finer		100.0			% Passing	D422
Sand		83.6			%	D422
Hydrometer Reading 2 - Particle Size		21.2			um	D422
Sieve Size 1.5 inch - Percent Finer		100.0			% Passing	D422
Coarse Sand		2.6			%	D422
Hydrometer Reading 3 - Particle Size		12.4			um	D422
Sieve Size 1 inch - Percent Finer		100.0			% Passing	D422
Medium Sand		39.5			%	D422
Hydrometer Reading 4 - Particle Size		8.9			um	D422
Sieve Size 0.75 inch - Percent Finer		100.0			% Passing	D422
Fine Sand		41.5			%	D422
Hydrometer Reading 5 - Particle Size		6.4			um	D422
Sieve Size 0.375 inch - Percent Finer		98.5			% Passing	D422
Silt		7.7			%	D422
Hydrometer Reading 6 - Particle Size		3.1			um	D422
Sieve Size #4 - Percent Finer		96.2			% Passing	D422
Clay		5.0			%	D422
Hydrometer Reading 7 - Particle Size		1.3			um	D422
Sieve Size #10 - Percent Finer		93.6			% Passing	D422
Sieve Size #20 - Percent Finer		89.5			% Passing	D422
Sieve Size #40 - Percent Finer		54.1			% Passing	D422
Sieve Size #60 - Percent Finer		23.6			% Passing	D422
Sieve Size #80 - Percent Finer		17.3			% Passing	D422
Sieve Size #100 - Percent Finer		15.9			% Passing	D422
Sieve Size #200 - Percent Finer		12.6			% Passing	D422
Hydrometer Reading 1 - Percent Finer		8.6			% Passing	D422
Hydrometer Reading 2 - Percent Finer		7.7			% Passing	D422
Hydrometer Reading 3 - Percent Finer		6.3			% Passing	D422
Hydrometer Reading 4 - Percent Finer		5.4			% Passing	D422
Hydrometer Reading 5 - Percent Finer		5.0			% Passing	D422
Hydrometer Reading 6 - Percent Finer		3.5			% Passing	D422
Hydrometer Reading 7 - Percent Finer		2.6			% Passing	D422
Specific Gravity at 20 deg Celsius		2.69			NONE	D854
Porosity		35.4			%	LAB-BUR
Void Ratio		0.5			NONE	LAB-BUR

EXECUTIVE SUMMARY - Detections

Client: Stone Environmental

Job Number: 680-88345-1
Sdg Number: 68088345

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
680-88345-2	**MW26-107.5-S**					
In Place Density		1.55			g/cc	D2937
Sieve Size 3 inch - Percent Finer		100.0			% Passing	D422
Gravel		0.0			%	D422
Hydrometer Reading 1 - Particle Size		34.3			um	D422
Sieve Size 2 inch - Percent Finer		100.0			% Passing	D422
Sand		82.7			%	D422
Hydrometer Reading 2 - Particle Size		21.8			um	D422
Sieve Size 1.5 inch - Percent Finer		100.0			% Passing	D422
Coarse Sand		0.9			%	D422
Hydrometer Reading 3 - Particle Size		12.8			um	D422
Sieve Size 1 inch - Percent Finer		100.0			% Passing	D422
Medium Sand		0.4			%	D422
Hydrometer Reading 4 - Particle Size		9.3			um	D422
Sieve Size 0.75 inch - Percent Finer		100.0			% Passing	D422
Fine Sand		81.4			%	D422
Hydrometer Reading 5 - Particle Size		6.6			um	D422
Sieve Size 0.375 inch - Percent Finer		100.0			% Passing	D422
Silt		14.4			%	D422
Hydrometer Reading 6 - Particle Size		3.2			um	D422
Sieve Size #4 - Percent Finer		100.0			% Passing	D422
Clay		2.9			%	D422
Hydrometer Reading 7 - Particle Size		1.4			um	D422
Sieve Size #10 - Percent Finer		99.1			% Passing	D422
Sieve Size #20 - Percent Finer		98.8			% Passing	D422
Sieve Size #40 - Percent Finer		98.7			% Passing	D422
Sieve Size #60 - Percent Finer		93.6			% Passing	D422
Sieve Size #80 - Percent Finer		73.2			% Passing	D422
Sieve Size #100 - Percent Finer		54.2			% Passing	D422
Sieve Size #200 - Percent Finer		17.3			% Passing	D422
Hydrometer Reading 1 - Percent Finer		6.3			% Passing	D422
Hydrometer Reading 2 - Percent Finer		5.8			% Passing	D422
Hydrometer Reading 3 - Percent Finer		4.4			% Passing	D422
Hydrometer Reading 4 - Percent Finer		3.4			% Passing	D422
Hydrometer Reading 5 - Percent Finer		2.9			% Passing	D422
Hydrometer Reading 6 - Percent Finer		2.8			% Passing	D422
Hydrometer Reading 7 - Percent Finer		1.8			% Passing	D422
Specific Gravity at 20 deg Celsius		2.69			NONE	D854
Porosity		42.6			%	LAB-BUR
Void Ratio		0.7			NONE	LAB-BUR

APPENDIX I: VERTICAL GROUNDWATER PROFILE SUMMARY PLOTS

BORING NAME WP-01

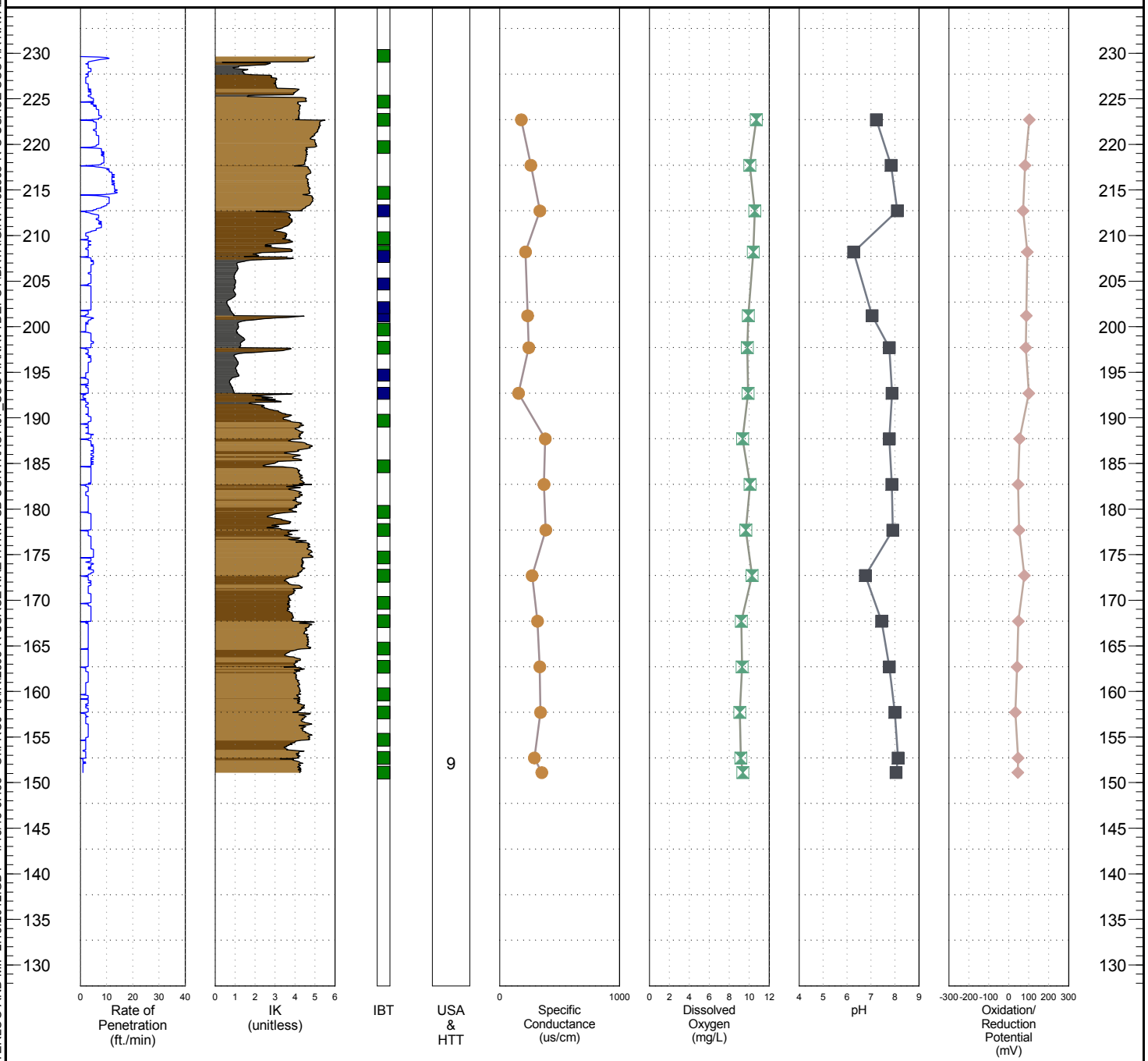
Total Depth 141.60 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/7/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

Notes: Dissolved Oxygen Values Not Usable



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:38 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-02

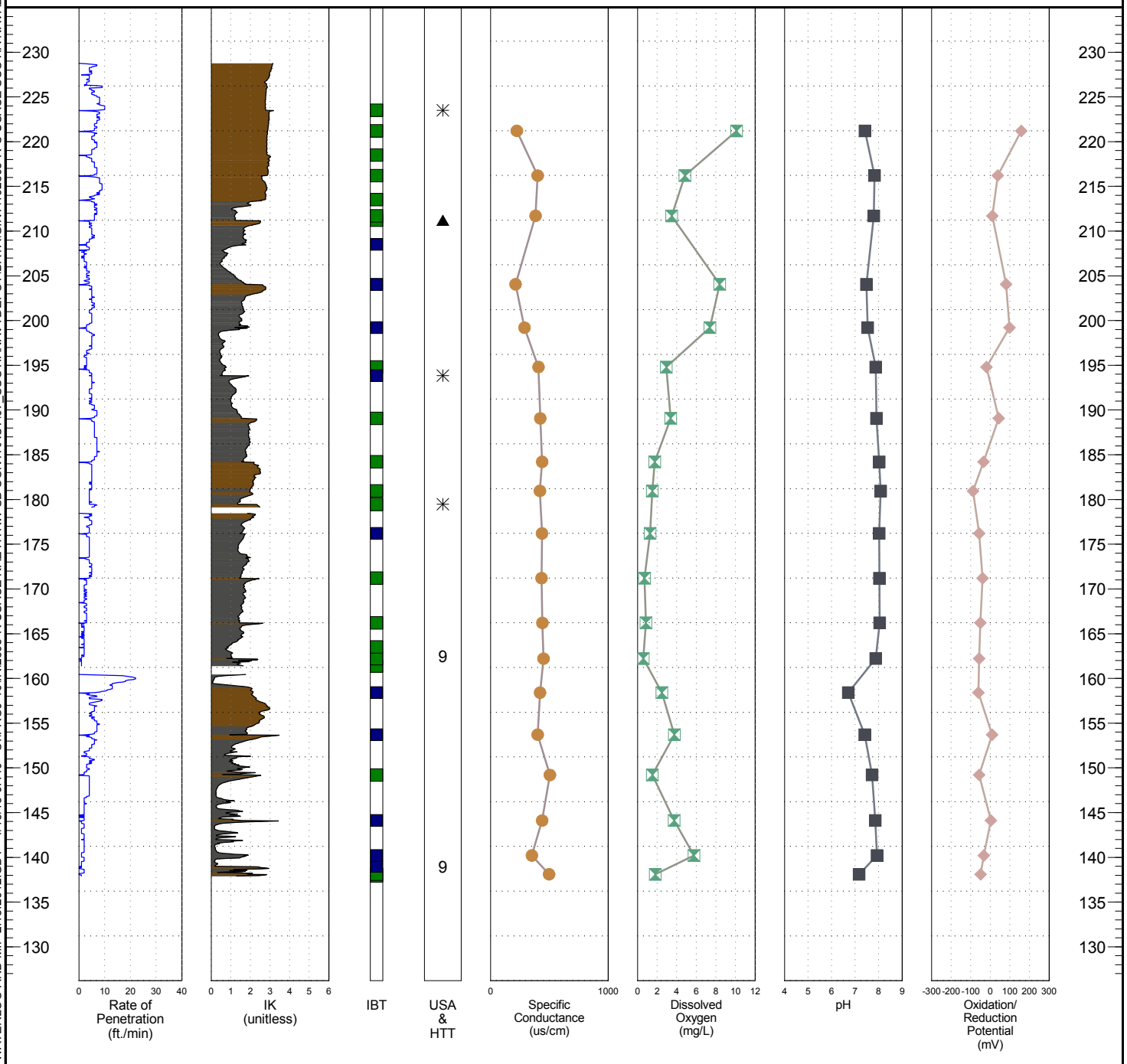
Total Depth 153.30 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/12/2013
Sampler(s) WAN/WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:40 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-03

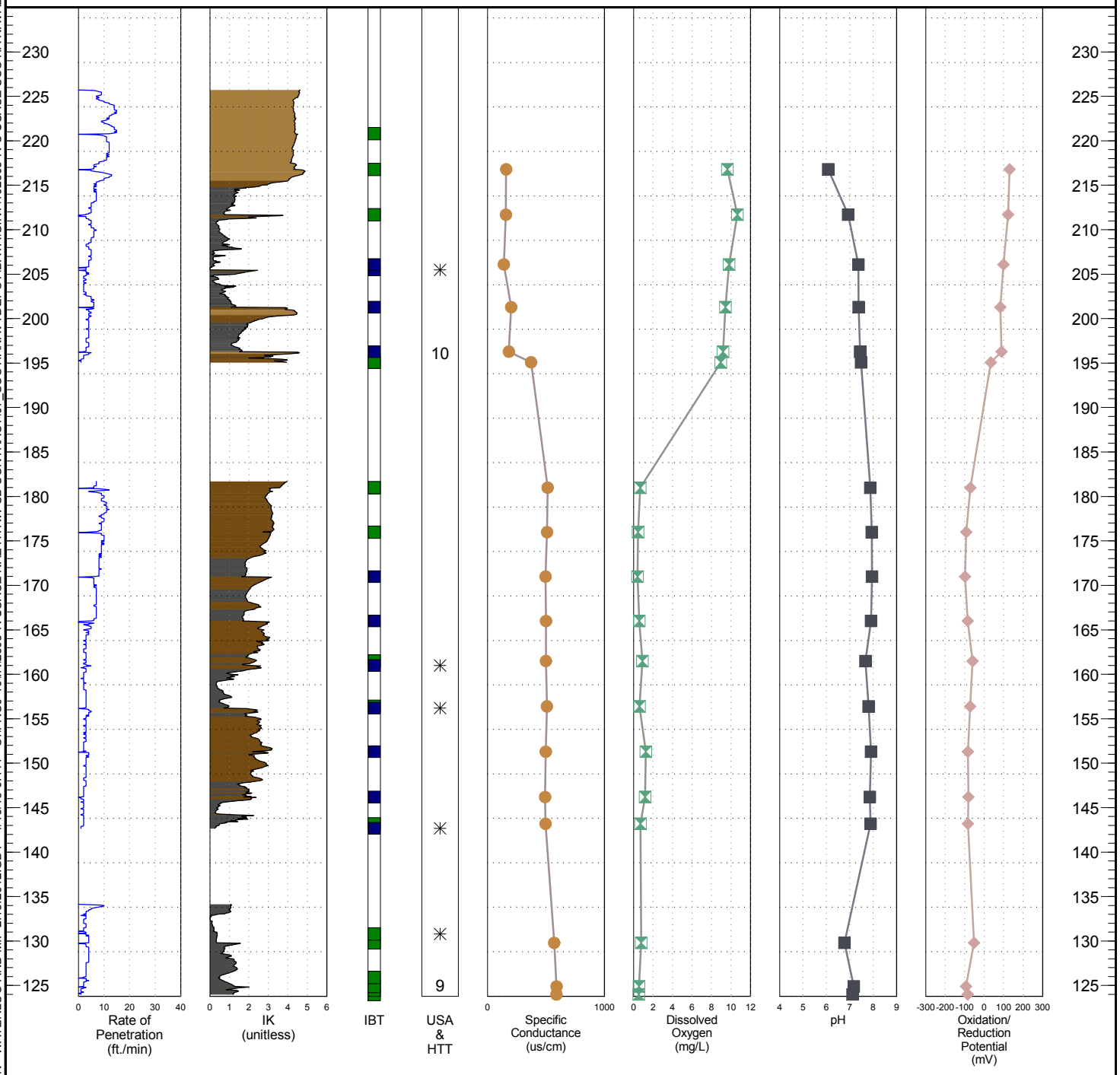
Total Depth 164.80 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/19/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

Notes: Dissolved Oxygen Values Not Usable from 72.00 fbgs to 93.70 fbgs



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:41 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-04

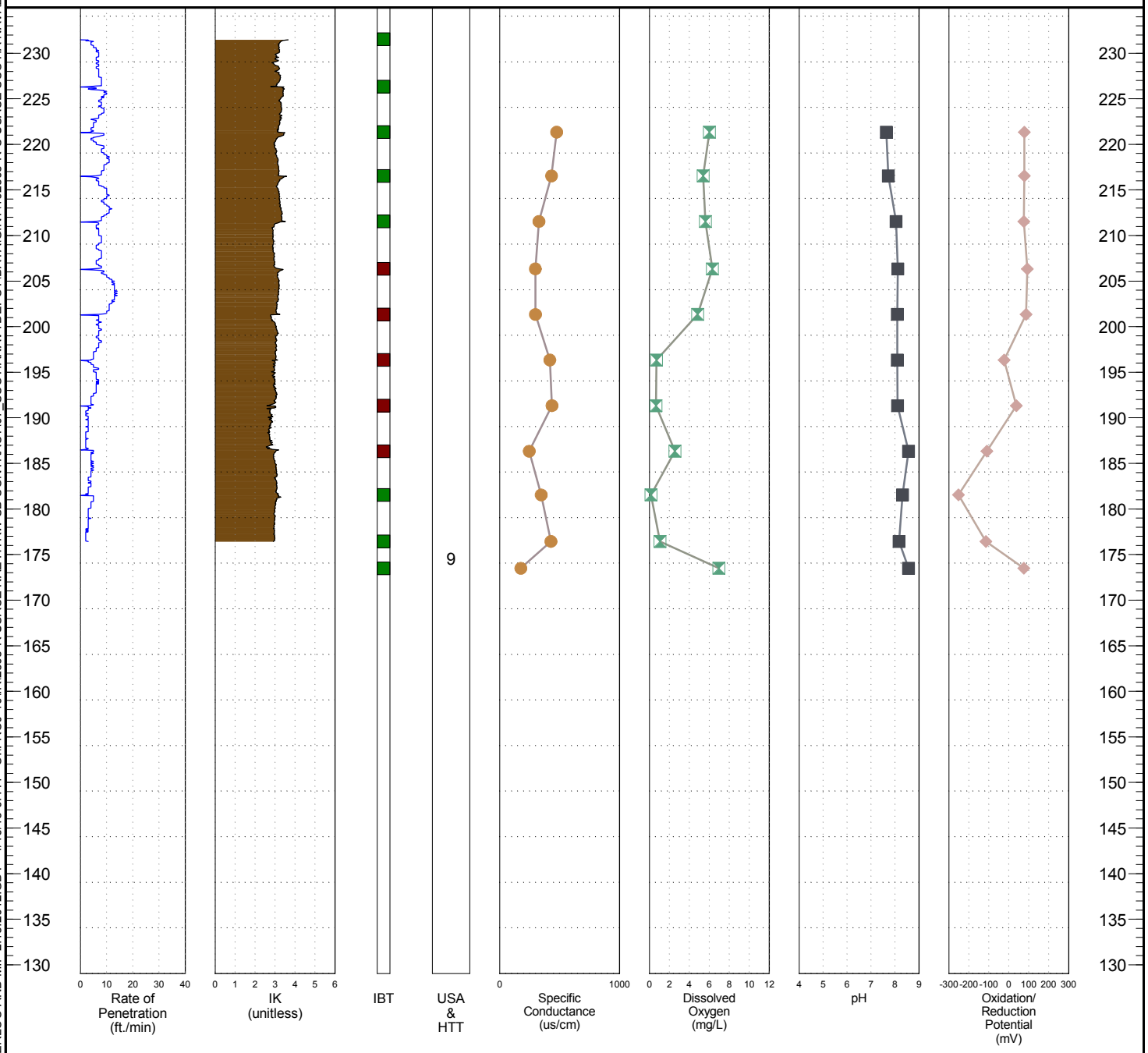
Total Depth 120.55 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/11/2013
Sampler(s) WAN
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:41 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-05

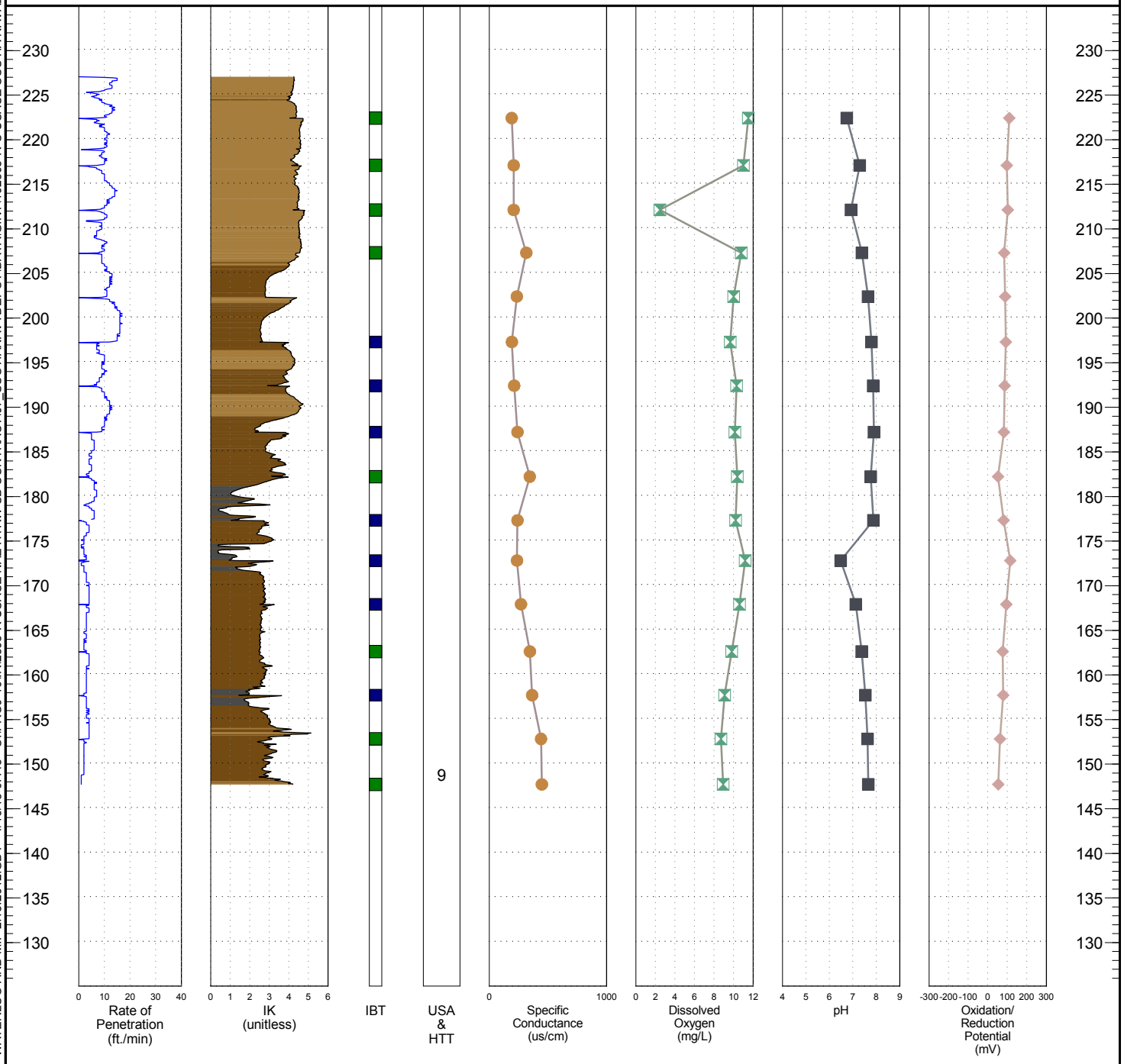
Total Depth 142.40 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/11/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

Notes: Dissolved Oxygen Values Not Usable



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:43 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-06

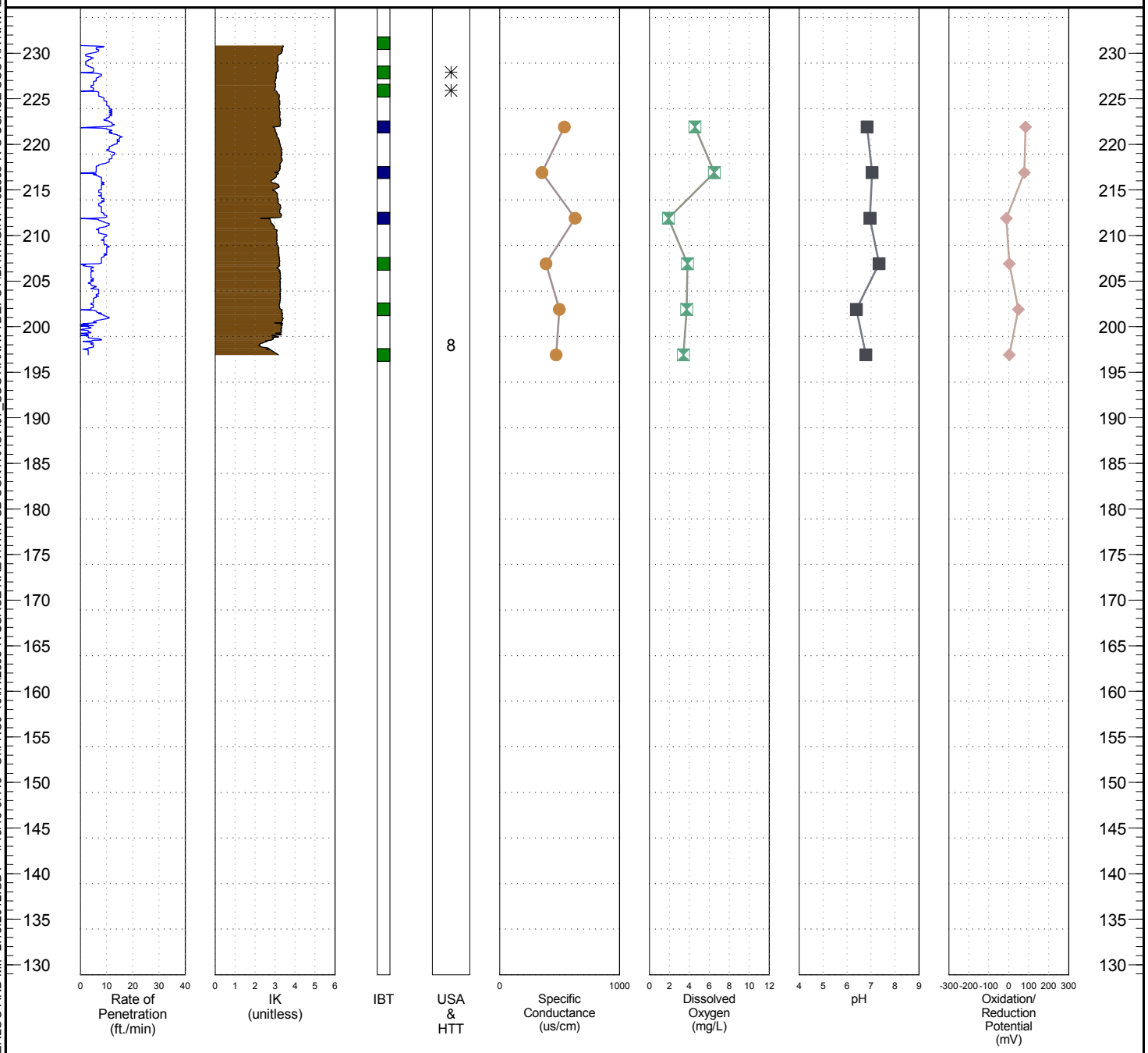
Total Depth 97.00 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/25/2013
Sampler(s) WAN/TWM
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1	
0.1 to 2	
2 to 4	
4 to 6	
>6	

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:43 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-07

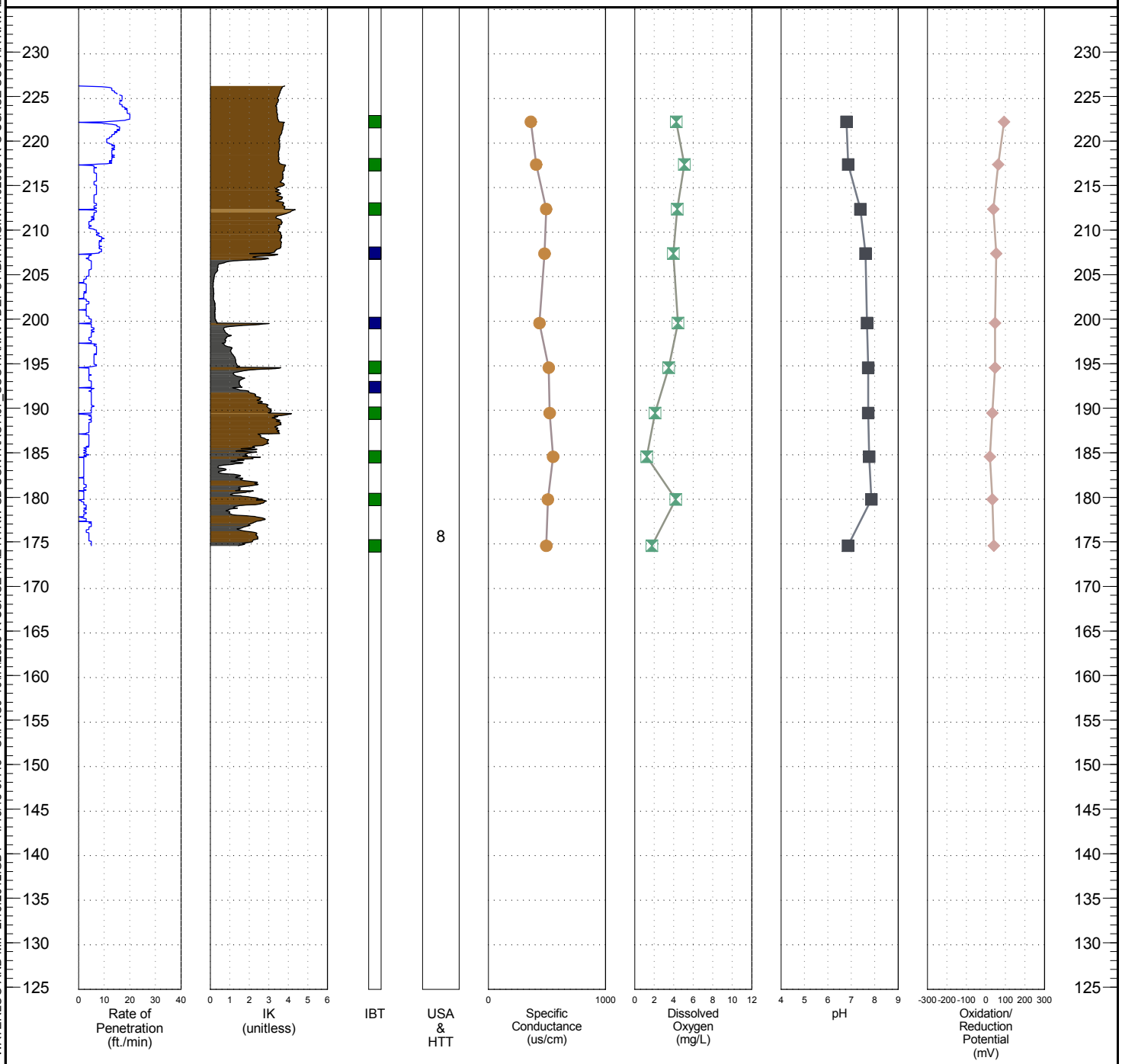
Total Depth 115.20 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/21/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:43 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-08

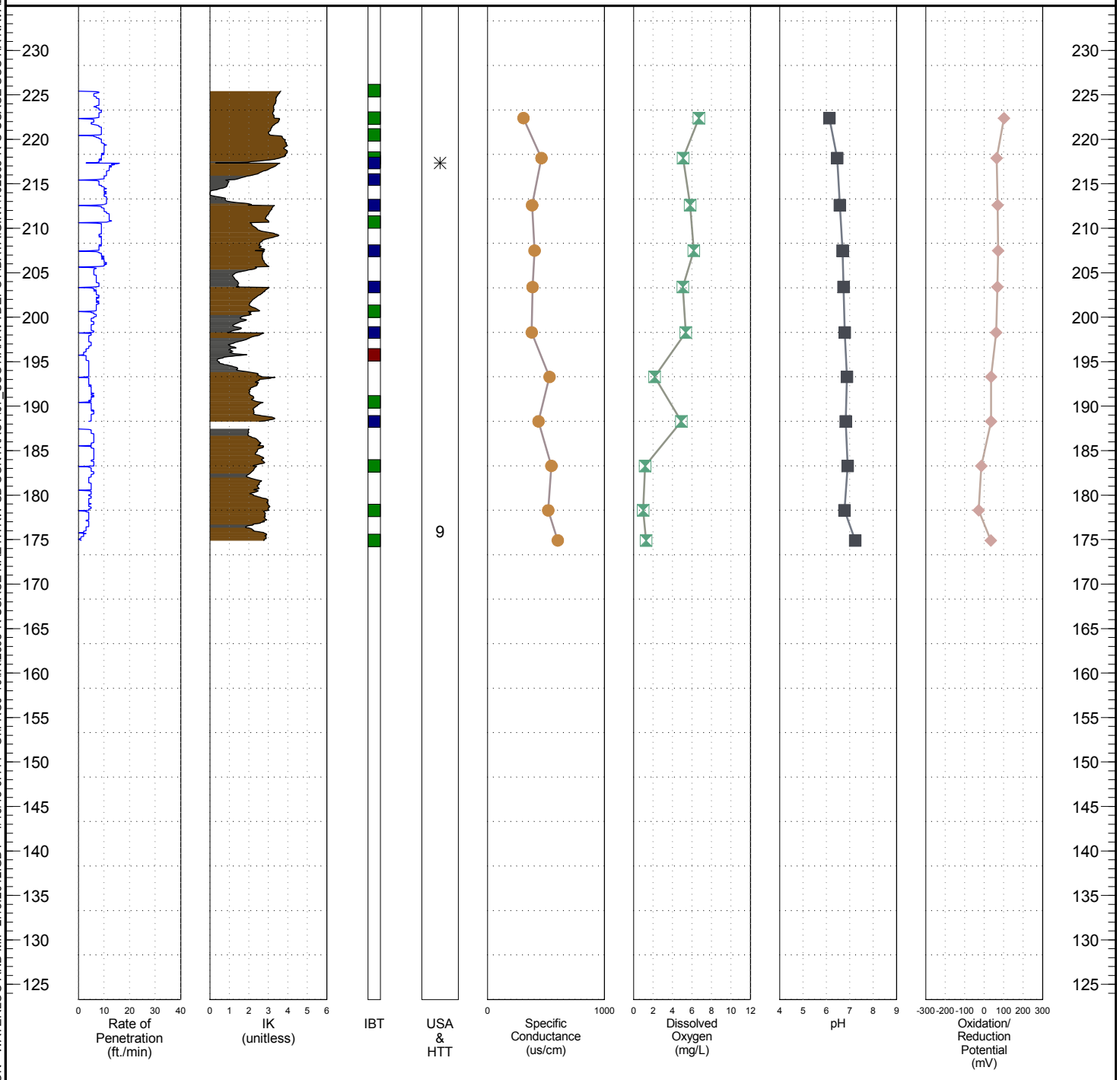
Total Depth 113.38 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/21/2013
Sampler(s) WAN
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:44 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-09

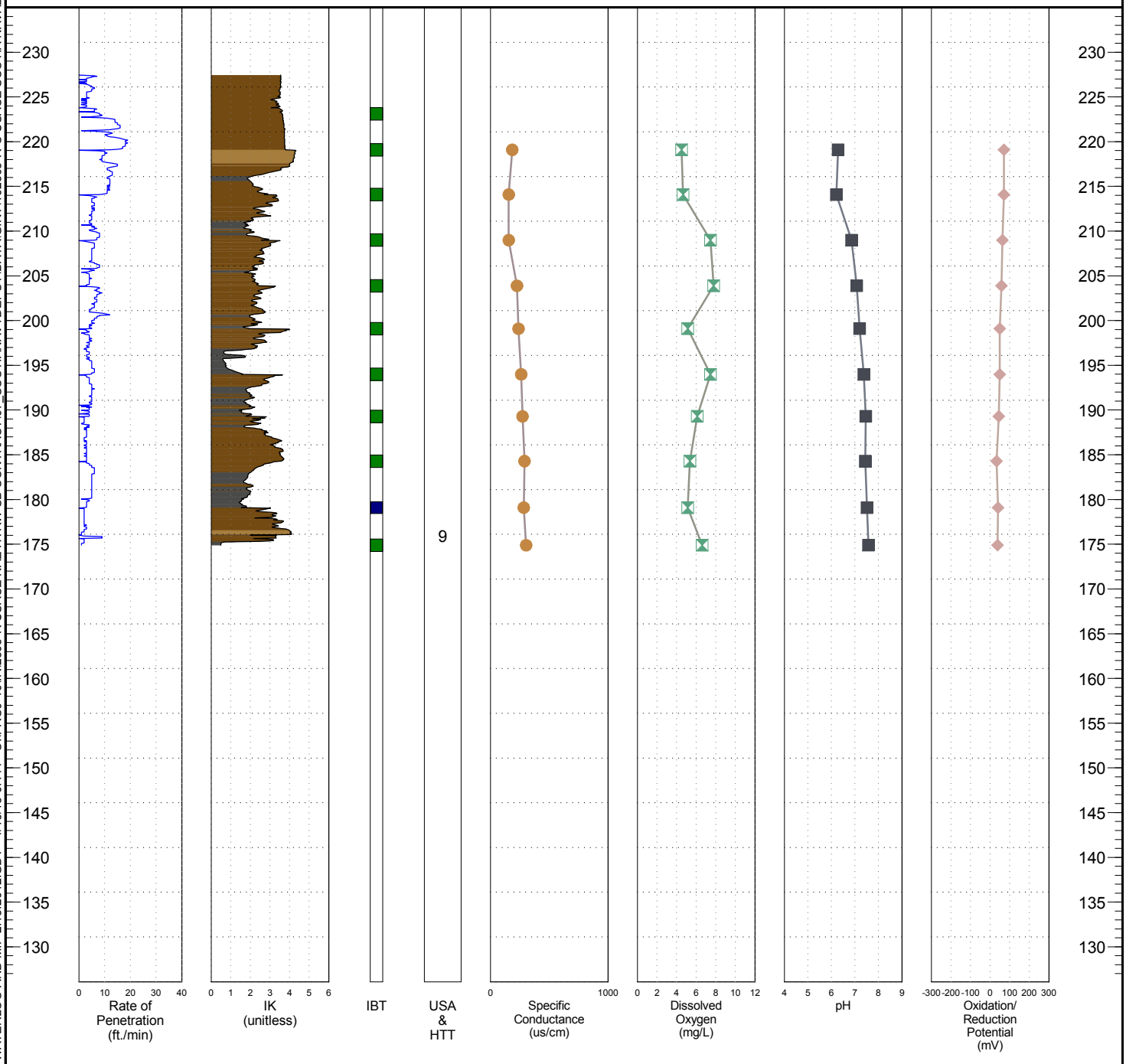
Total Depth 116.20 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/26/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:44 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-10

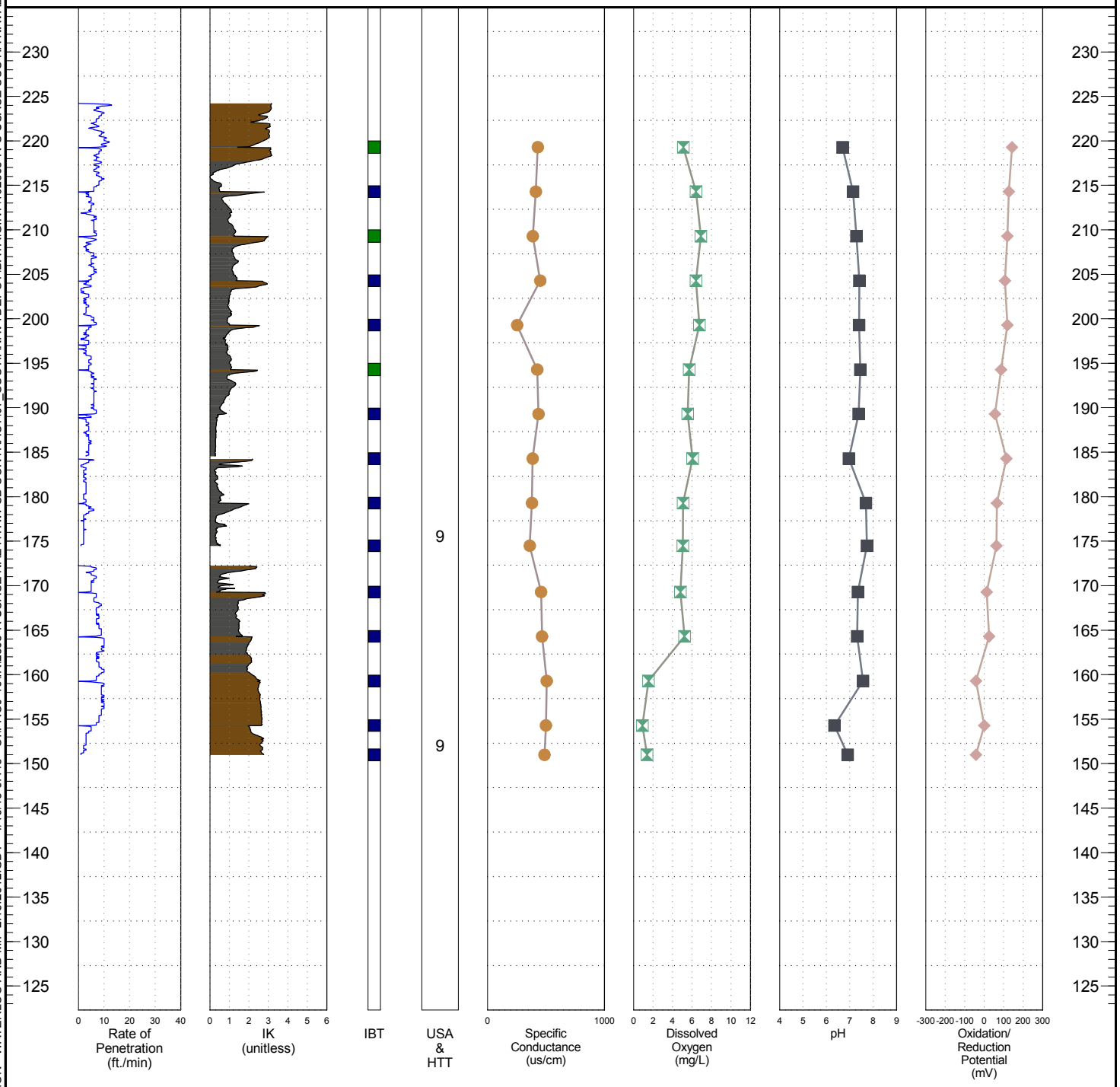
Total Depth 136.30 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/4/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:45 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-11

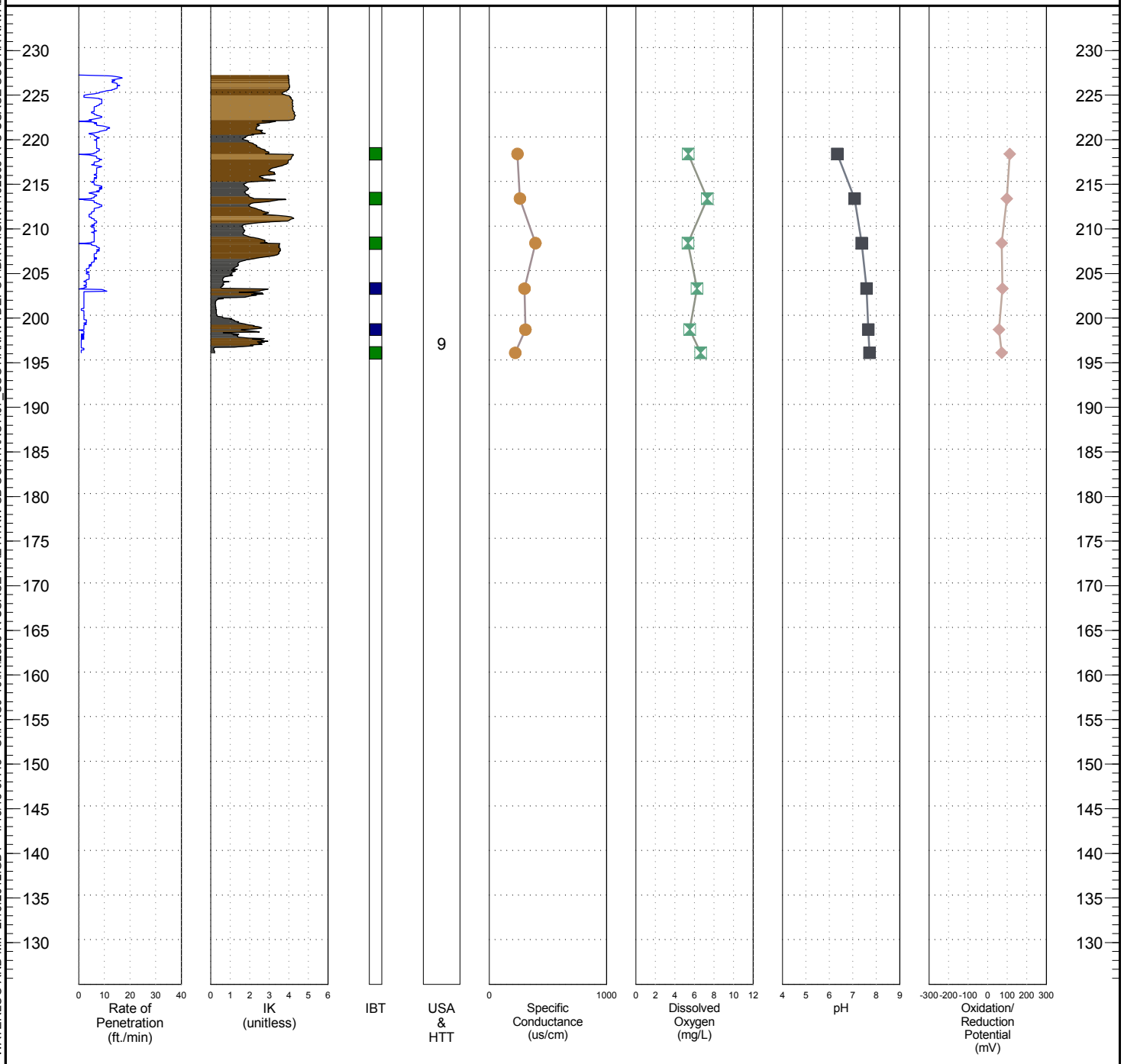
Total Depth 94.20 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/27/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
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- 8 = Reached Target Depth
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APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:45 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-12

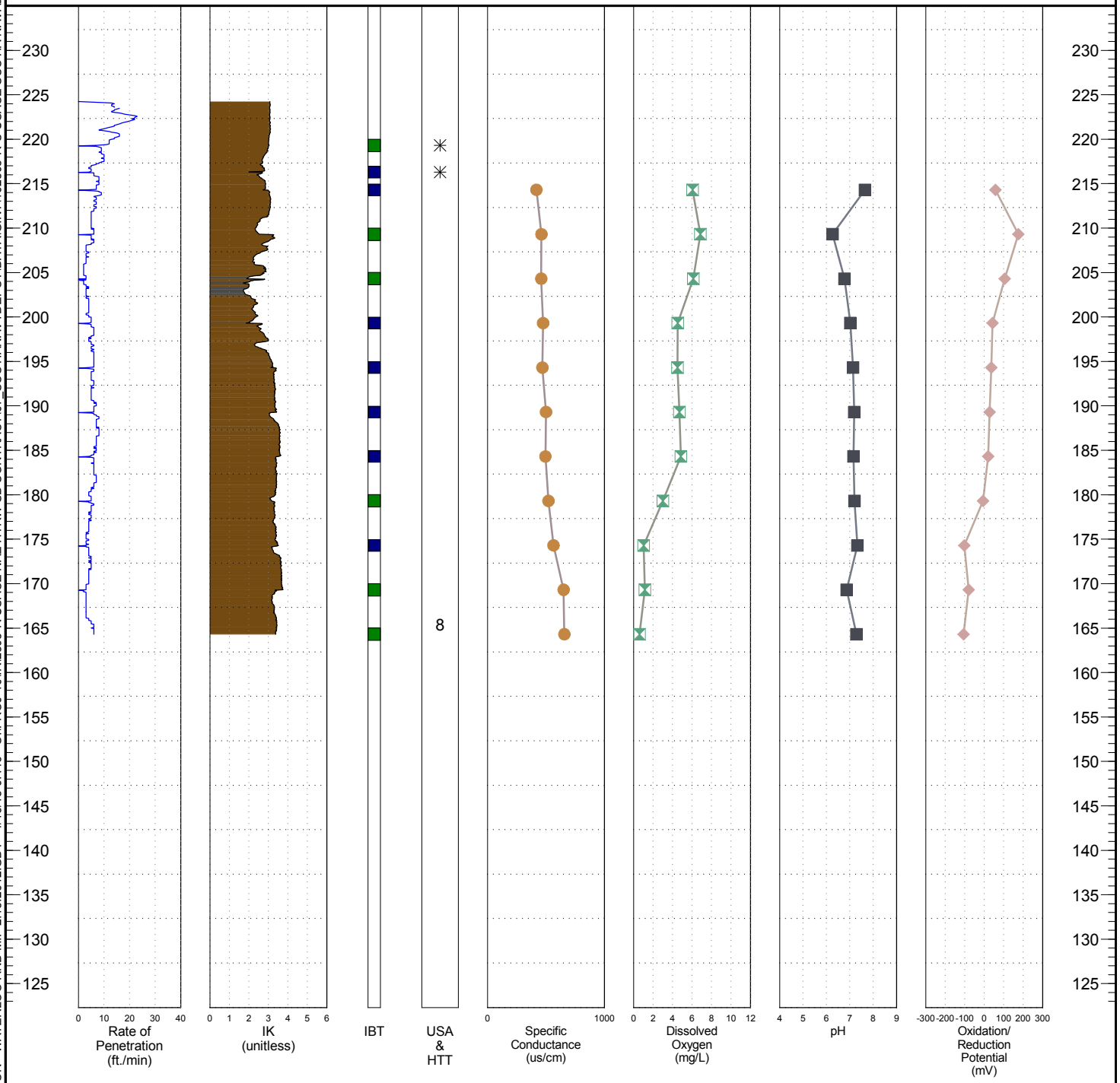
Total Depth 123.00 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/1/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:46 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-13

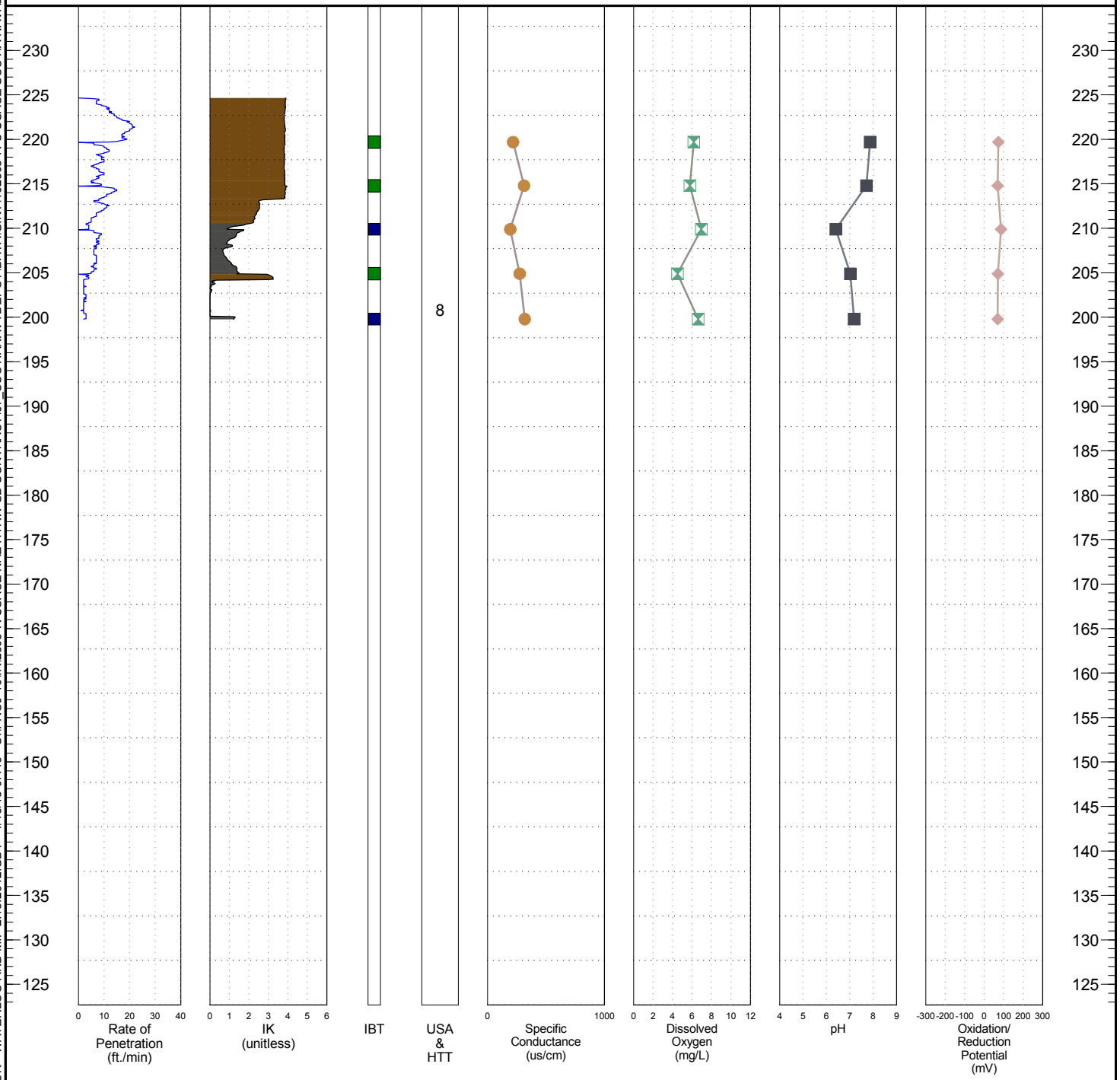
Total Depth 87.90 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/1/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
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HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:46 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-14

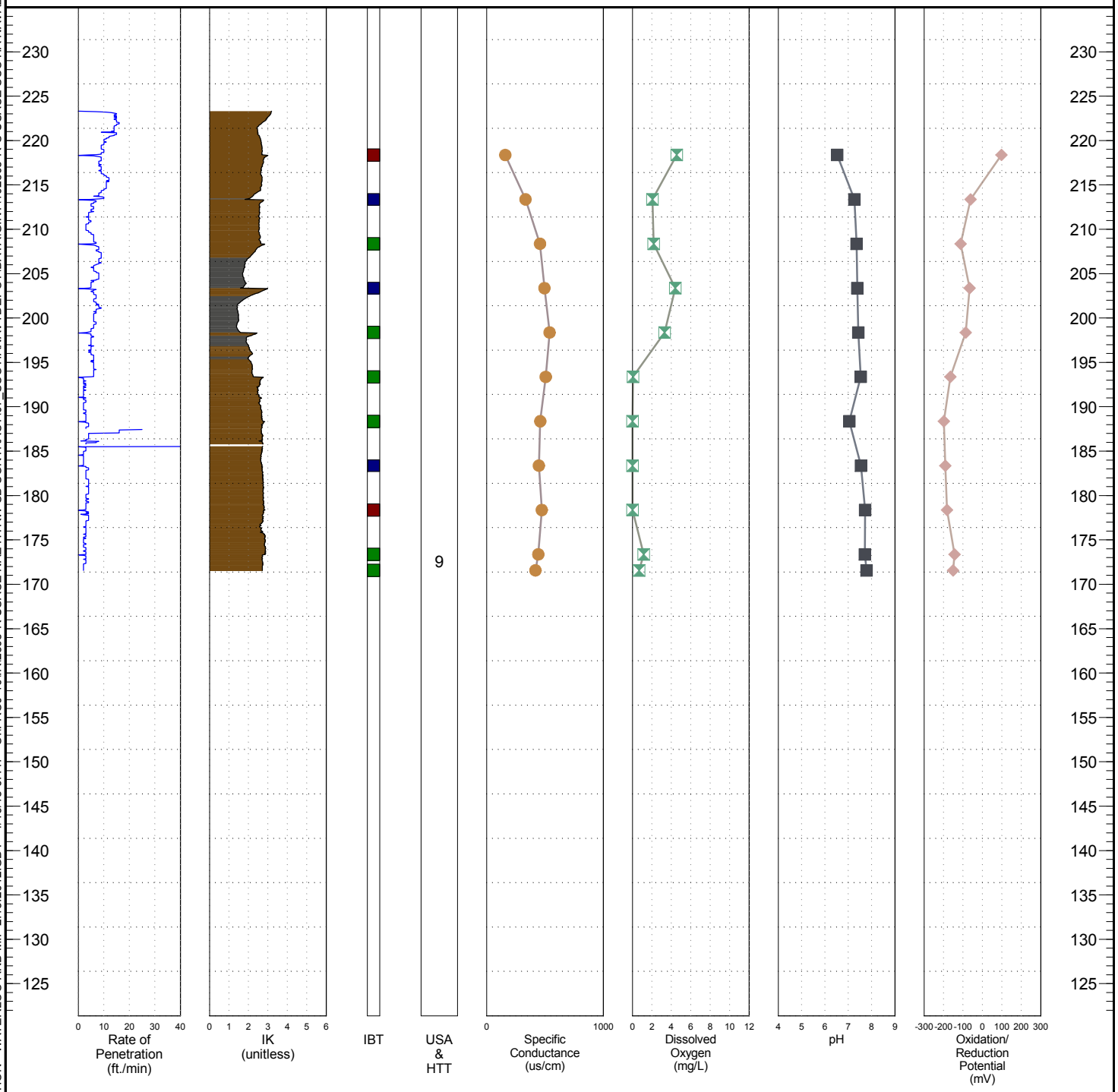
Total Depth 114.80 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/6/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:47 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-15

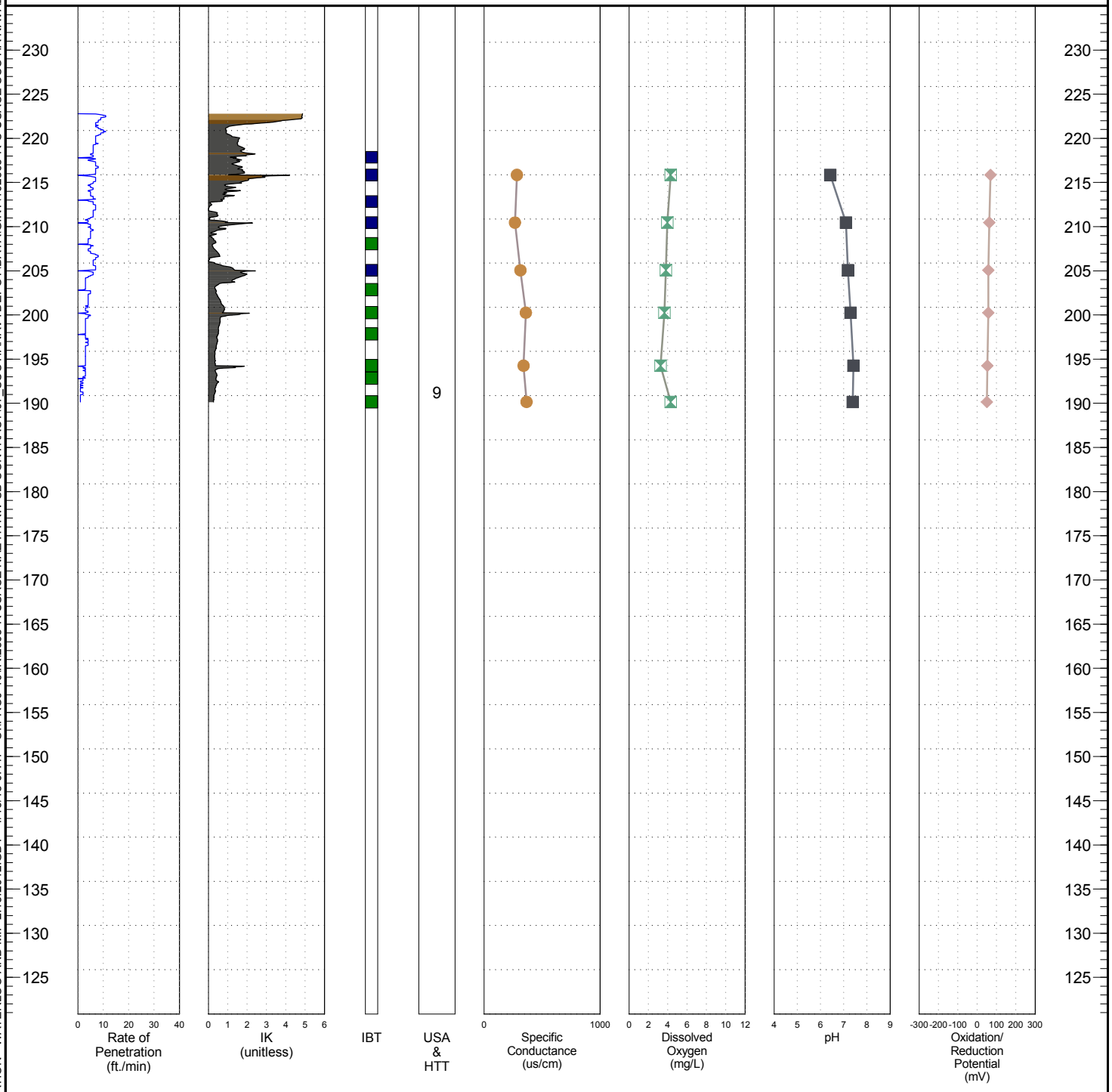
Total Depth 95.70 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/6/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

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HTT = Hole Termination Type
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APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:47 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-16

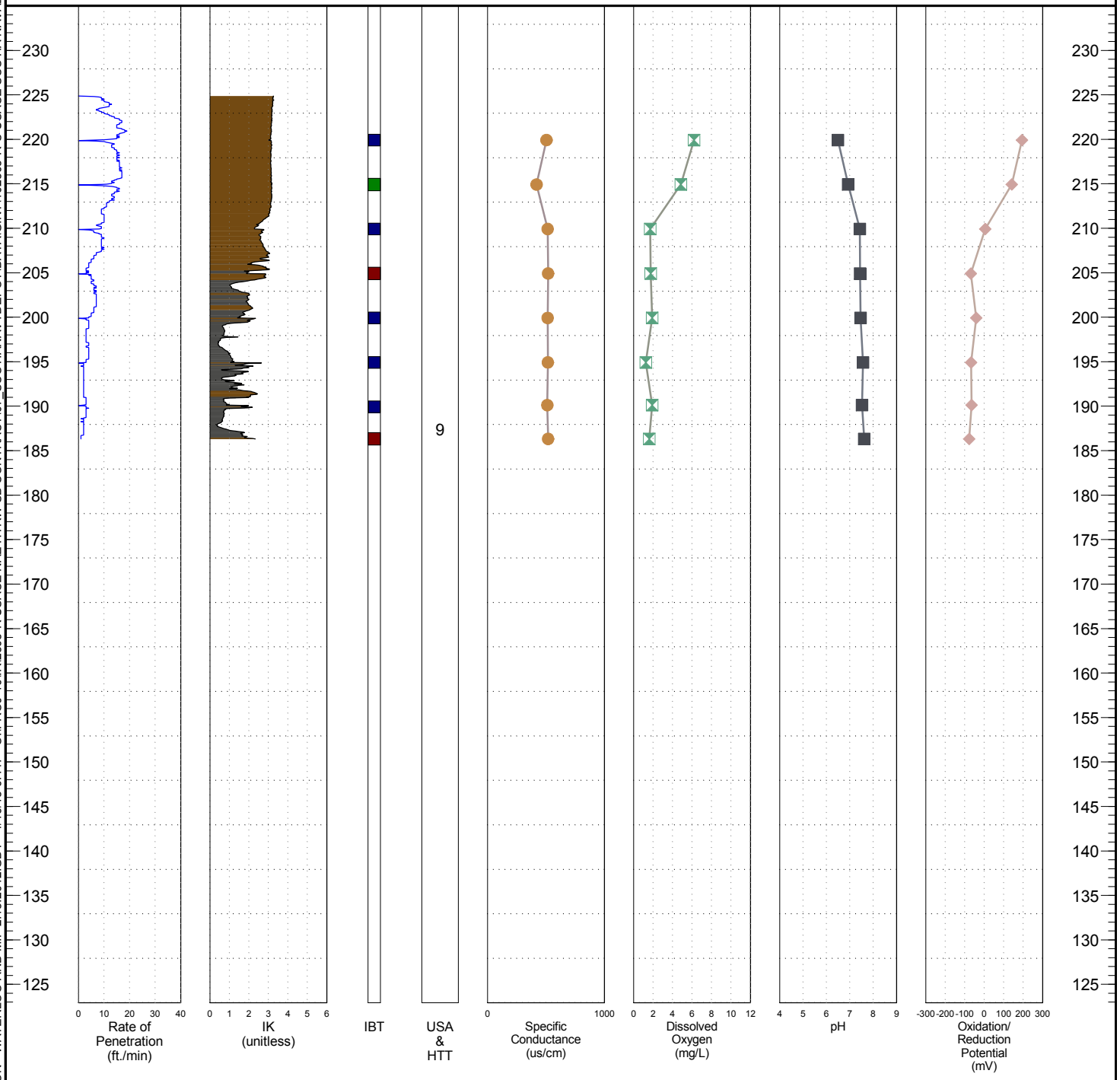
Total Depth 101.60 ft.

Waterloo APS-D™ ADVANCED PROFILING SYSTEM

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/7/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

Notes:



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

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APS NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 07:47 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-01

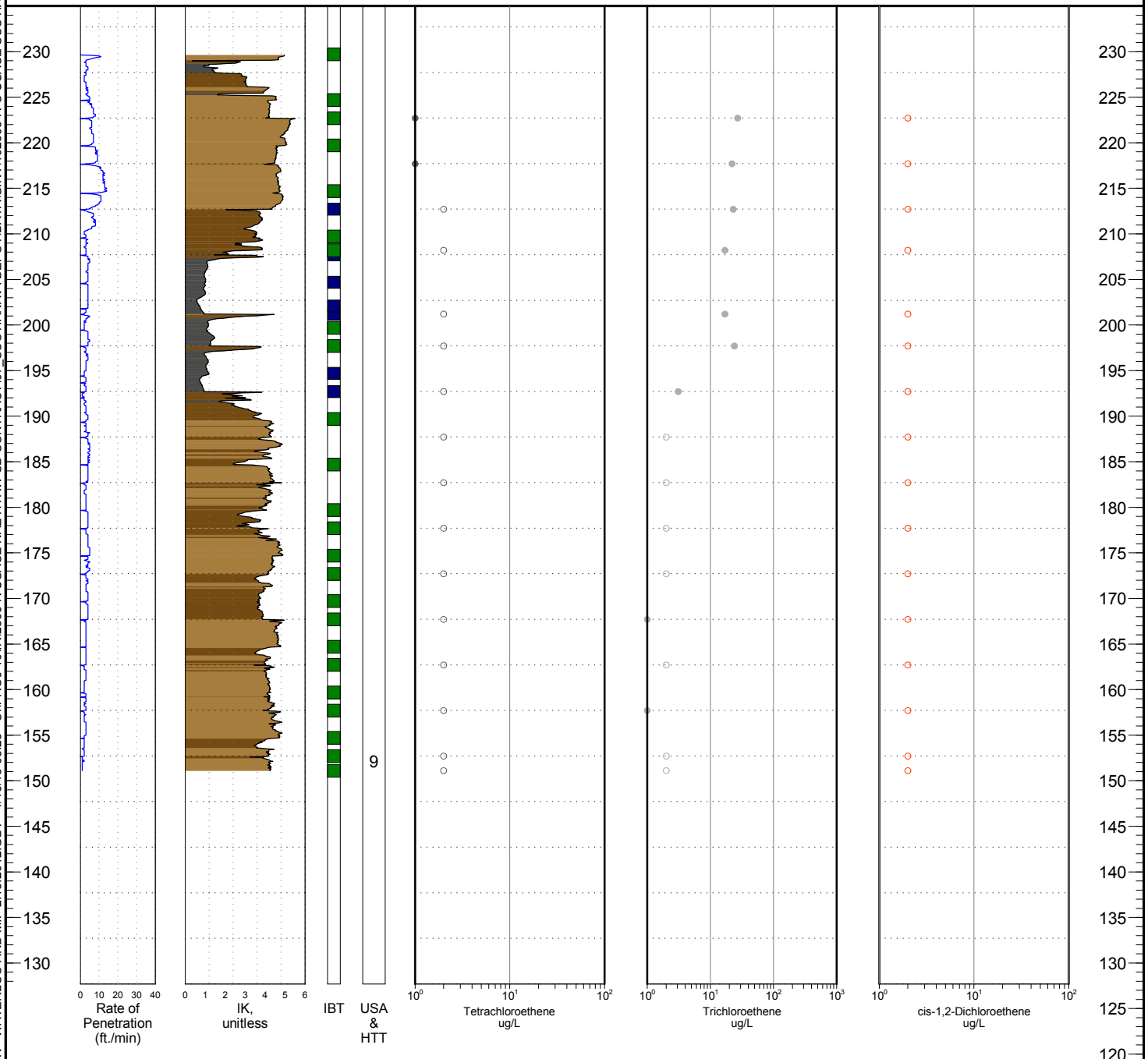
Total Depth 141.60 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/7/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

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APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:25 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-02

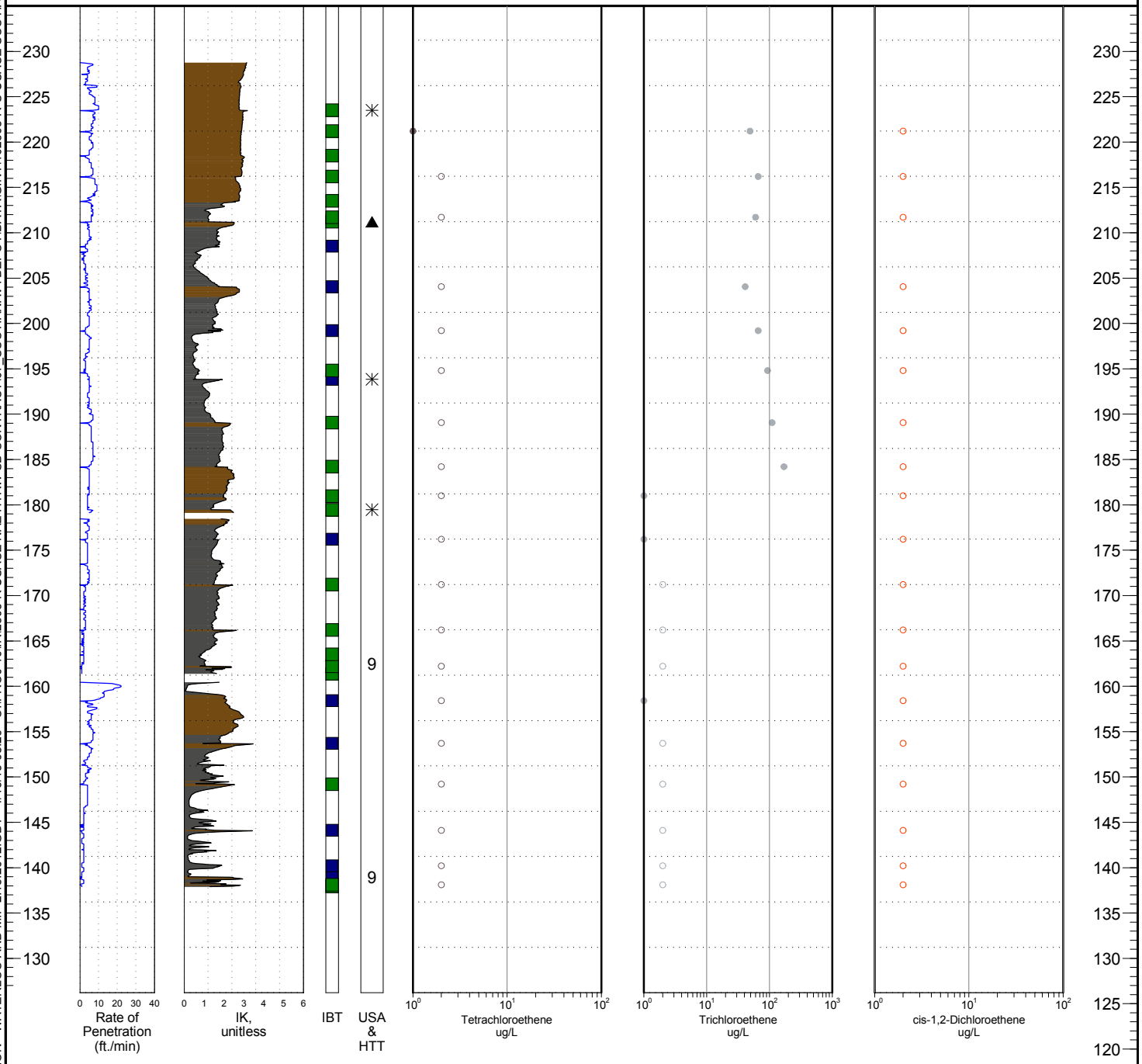
Total Depth 153.30 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/12/2013
Sampler(s) WAN/WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1	
0.1 to 2	
2 to 4	
4 to 6	
>6	

Legend

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- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:26 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-03

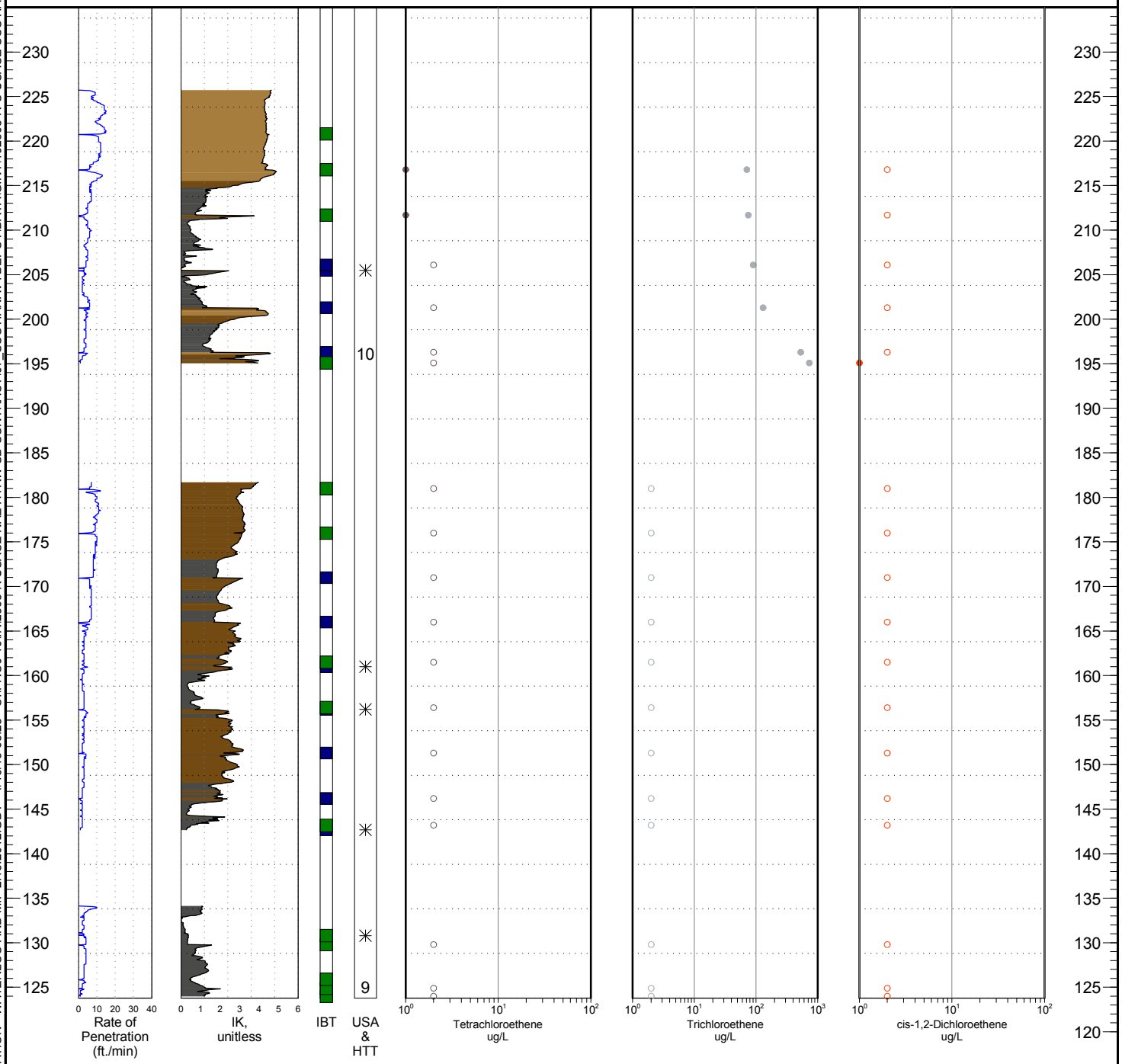
Total Depth 164.80 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/19/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
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- ▲ = Yield deemed too slow
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HTT = Hole Termination Type
- 7 = Broken downhole equipment
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- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:28 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-04

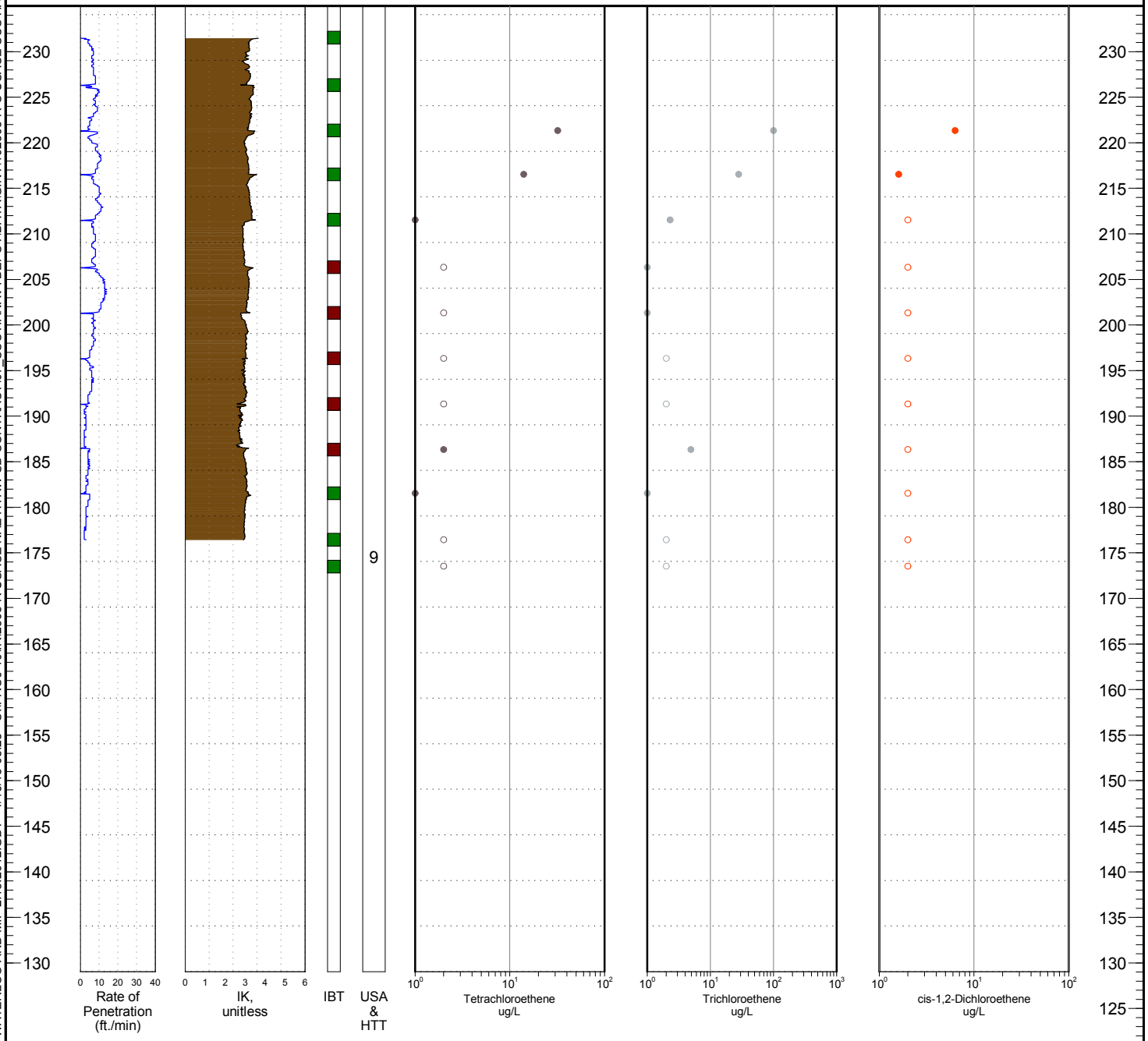
Total Depth 120.55 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/11/2013
Sampler(s) WAN
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1	
0.1 to 2	
2 to 4	
4 to 6	
>6	

Legend

IBT = IK Behavior Type
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HTT = Hole Termination Type
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APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:28 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-05

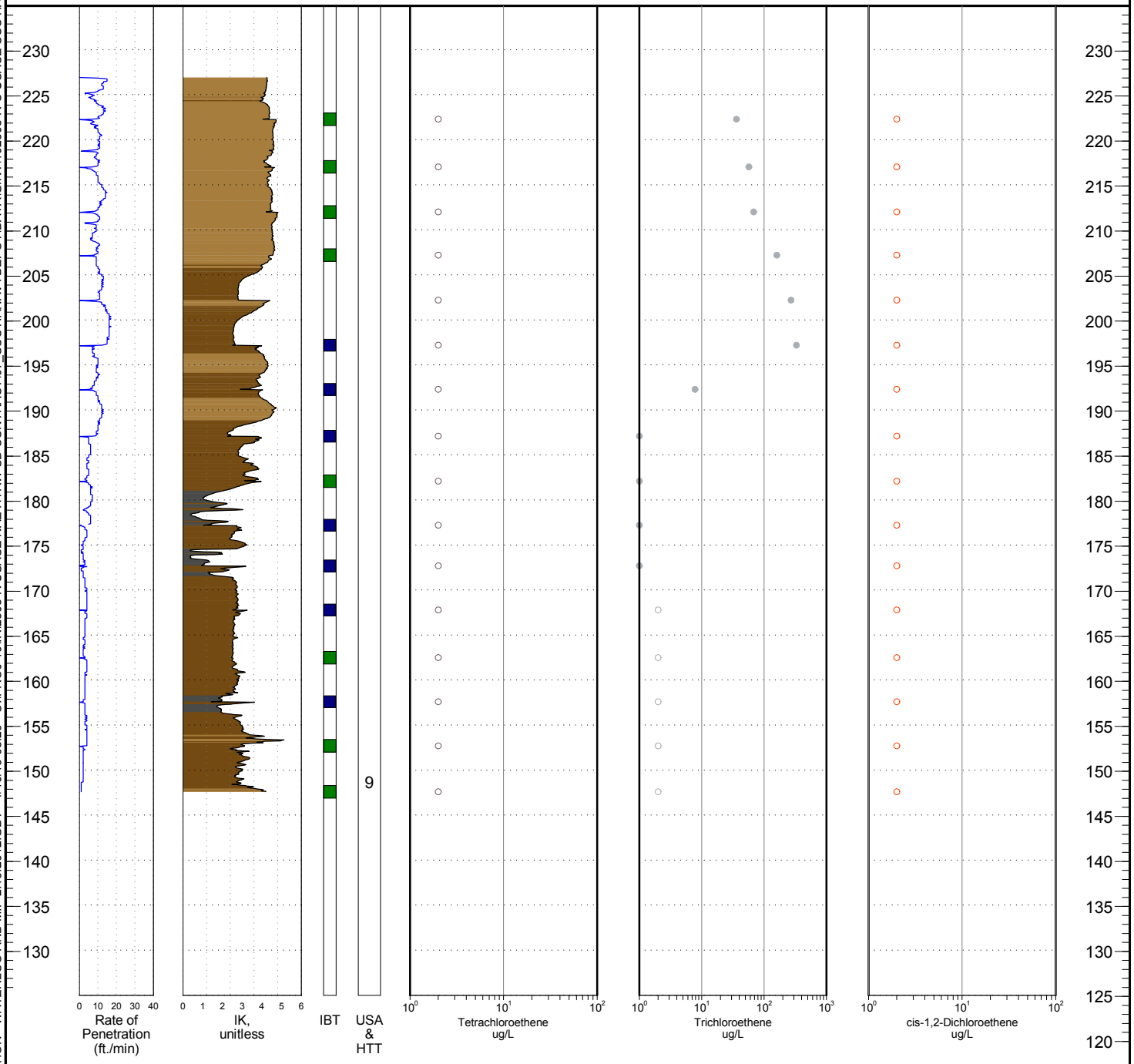
Total Depth 142.40 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/11/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1	
0.1 to 2	
2 to 4	
4 to 6	
>6	

Legend

IBT = IK Behavior Type
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- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:29 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-06

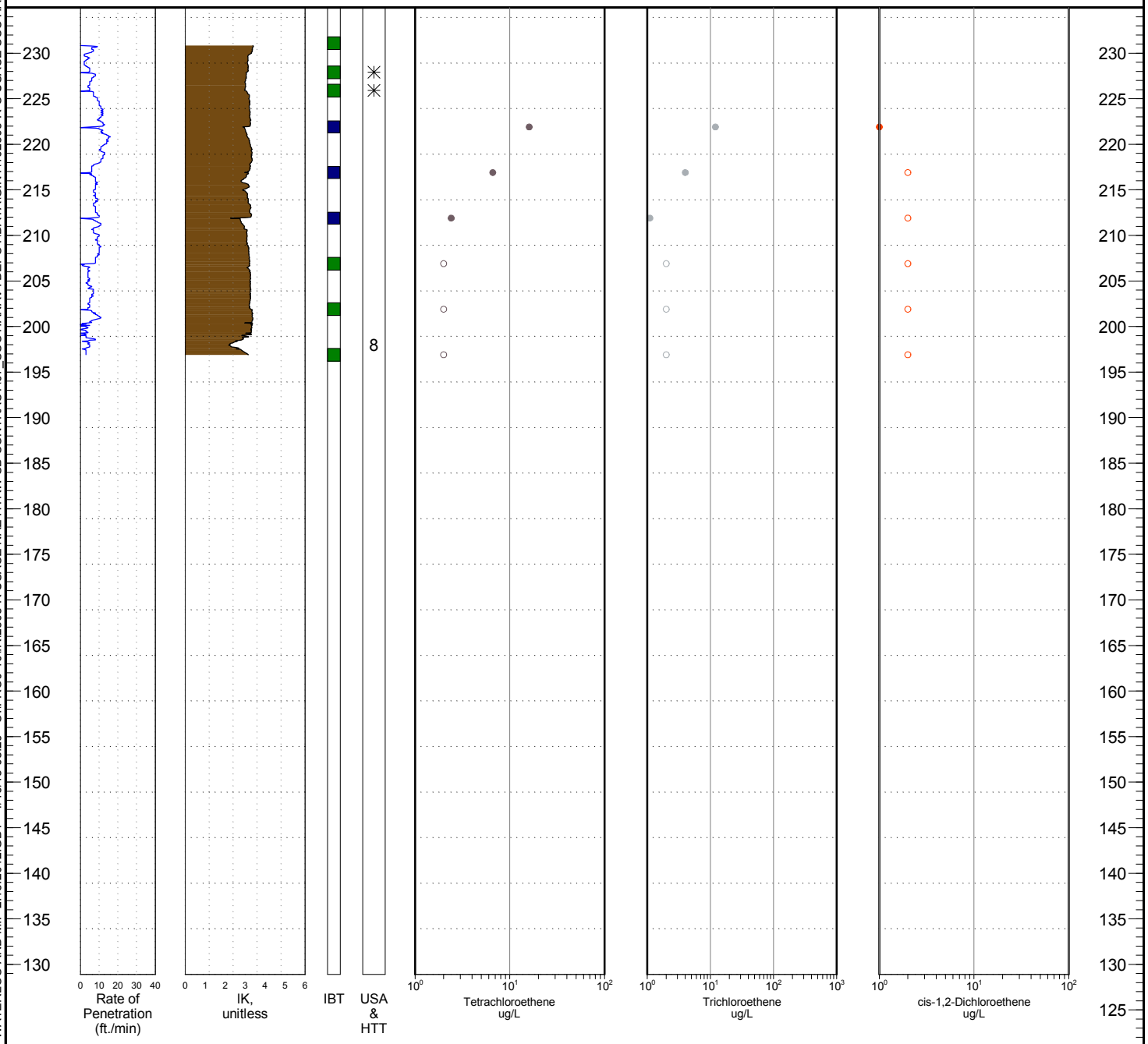
Total Depth 97.00 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/25/2013
Sampler(s) WAN/TWM
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1	
0.1 to 2	
2 to 4	
4 to 6	
>6	

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
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- ✳ = Could not produce water
- ▲ = Yield deemed too slow
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HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:29 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-07

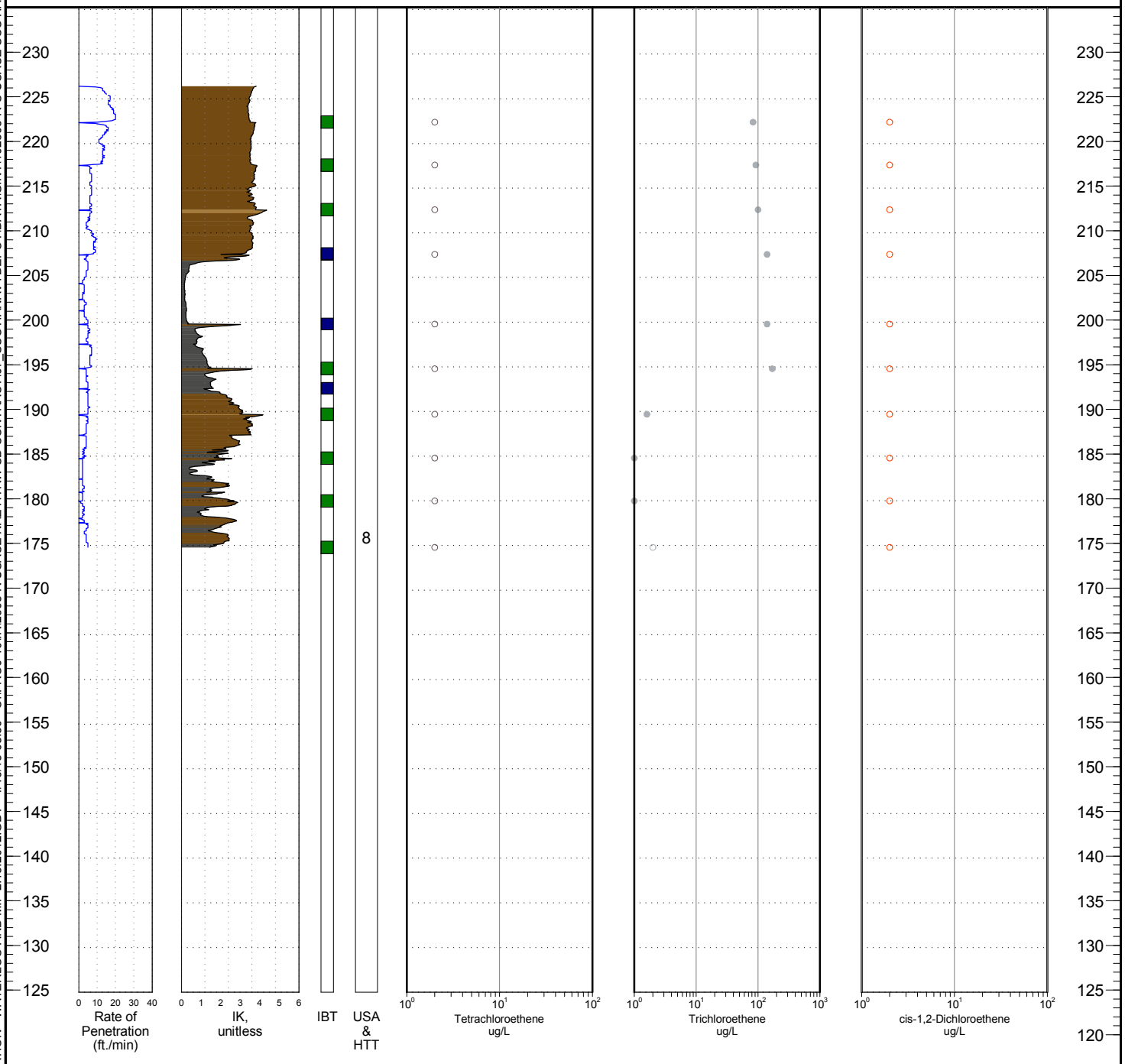
Total Depth 115.20 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/21/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1	
0.1 to 2	
2 to 4	
4 to 6	
>6	

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
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- = No change when hammer stops

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HTT = Hole Termination Type
- 7 = Broken downhole equipment
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APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:30 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-08

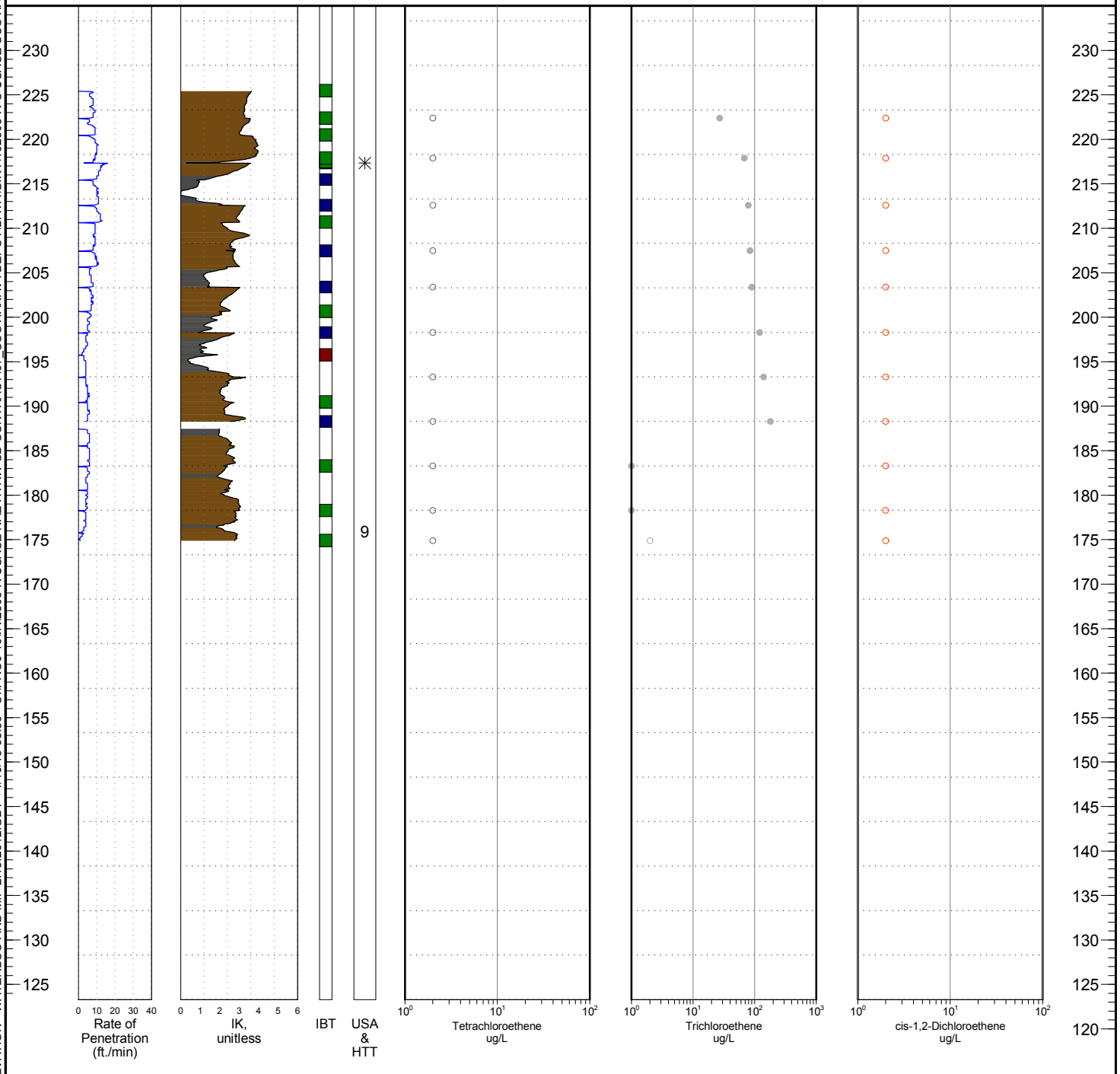
Total Depth 113.38 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/21/2013
Sampler(s) WAN
Drilling Contractor GeoLogic/Parratt-Wolfe
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
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APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:30 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-09

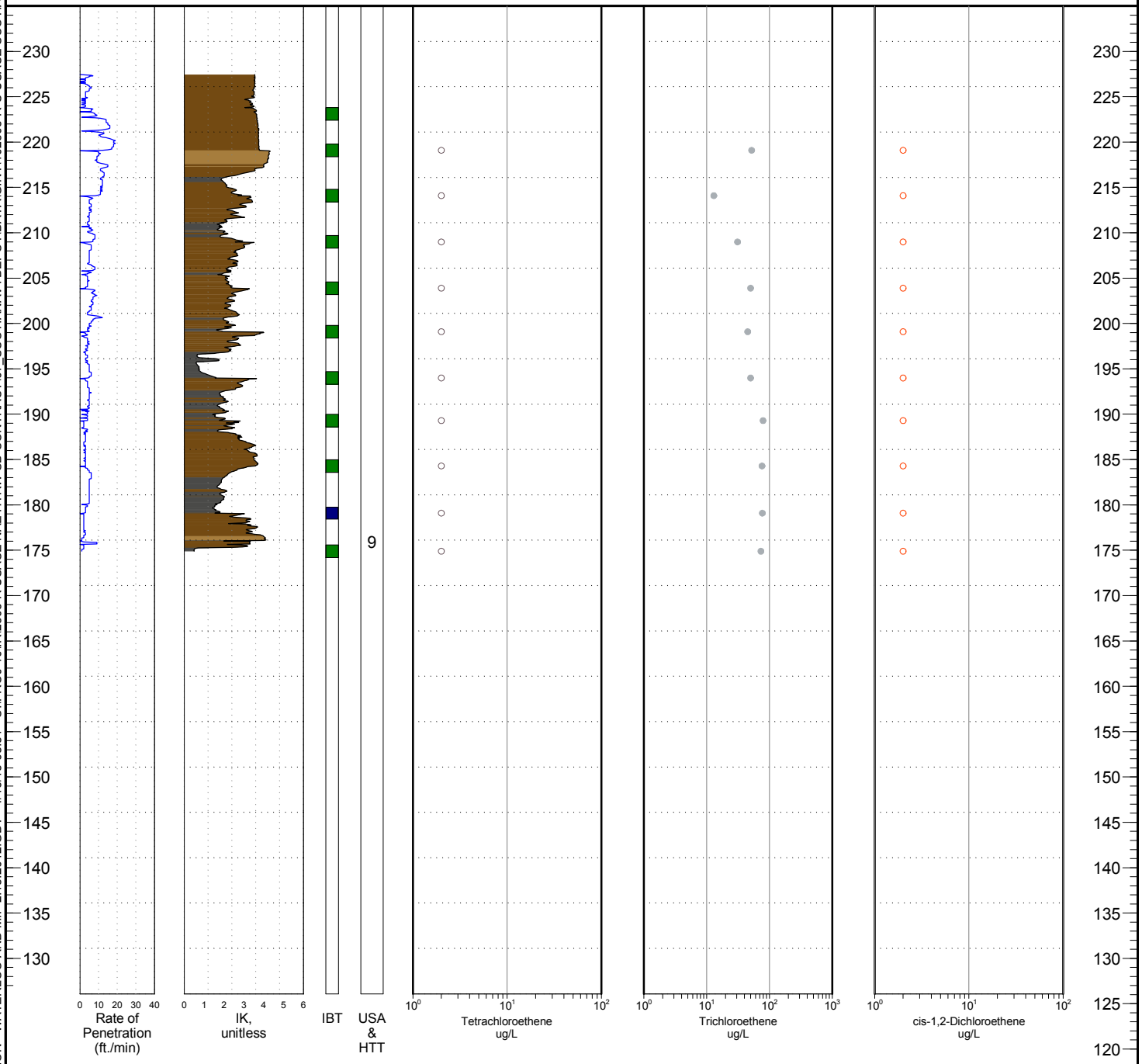
Total Depth 116.20 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/26/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
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- ✳ = Could not produce water
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HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
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APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:31 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-10

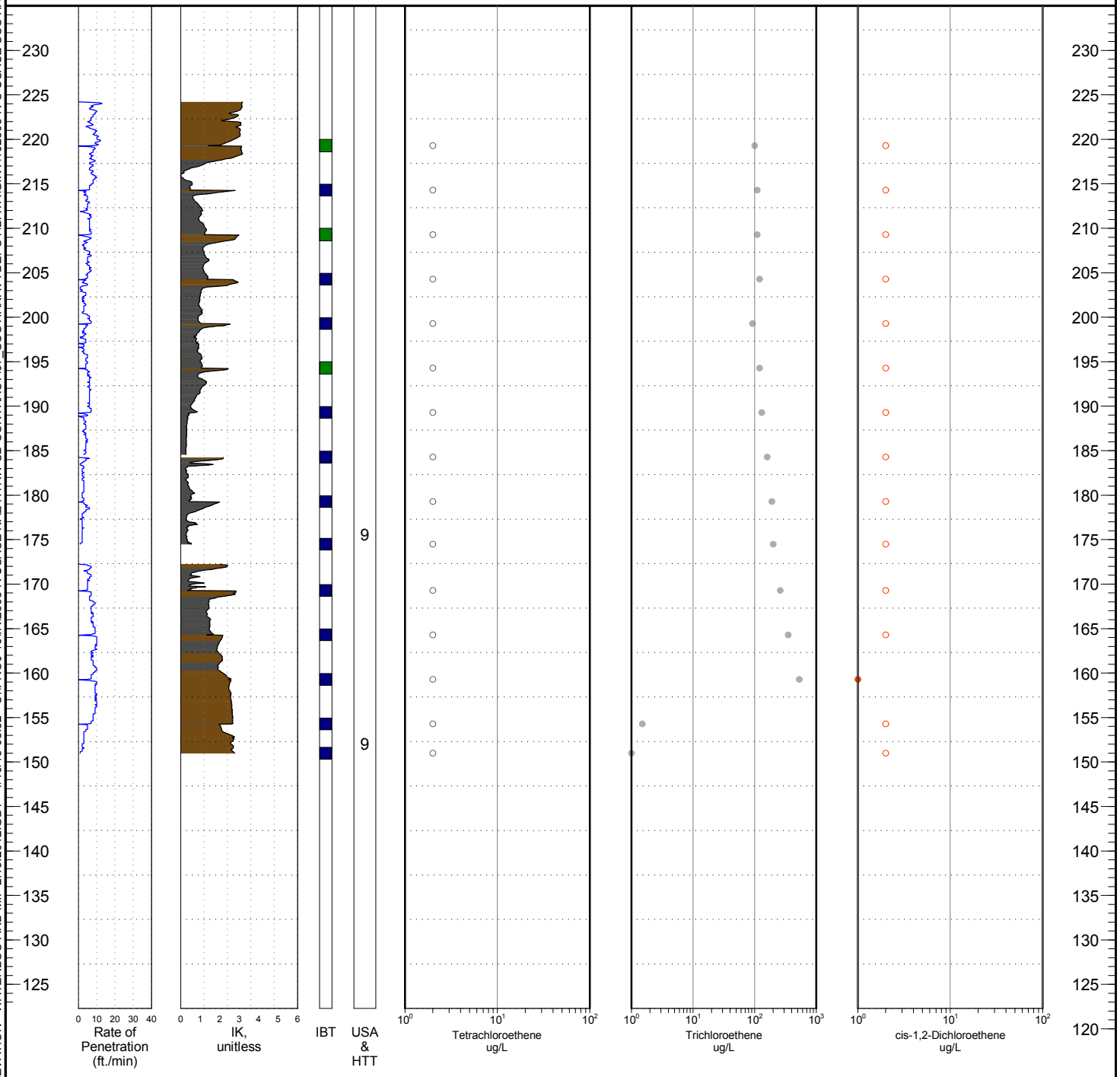
Total Depth 136.30 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/4/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:32 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-11

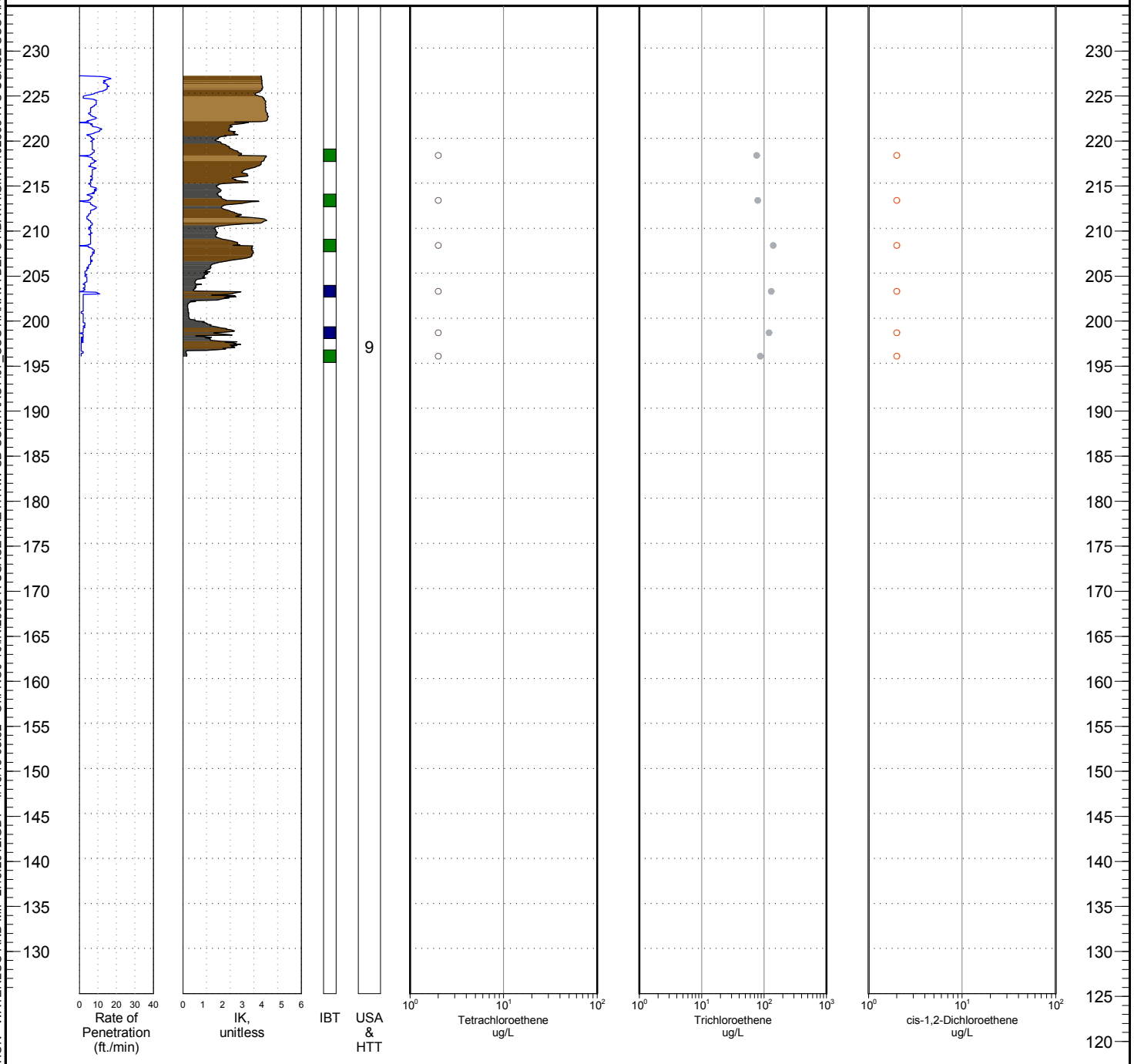
Total Depth 94.20 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 2/27/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
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HTT = Hole Termination Type
- 7 = Broken downhole equipment
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APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:32 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-12

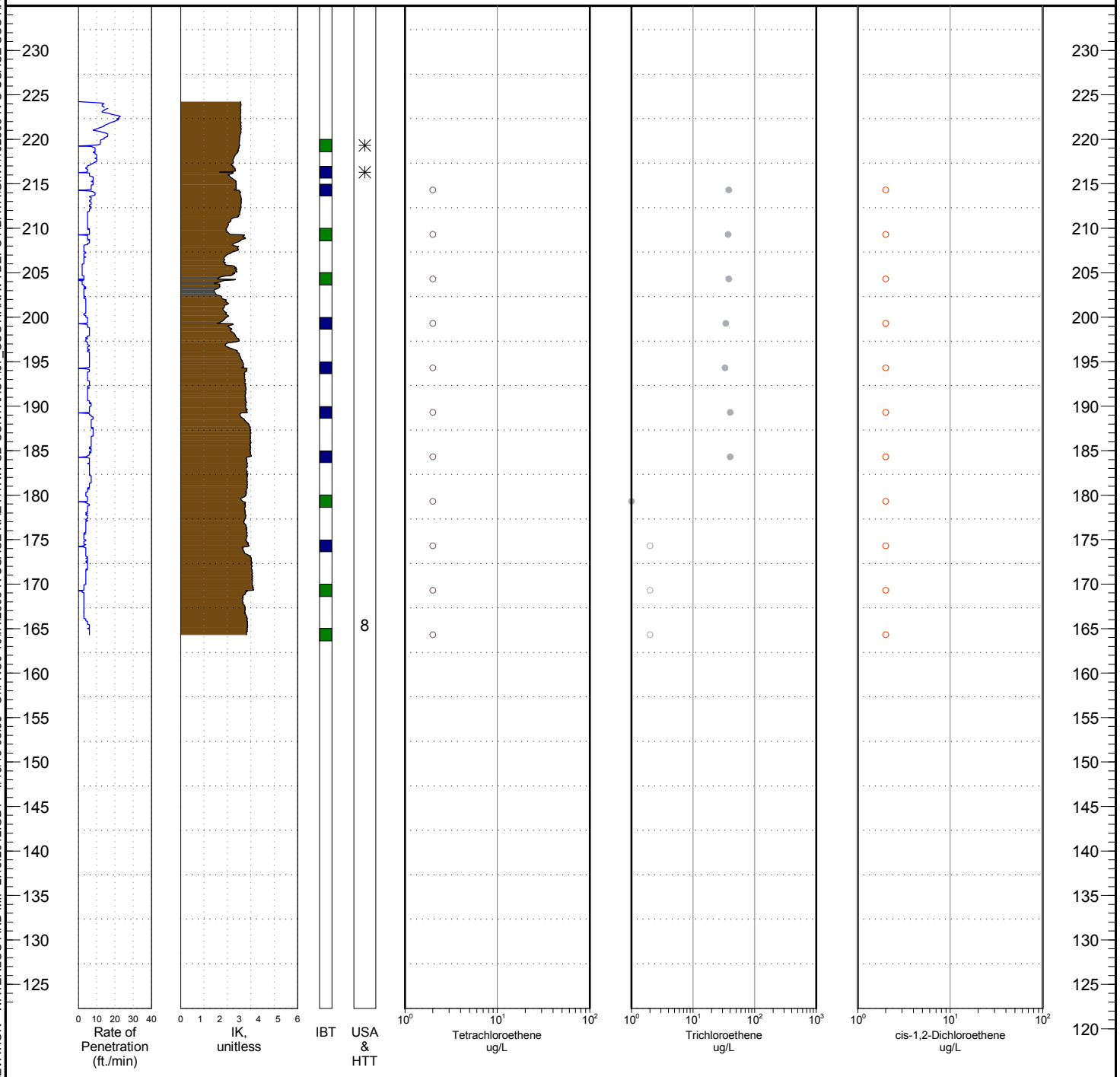
Total Depth 123.00 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/1/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
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APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:33 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-13

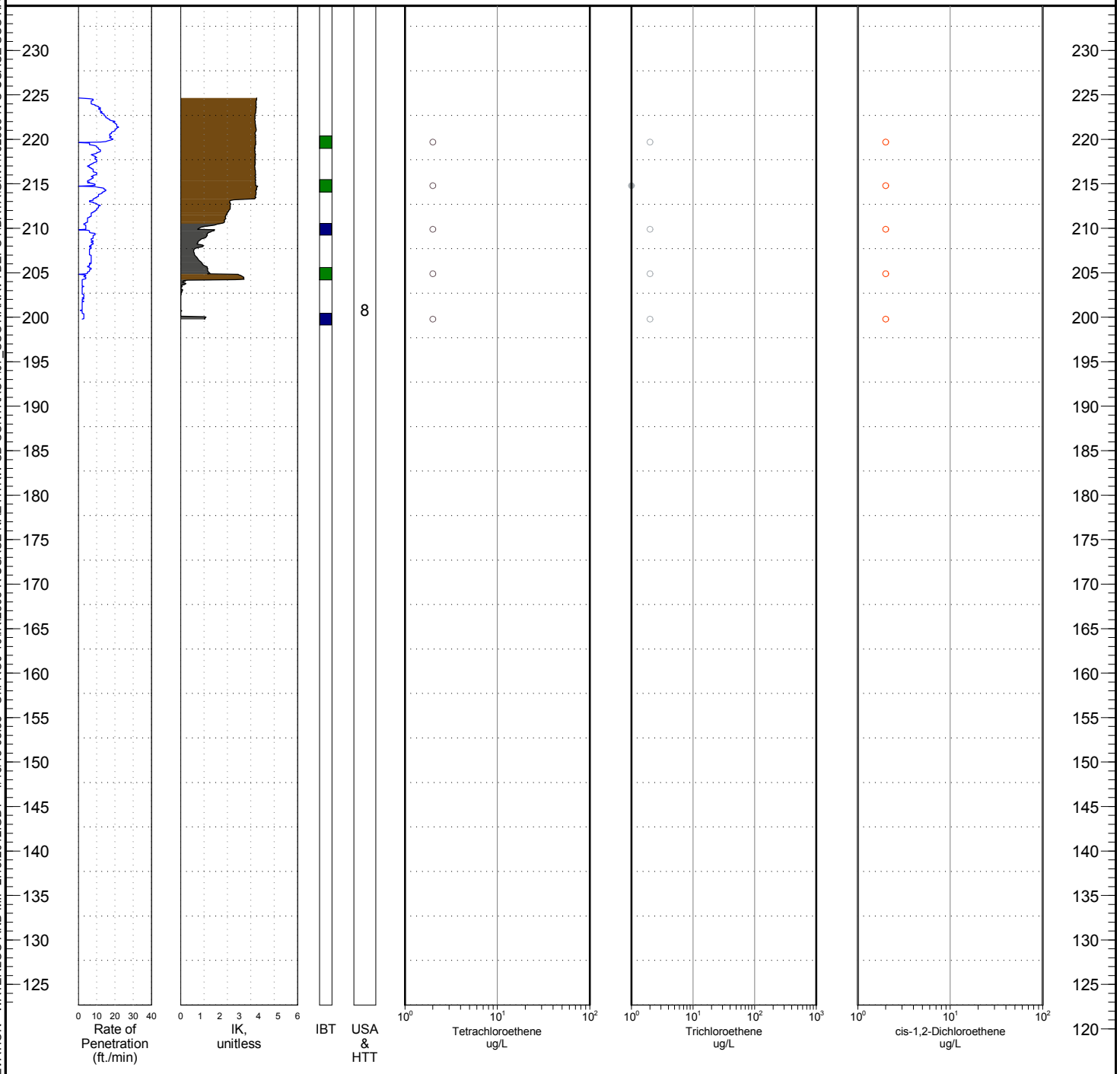
Total Depth 87.90 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/1/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:33 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIA\NAVY\DEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-14

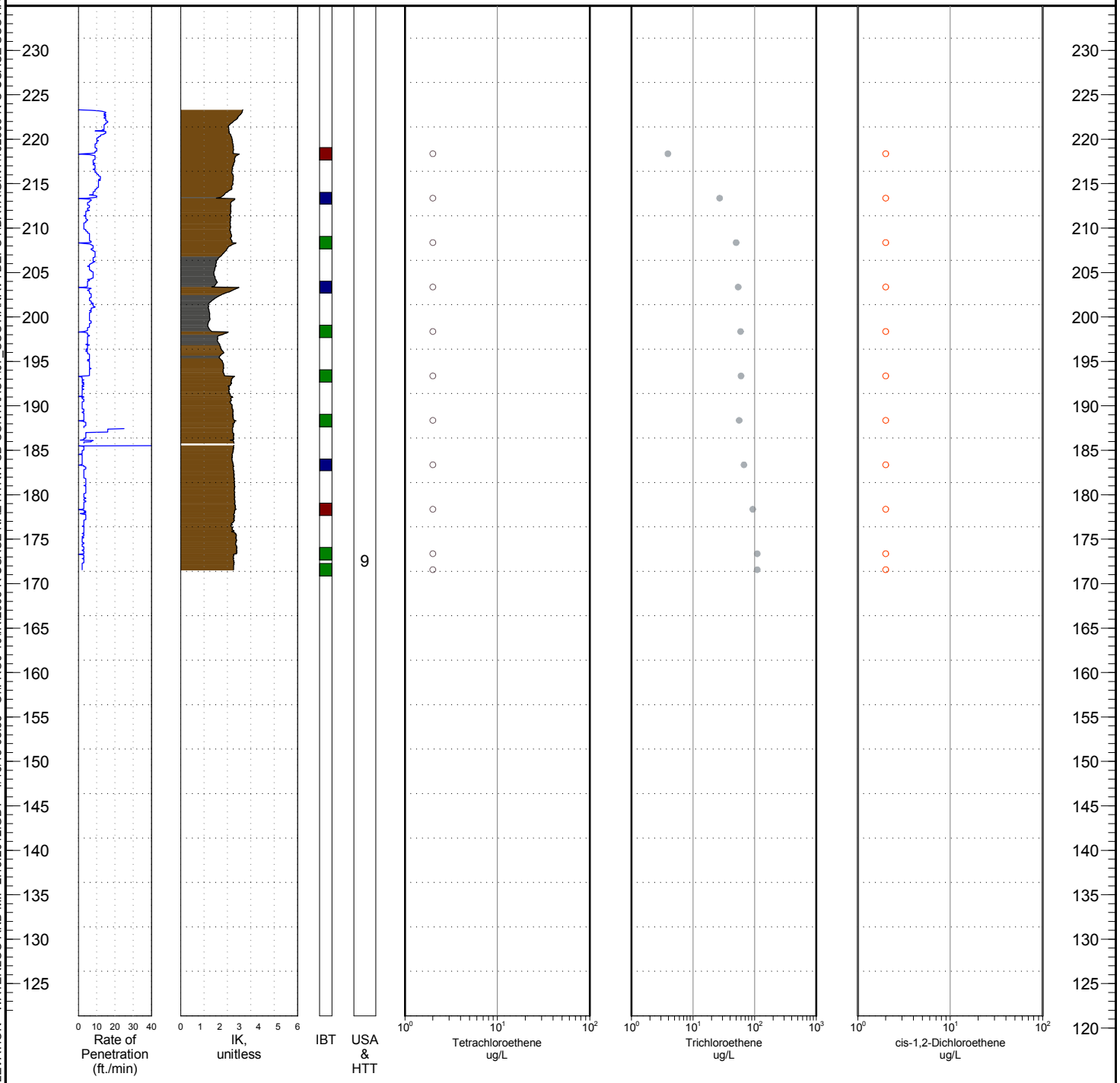
Total Depth 114.80 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/6/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

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- ✳ = Could not produce water
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- 7 = Broken downhole equipment
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- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:33 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-15

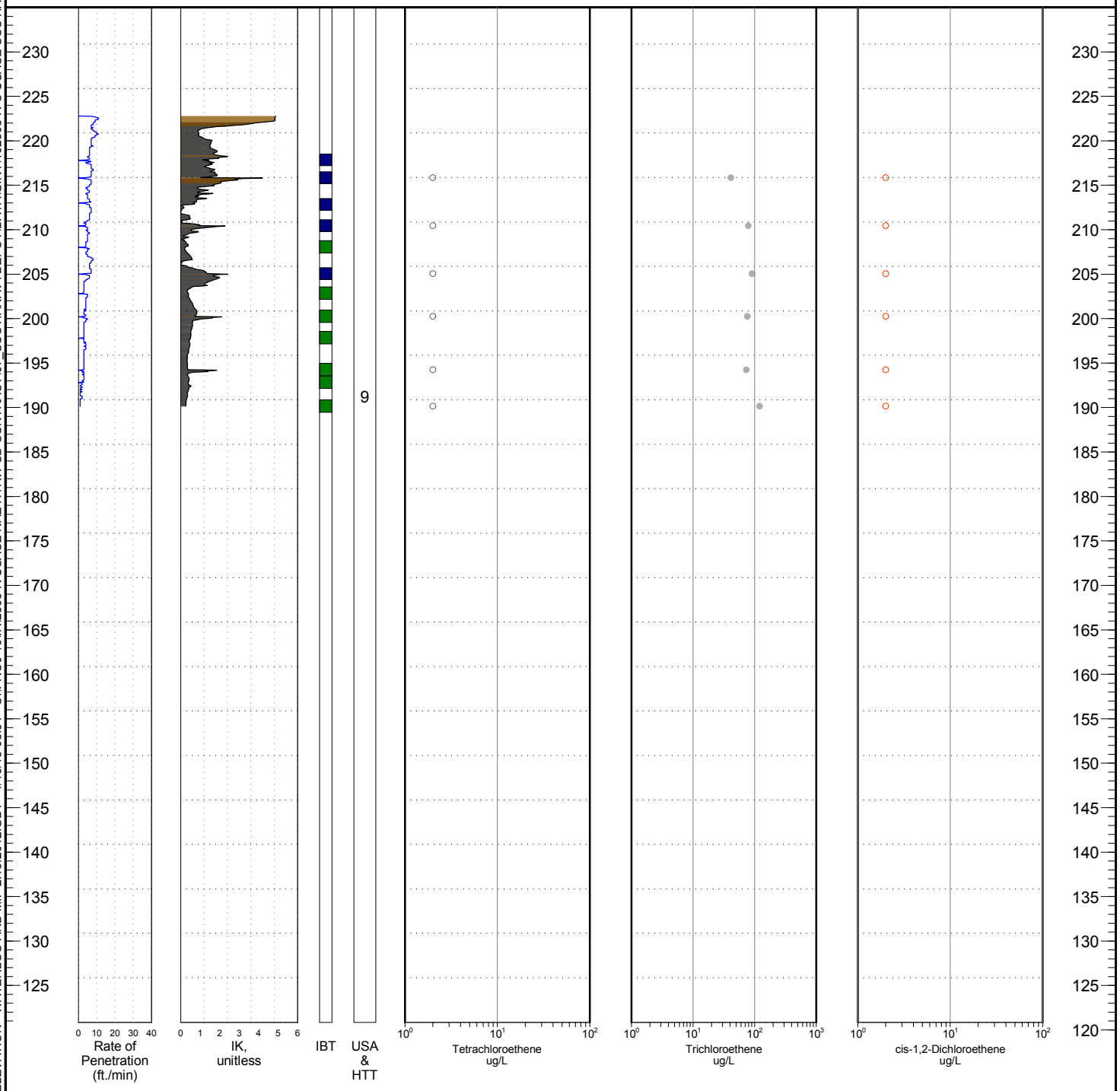
Total Depth 95.70 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/6/2013
Sampler(s) WJW
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
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- ▲ = Yield deemed too slow
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HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:34 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

BORING NAME WP-16

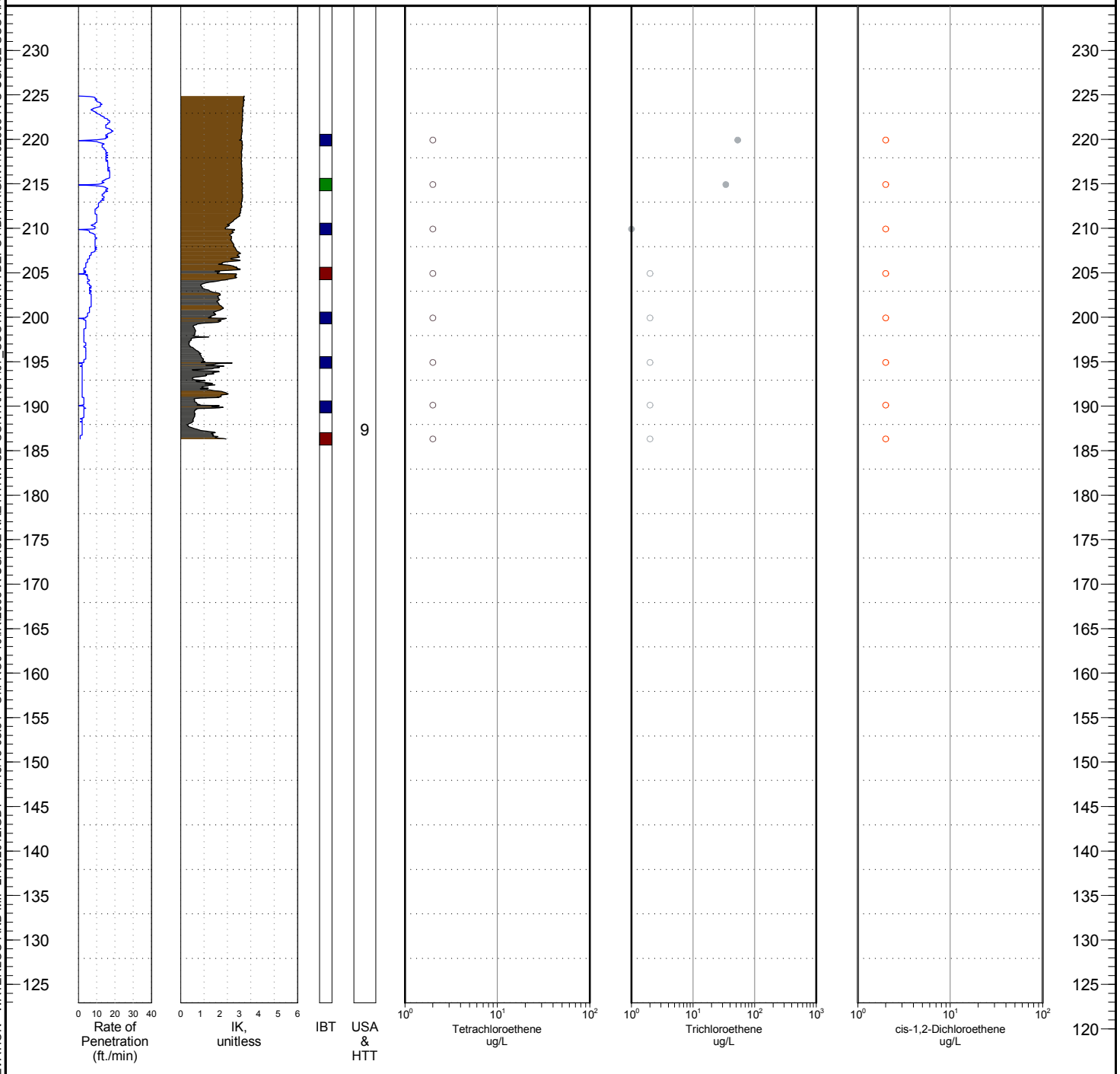
Total Depth 101.60 ft.

MobiLab™
DEFENSIBLE REAL-TIME ANALYTICS

Project Name Scotia Naval Depot
Client USACE
Stone Project Number 12305-R-C
Project Location Scotia NY

Date Completed 3/7/2013
Sampler(s) TWM
Drilling Contractor GeoLogic/Parratt-Wolff
Gas Drive or Peri Pump Gas Drive

All Results given as ug/L
Detects noted by filled symbol
Non Detects are noted by open symbols at the detection limit



IK Scale

0 to 0.1
0.1 to 2
2 to 4
4 to 6
>6

Legend

IBT = IK Behavior Type
- = IK increase when hammer stops
- = IK decrease when hammer stops
- = No change when hammer stops

USA = Unsuccessful Sample Attempt
- ✳ = Could not produce water
- ▲ = Yield deemed too slow
- ■ = Equipment issue

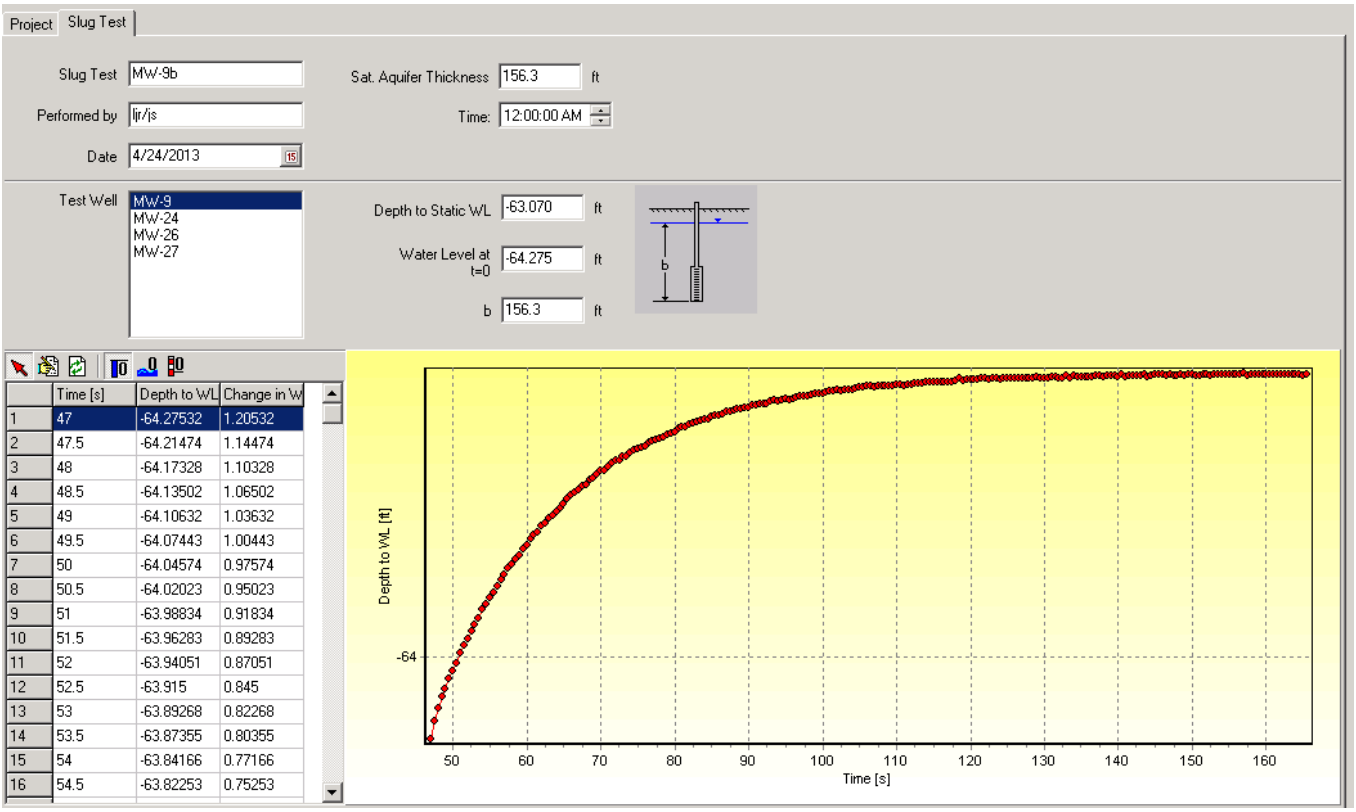
HTT = Hole Termination Type
- 7 = Broken downhole equipment
- 8 = Reached Target Depth
- 9 = ROP dropped below threshold
- 10 = Sudden Hard Refusal

APS & VOC NO HEAD ELEVATION - WATERLOO AND MIP 2.13.2012.GDT - 4/16/13 08:34 - O:\PROJ-10\IR\2305-R USACE NAE HTRW SB CONTRACT\07_SCOTIANAVYDEPOT\DATA\GINT\102305-R-C USACE SCOTIA NAVAL DEPOT.GPJ

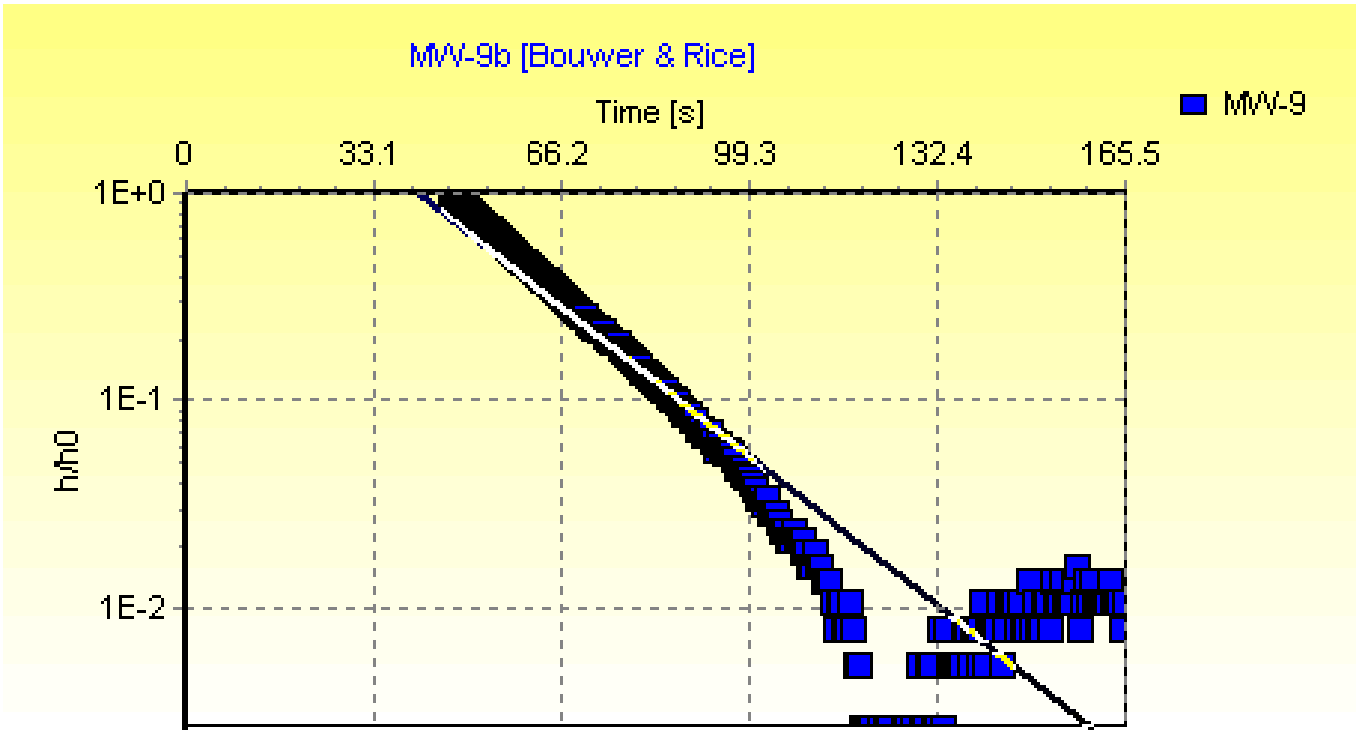
APPENDIX J: HYDRAULIC CONDUCTIVITY TESTING DATA AND CALCULATIONS

Test MW-9b

Input



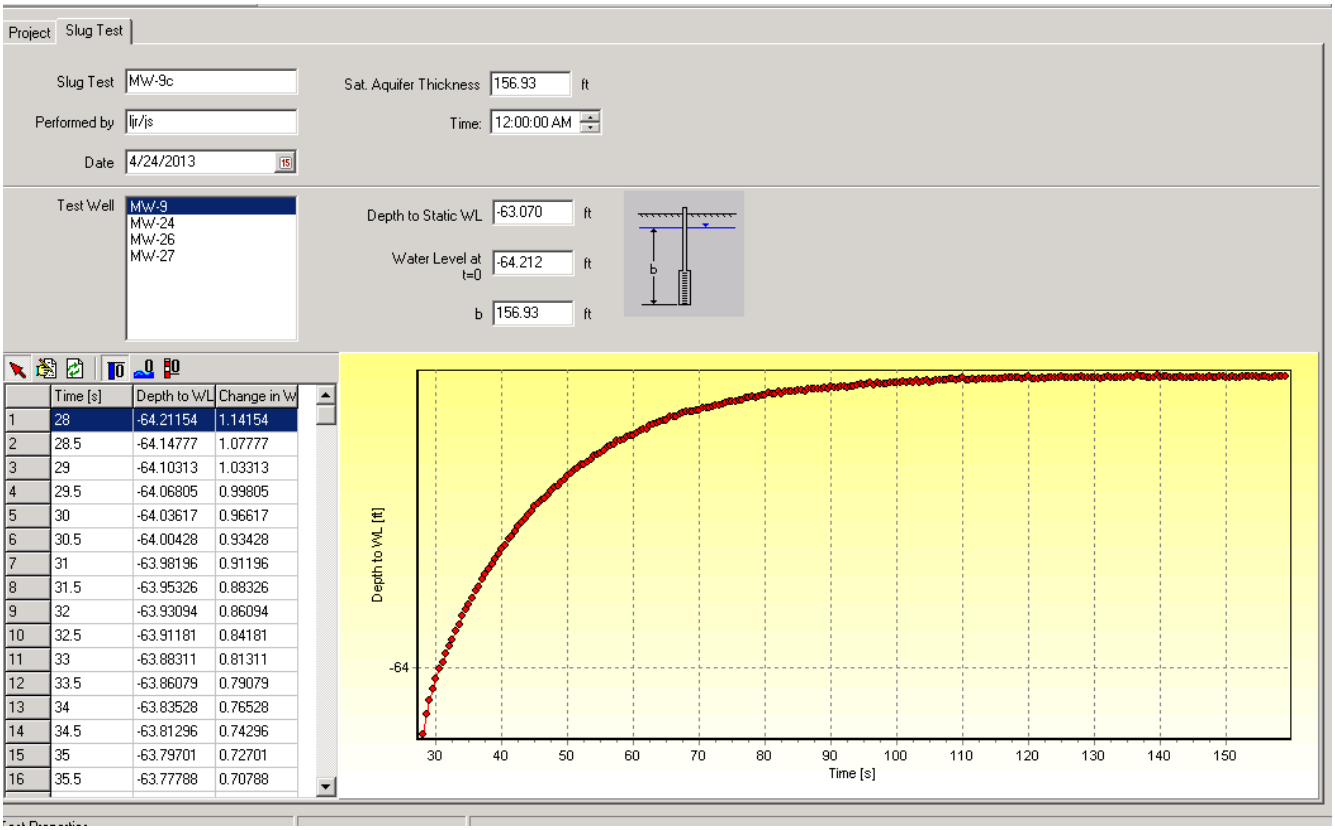
Output



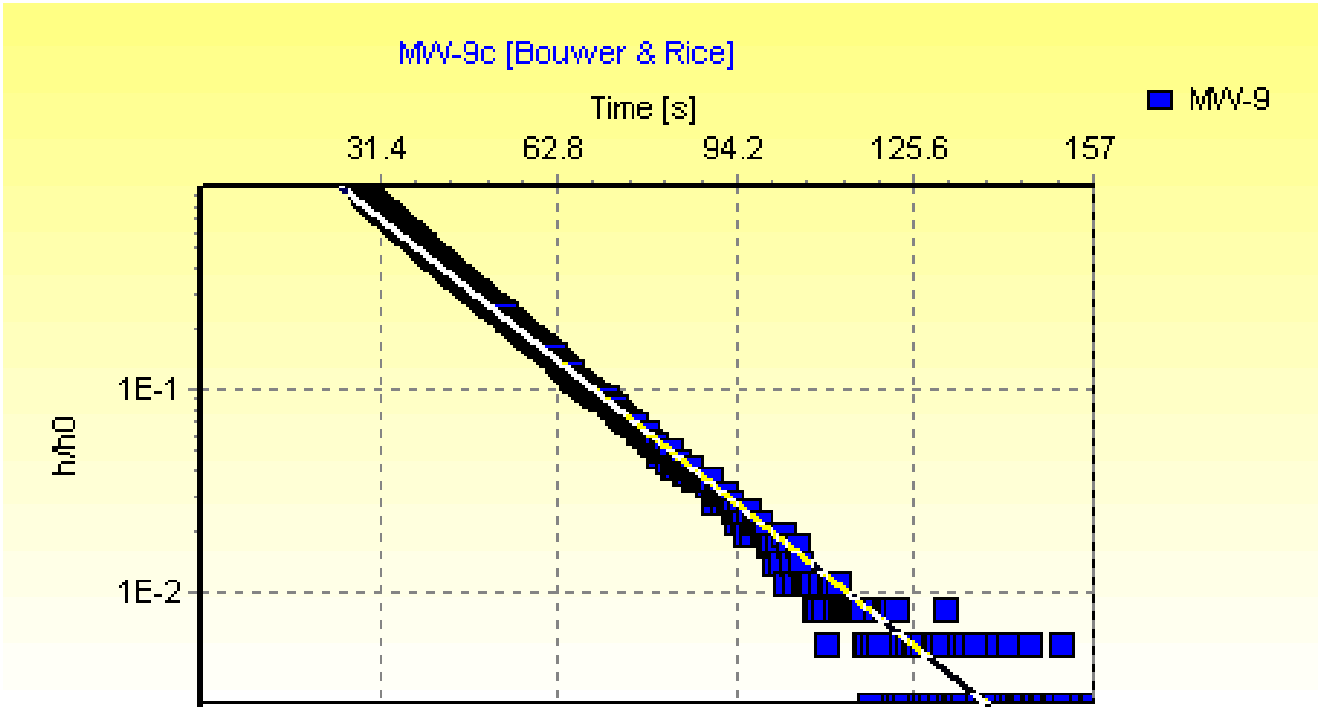
Conductivity: 2.52E-3 cm/s

Test MW-9c

Input



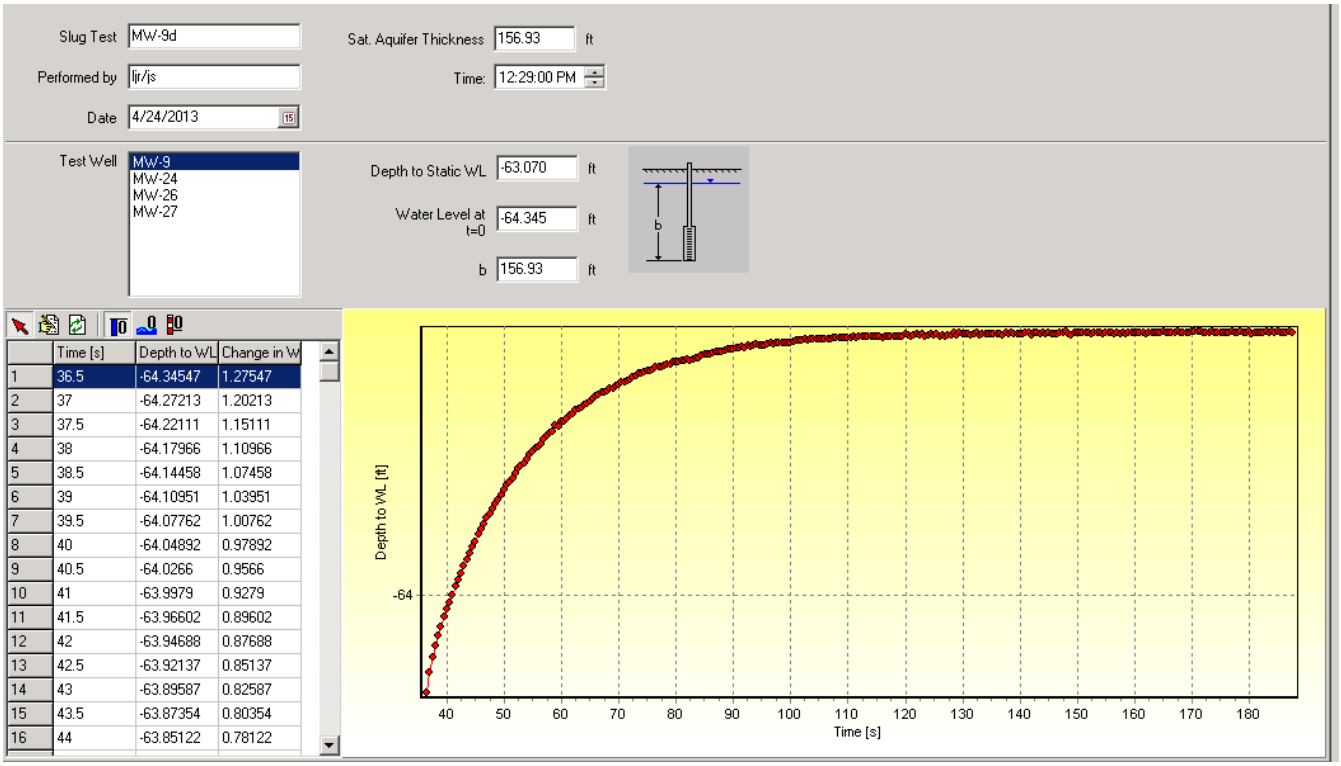
Output



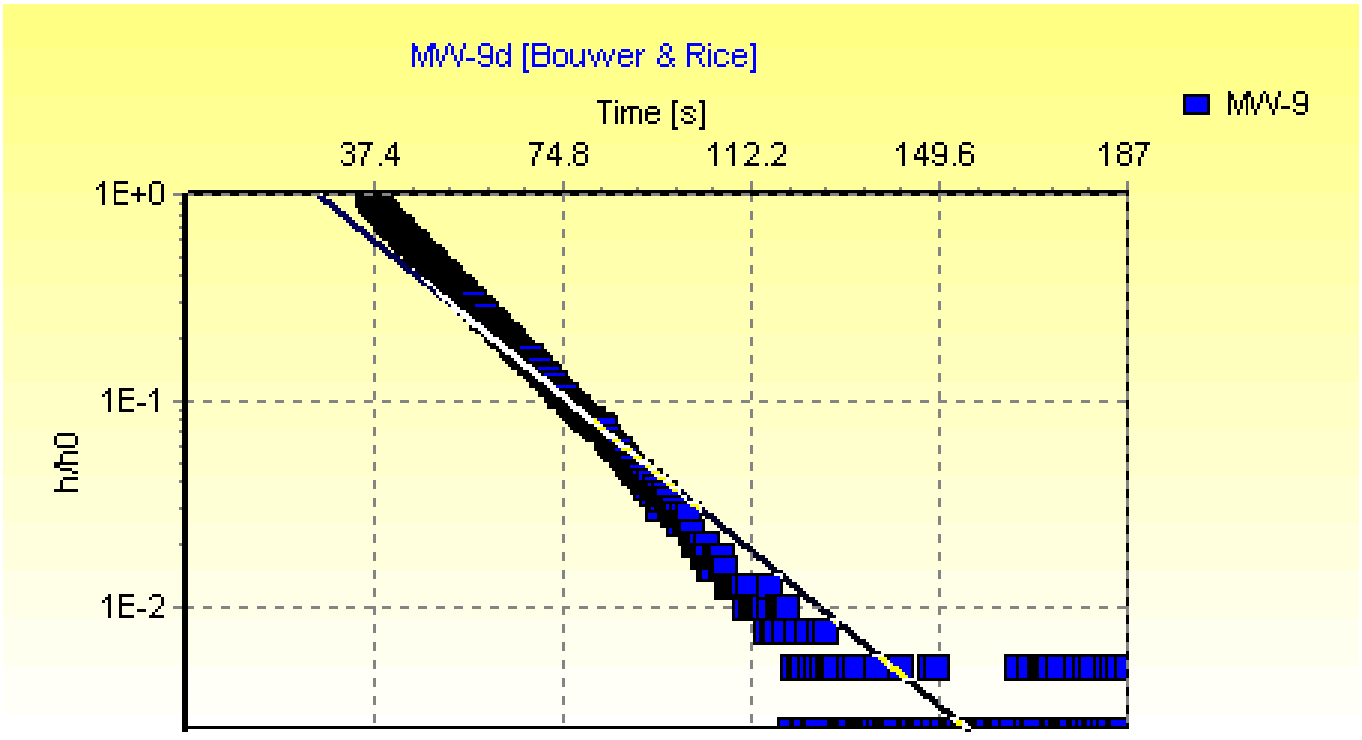
Conductivity: 2.60E-3 cm/s

Test MW-9d

Input



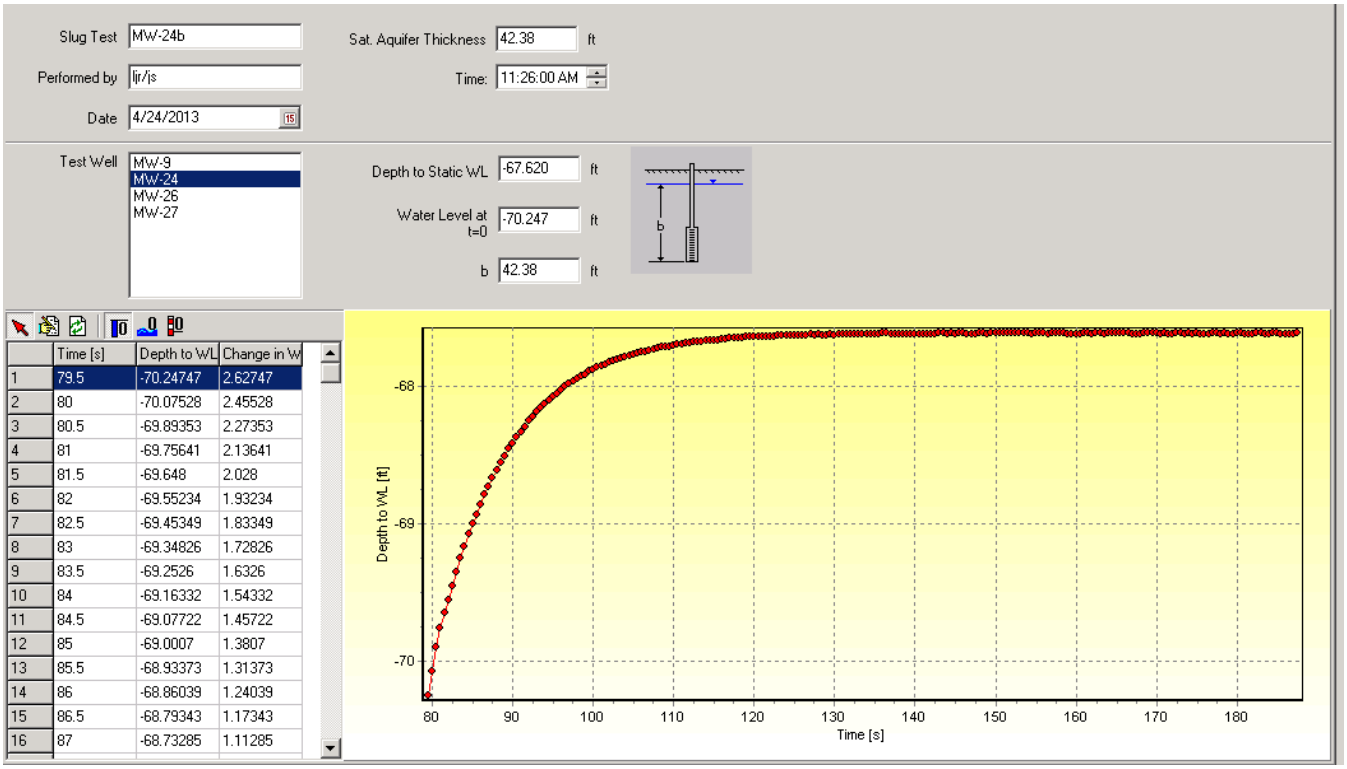
Output



Conductivity: 2.33E-3 cm/s

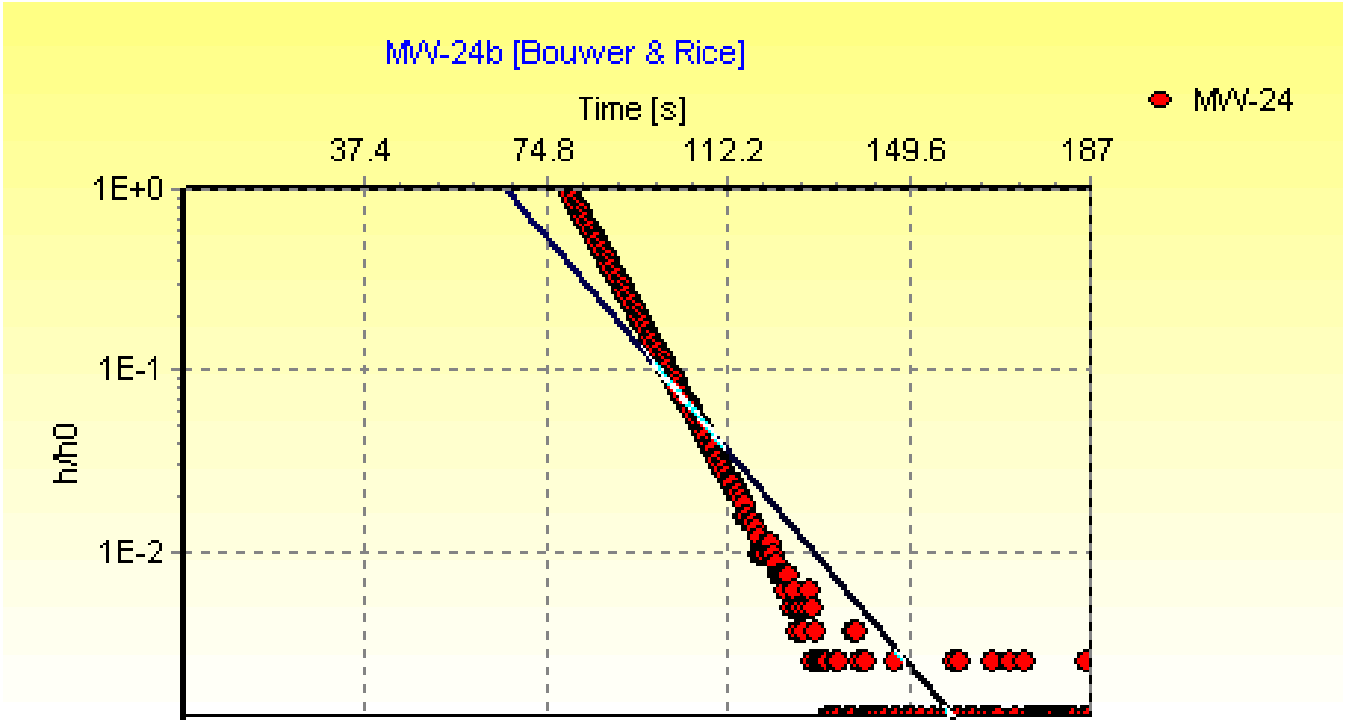
Test MW-24b

Input



	Time [s]	Depth to WL	Change in W
1	79.5	-70.24747	2.62747
2	80	-70.07528	2.45528
3	80.5	-69.89353	2.27353
4	81	-69.75641	2.13641
5	81.5	-69.648	2.028
6	82	-69.55234	1.93234
7	82.5	-69.45349	1.83349
8	83	-69.34826	1.72826
9	83.5	-69.2526	1.6326
10	84	-69.16332	1.54332
11	84.5	-69.07722	1.45722
12	85	-69.0007	1.3807
13	85.5	-68.93373	1.31373
14	86	-68.86039	1.24039
15	86.5	-68.79343	1.17343
16	87	-68.73285	1.11285

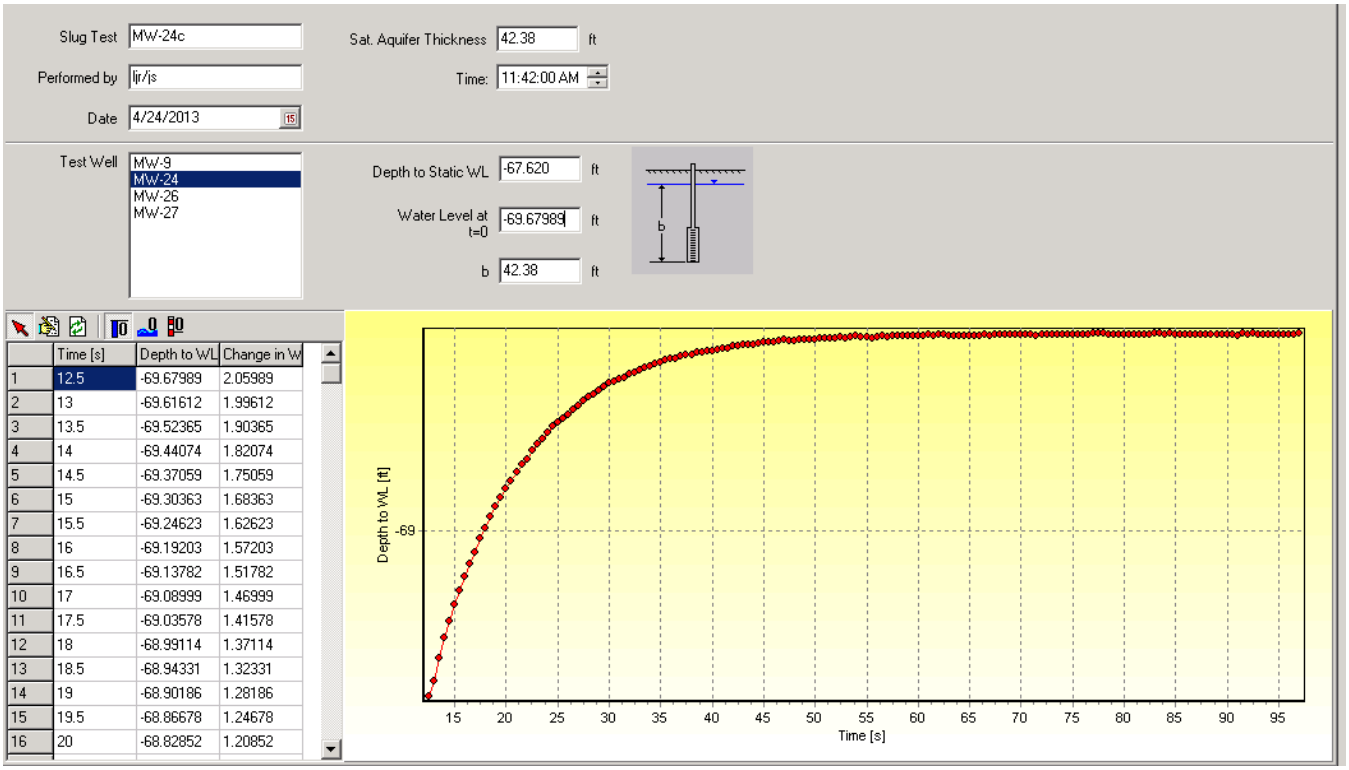
Output



Conductivity: 3.11E-3 cm/s

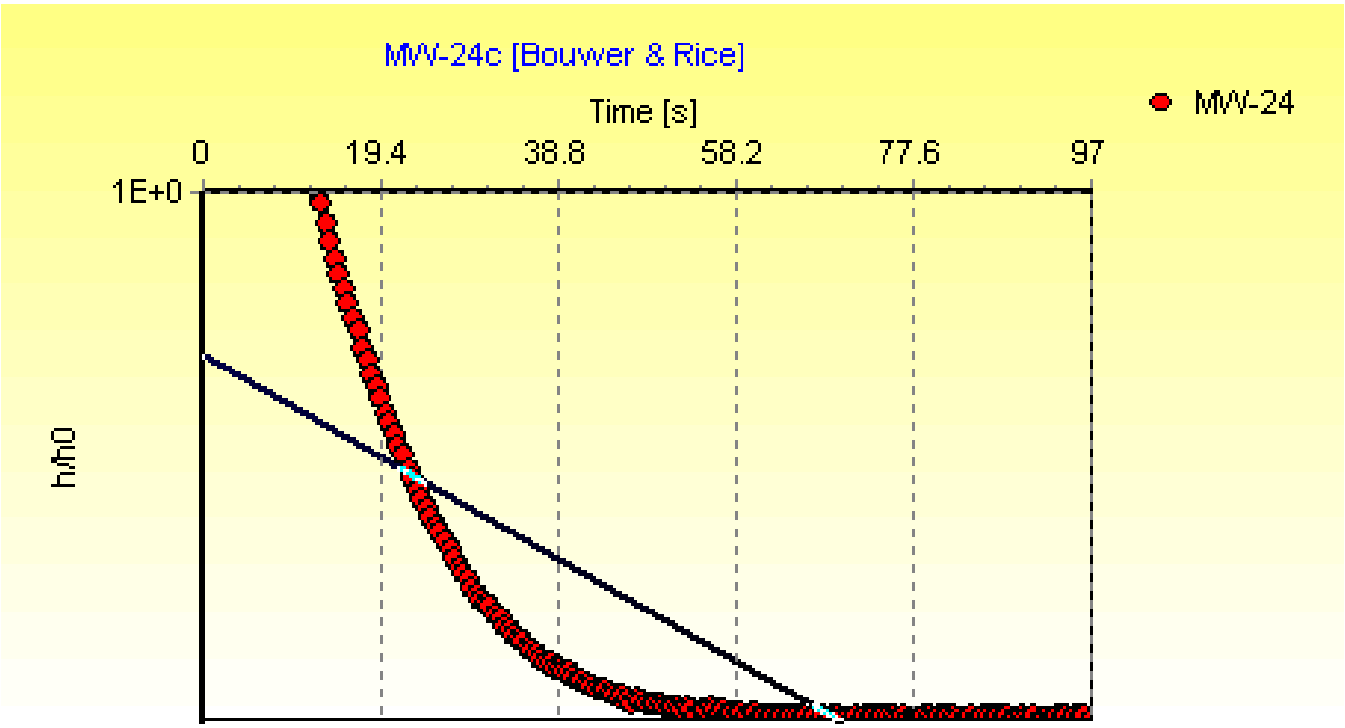
Test MW-24c

Input



	Time [s]	Depth to WL	Change in W
1	12.5	-69.67989	2.05989
2	13	-69.61612	1.99612
3	13.5	-69.52365	1.90365
4	14	-69.44074	1.82074
5	14.5	-69.37059	1.75059
6	15	-69.30363	1.68363
7	15.5	-69.24623	1.62623
8	16	-69.19203	1.57203
9	16.5	-69.13782	1.51782
10	17	-69.08999	1.46999
11	17.5	-69.03578	1.41578
12	18	-68.99114	1.37114
13	18.5	-68.94331	1.32331
14	19	-68.90186	1.28186
15	19.5	-68.86678	1.24678
16	20	-68.82852	1.20852

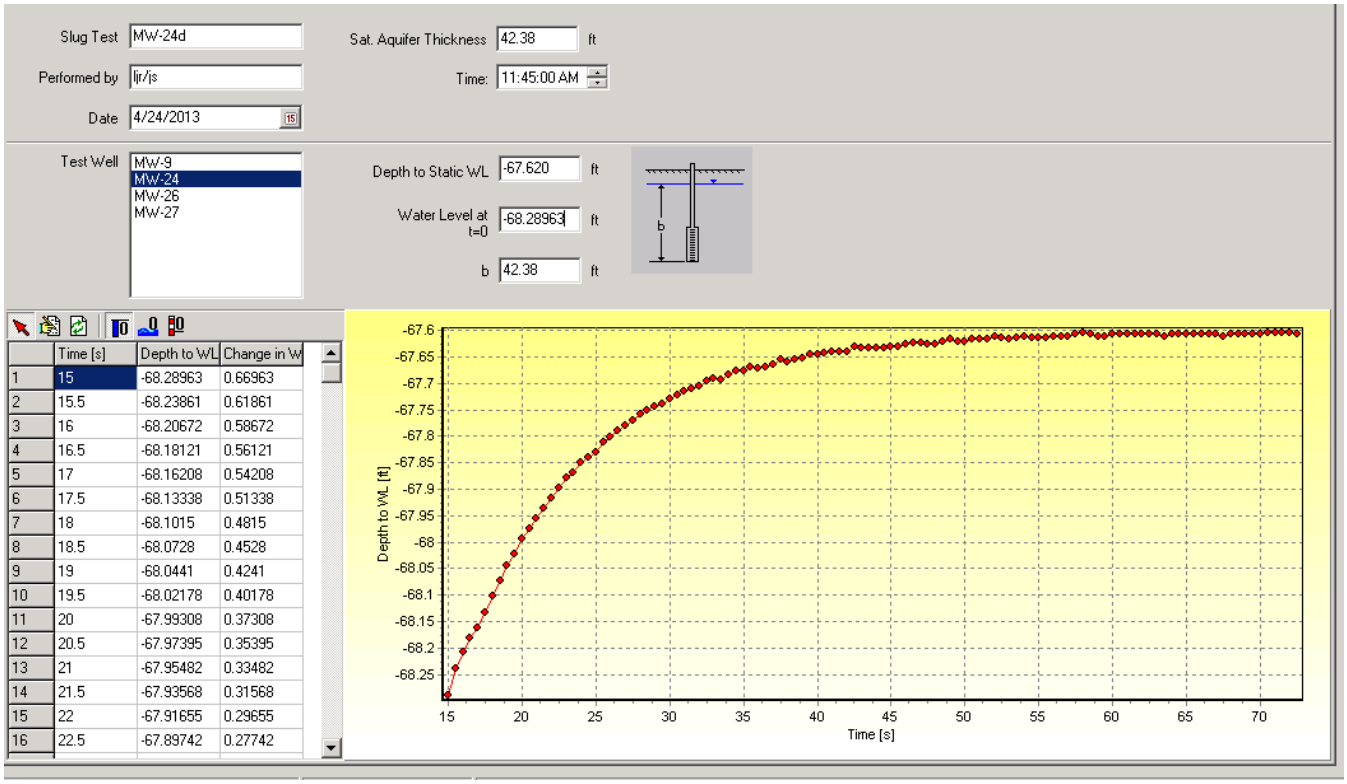
Output



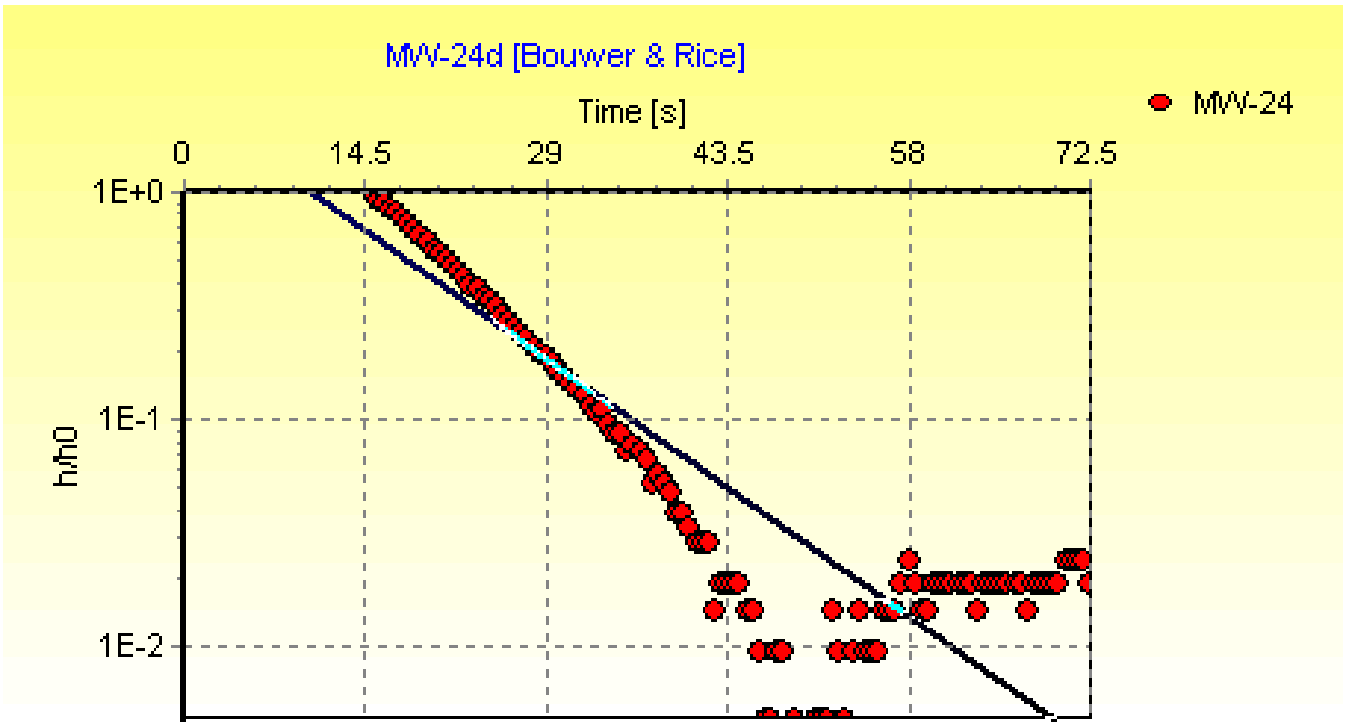
Conductivity: 5.41E-4 cm/s

Test MW-24d

Input



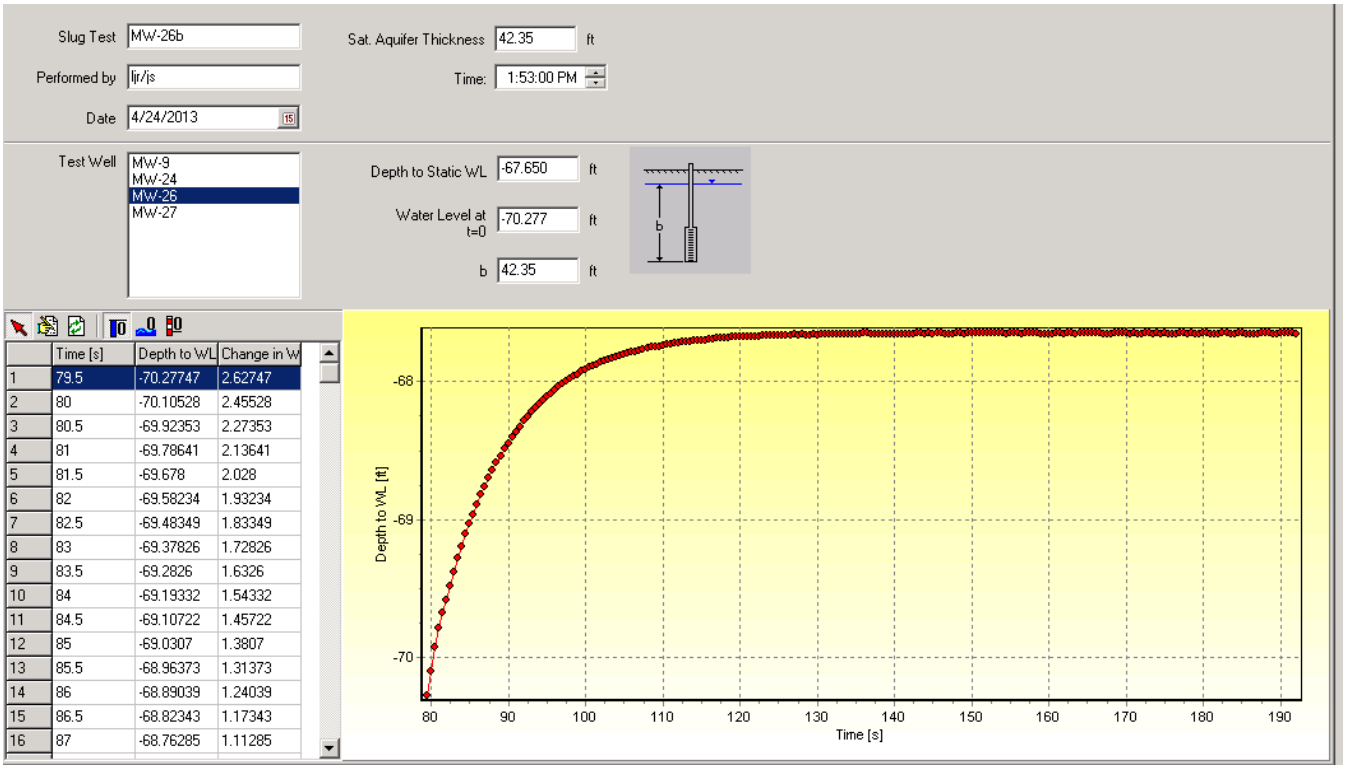
Output



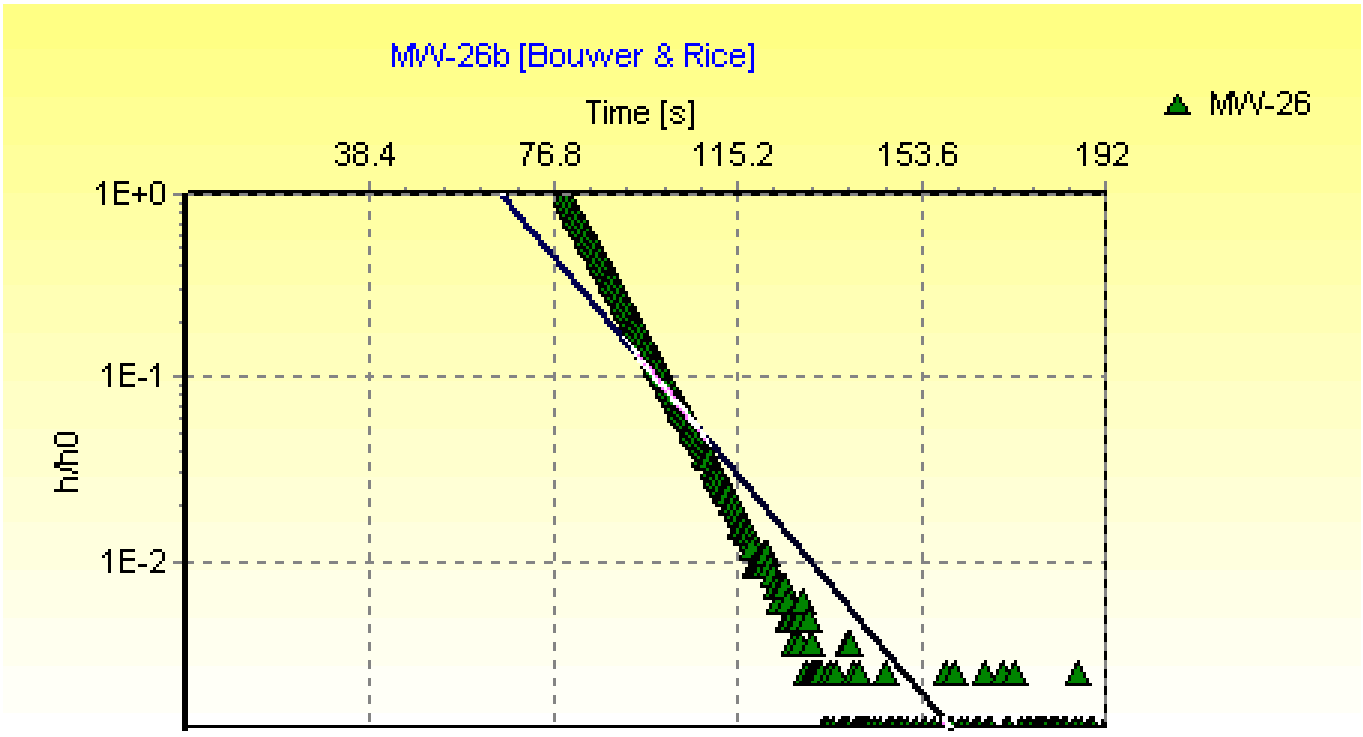
Conductivity: 3.85E-3 cm/s

Test MW-26b

Input



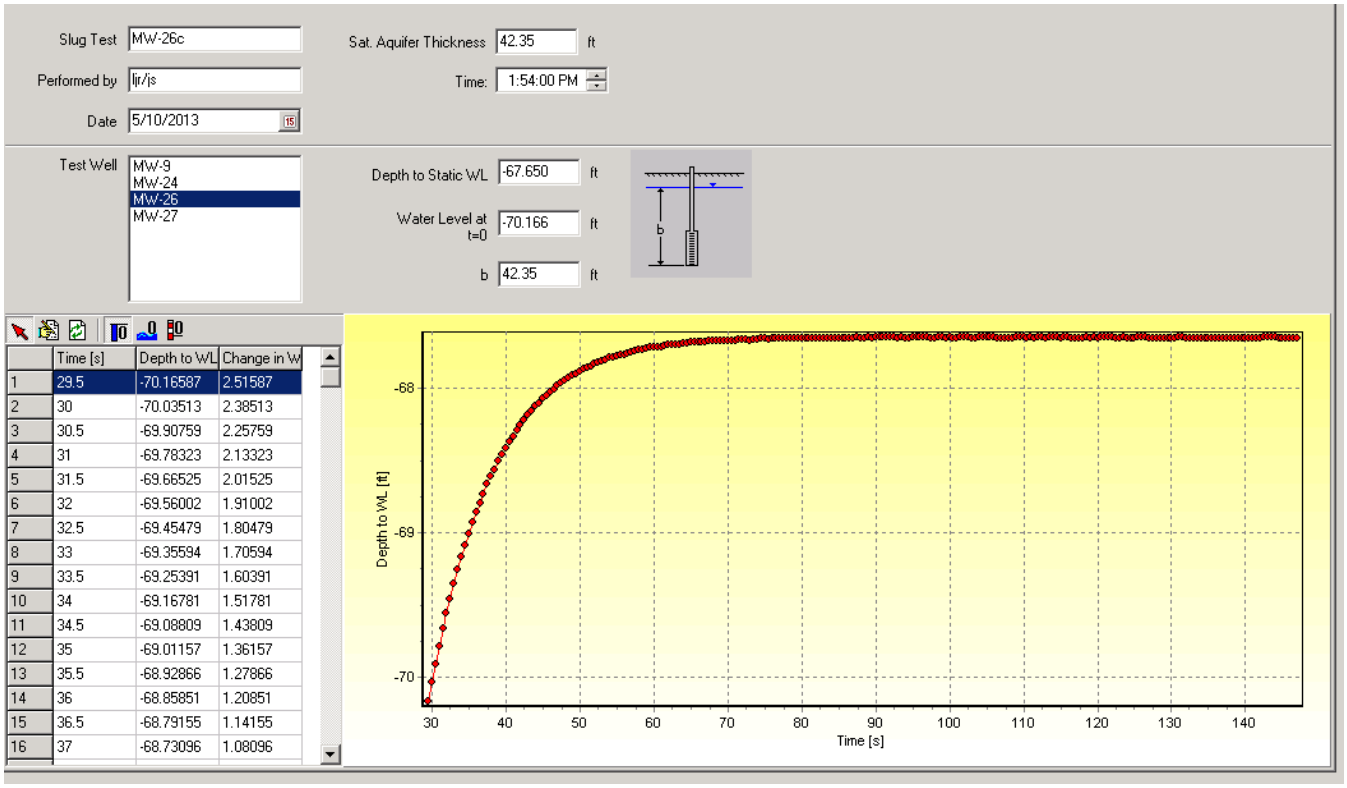
Output



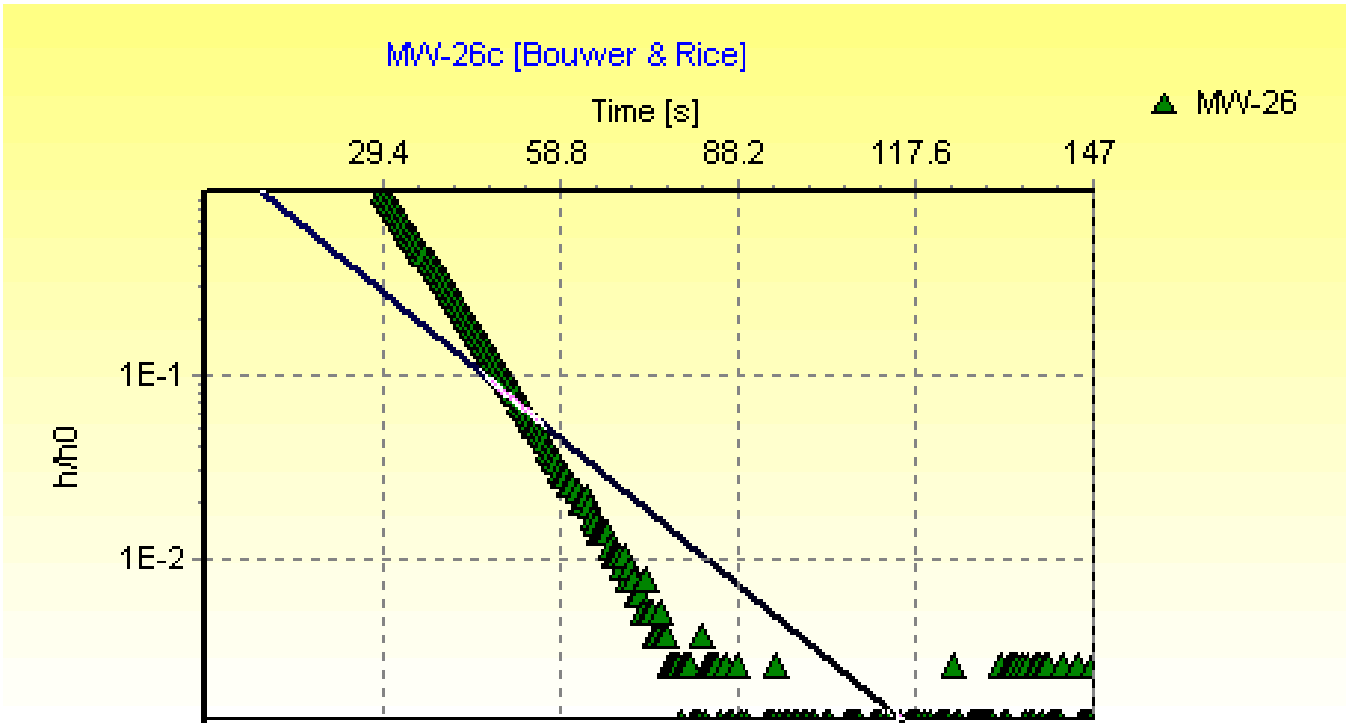
Conductivity: 3.03E-3 cm/s

Test MW-26c

Input



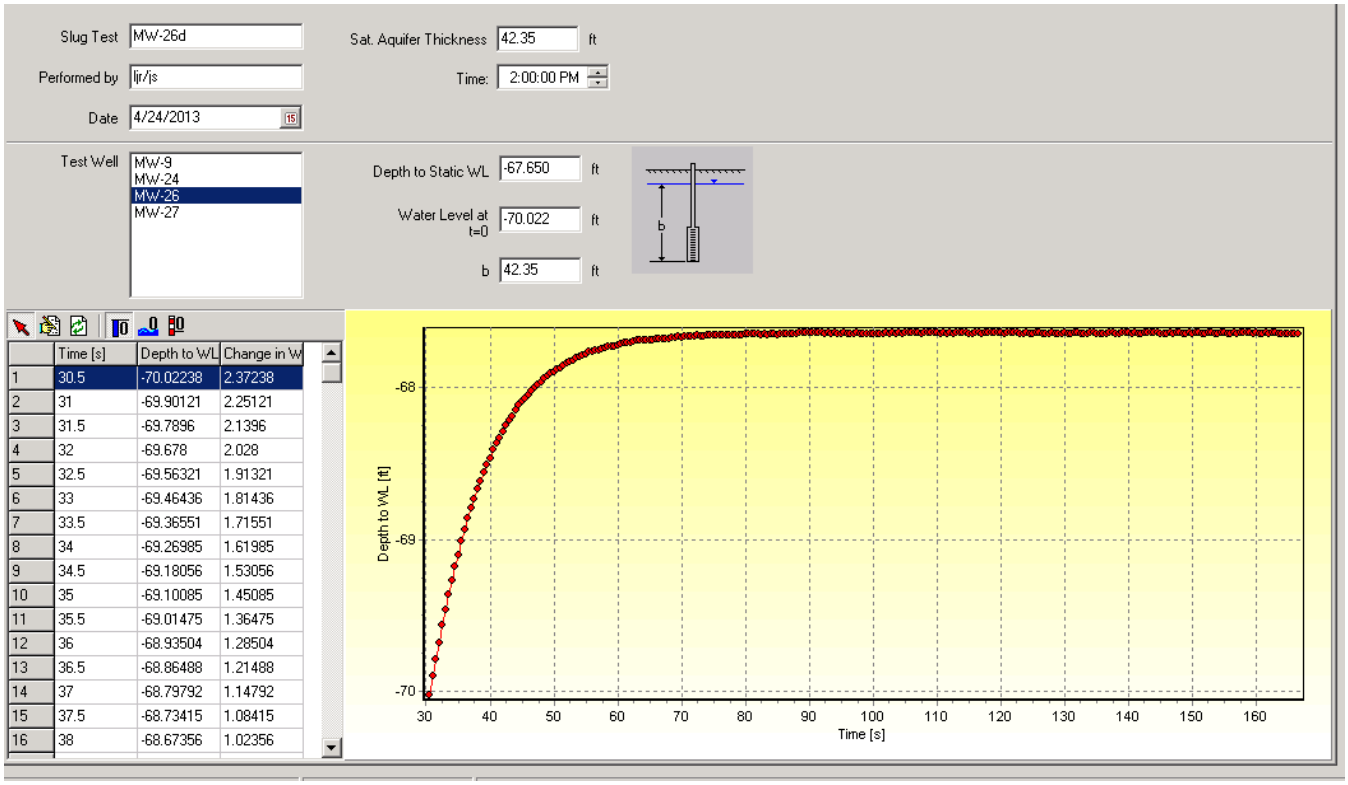
Output



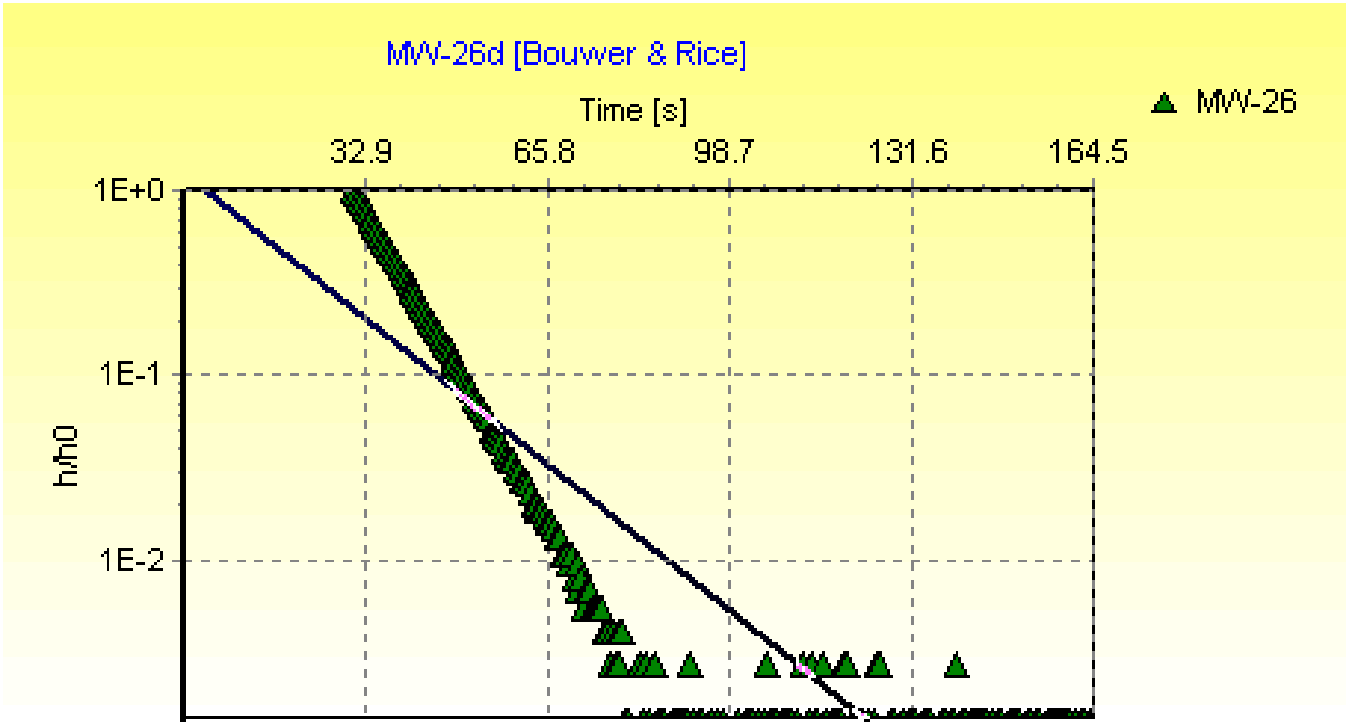
Conductivity: 2.69E-3 cm/s

Test MW-26d

Input



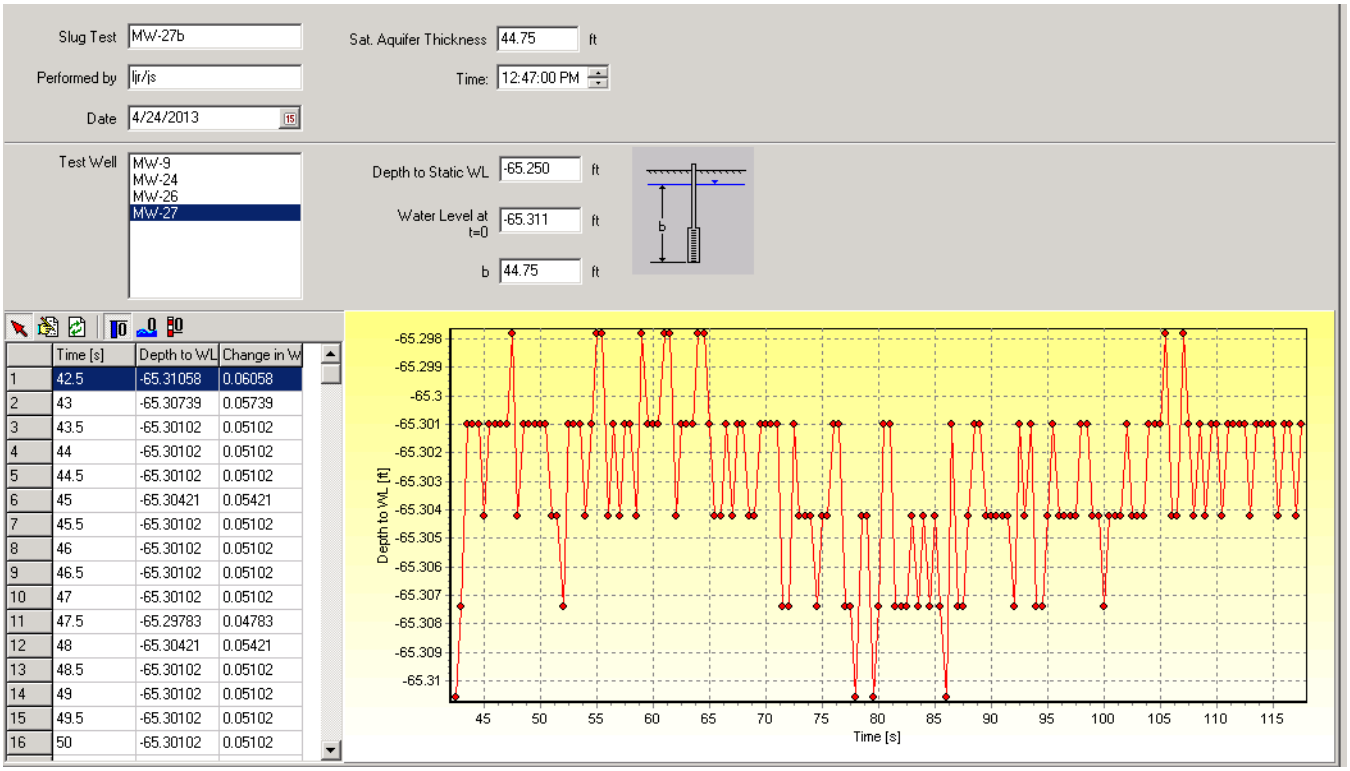
Output



Conductivity: 2.36E-3 cm/s

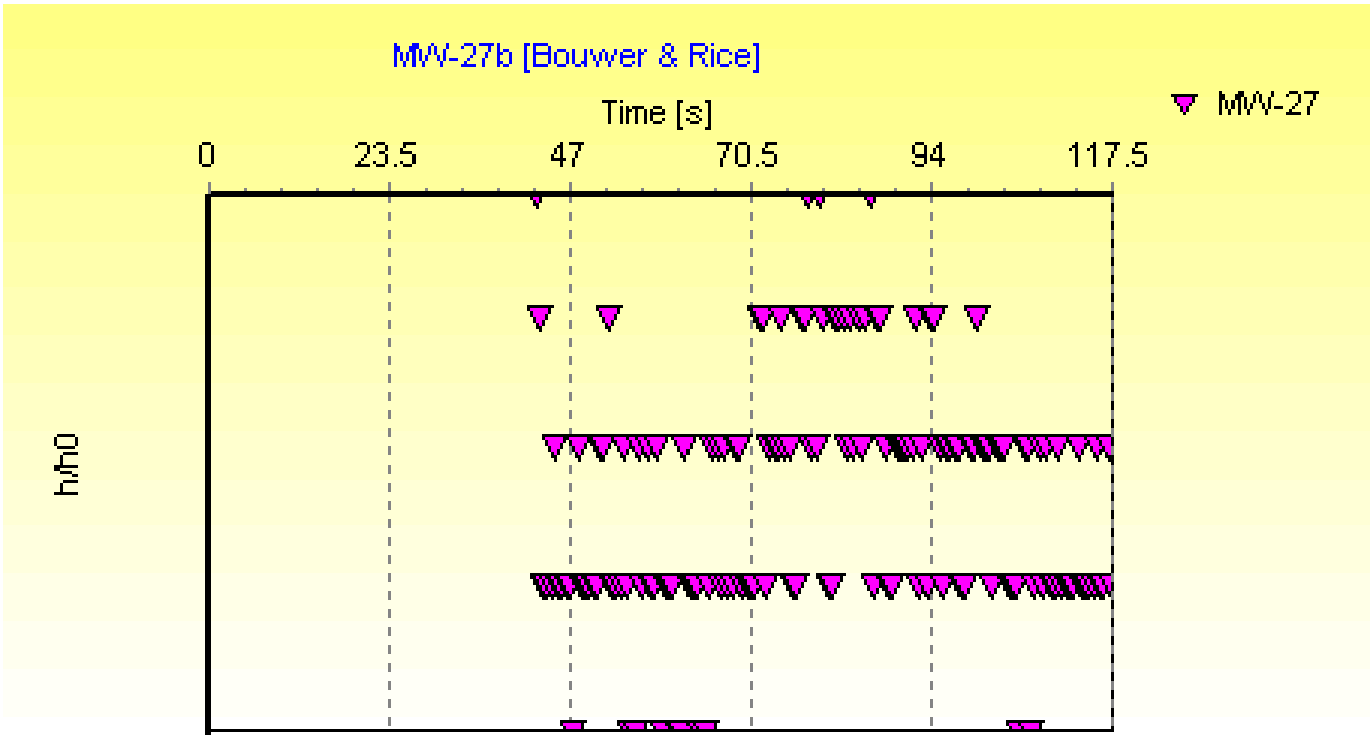
Test MW-27b

Input



	Time [s]	Depth to WL	Change in W
1	42.5	-65.31058	0.06058
2	43	-65.30739	0.05739
3	43.5	-65.30102	0.05102
4	44	-65.30102	0.05102
5	44.5	-65.30102	0.05102
6	45	-65.30421	0.05421
7	45.5	-65.30102	0.05102
8	46	-65.30102	0.05102
9	46.5	-65.30102	0.05102
10	47	-65.30102	0.05102
11	47.5	-65.29783	0.04783
12	48	-65.30421	0.05421
13	48.5	-65.30102	0.05102
14	49	-65.30102	0.05102
15	49.5	-65.30102	0.05102
16	50	-65.30102	0.05102

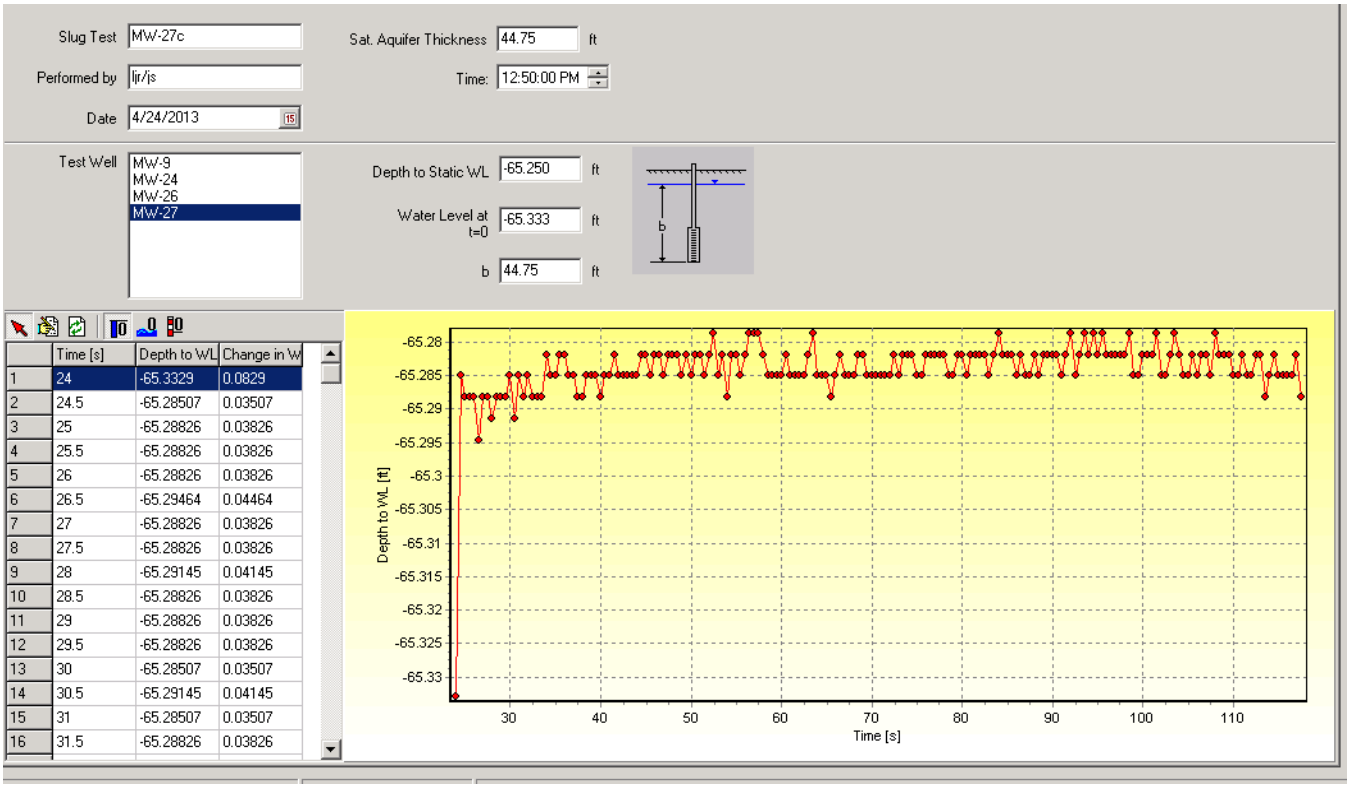
Output



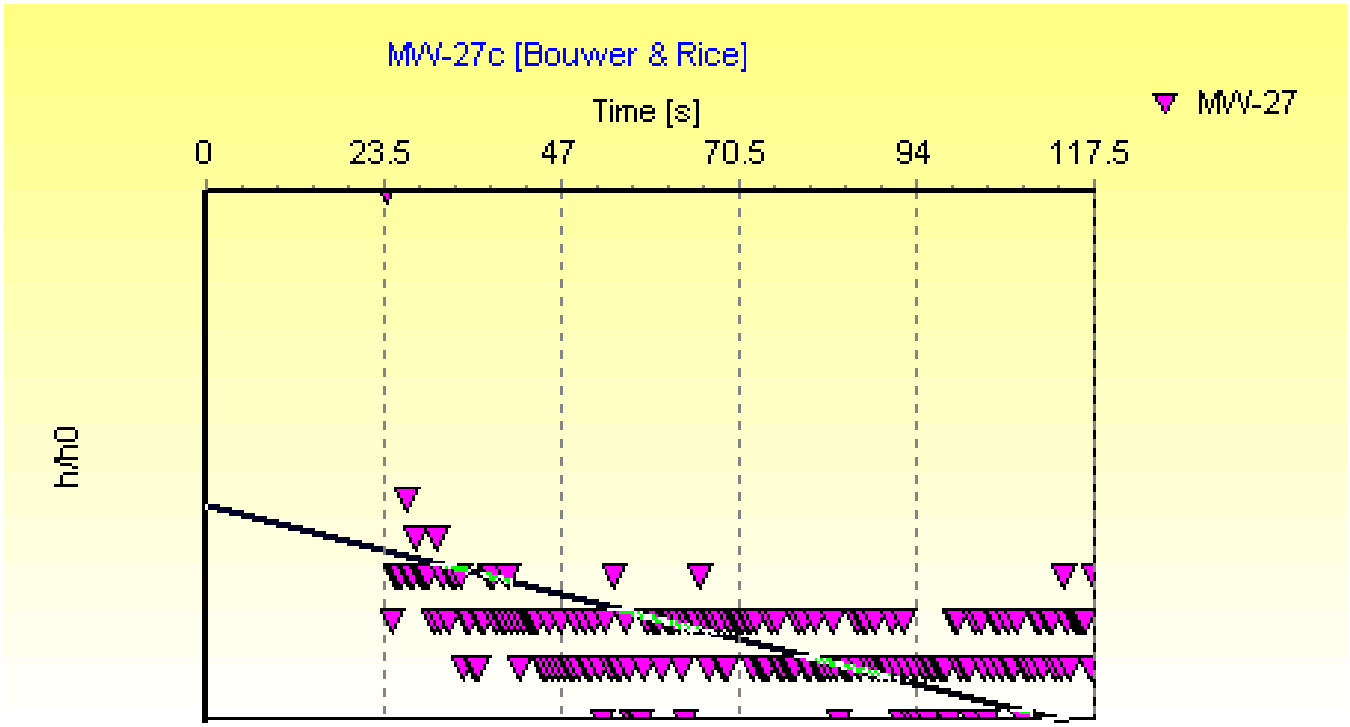
Conductivity: 1.05E-4 cm/s

Test MW-27c

Input



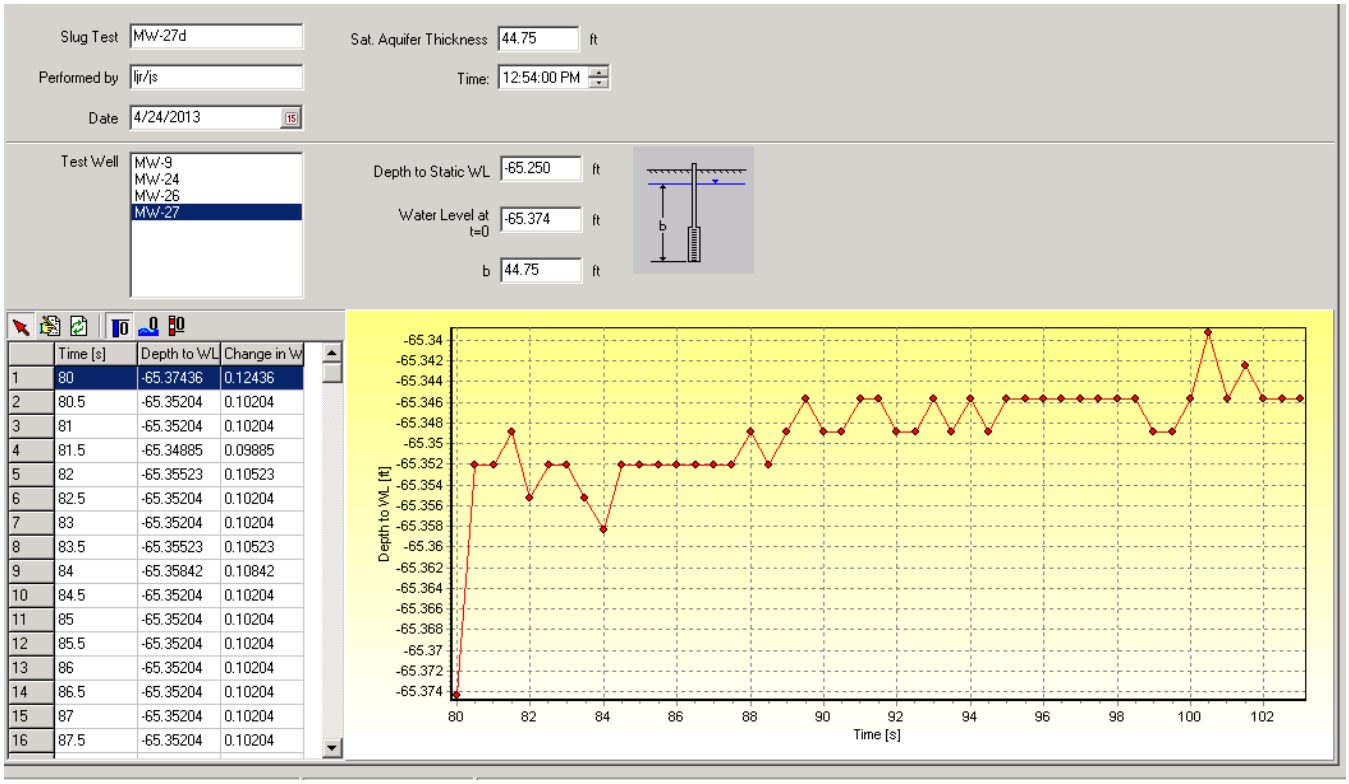
Output



Conductivity: 1.64E-4 cm/s

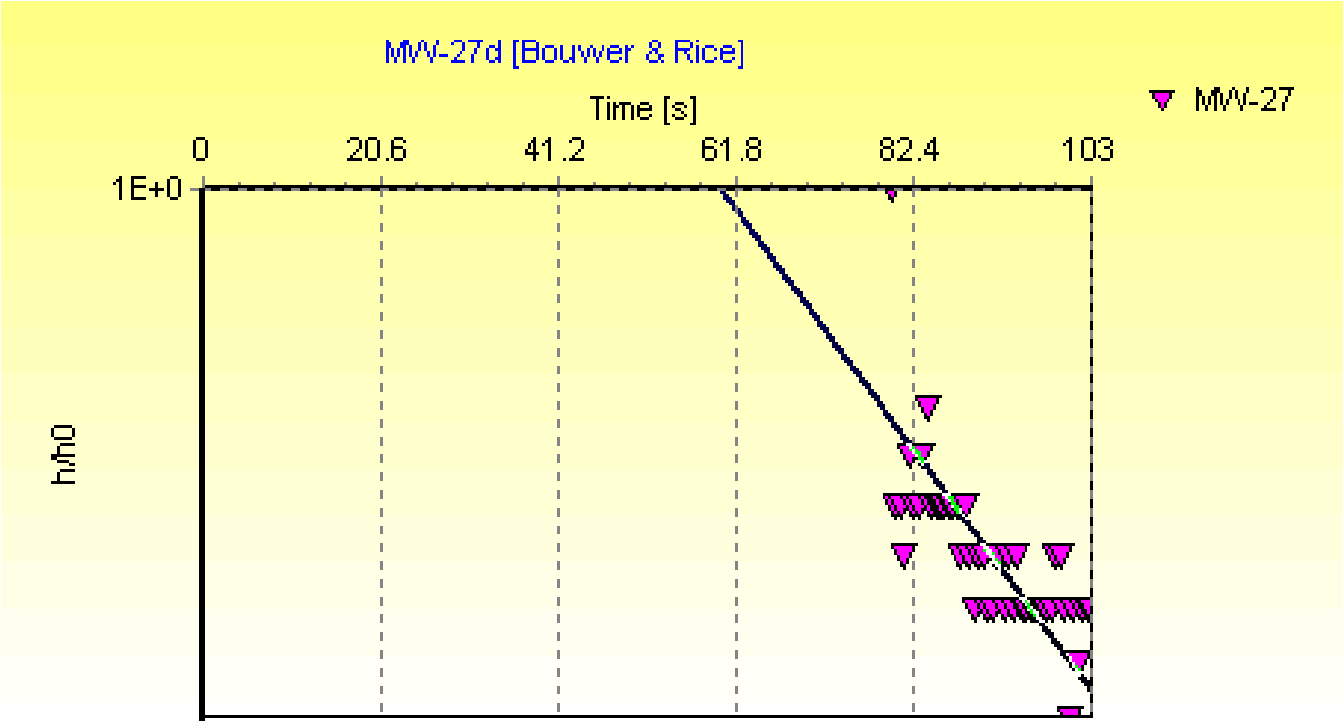
Test MW-27d

Input



	Time [s]	Depth to WL	Change in W
1	80	-65.37436	0.12436
2	80.5	-65.35204	0.10204
3	81	-65.35204	0.10204
4	81.5	-65.34885	0.09885
5	82	-65.35523	0.10523
6	82.5	-65.35204	0.10204
7	83	-65.35204	0.10204
8	83.5	-65.35523	0.10523
9	84	-65.35842	0.10842
10	84.5	-65.35204	0.10204
11	85	-65.35204	0.10204
12	85.5	-65.35204	0.10204
13	86	-65.35204	0.10204
14	86.5	-65.35204	0.10204
15	87	-65.35204	0.10204
16	87.5	-65.35204	0.10204

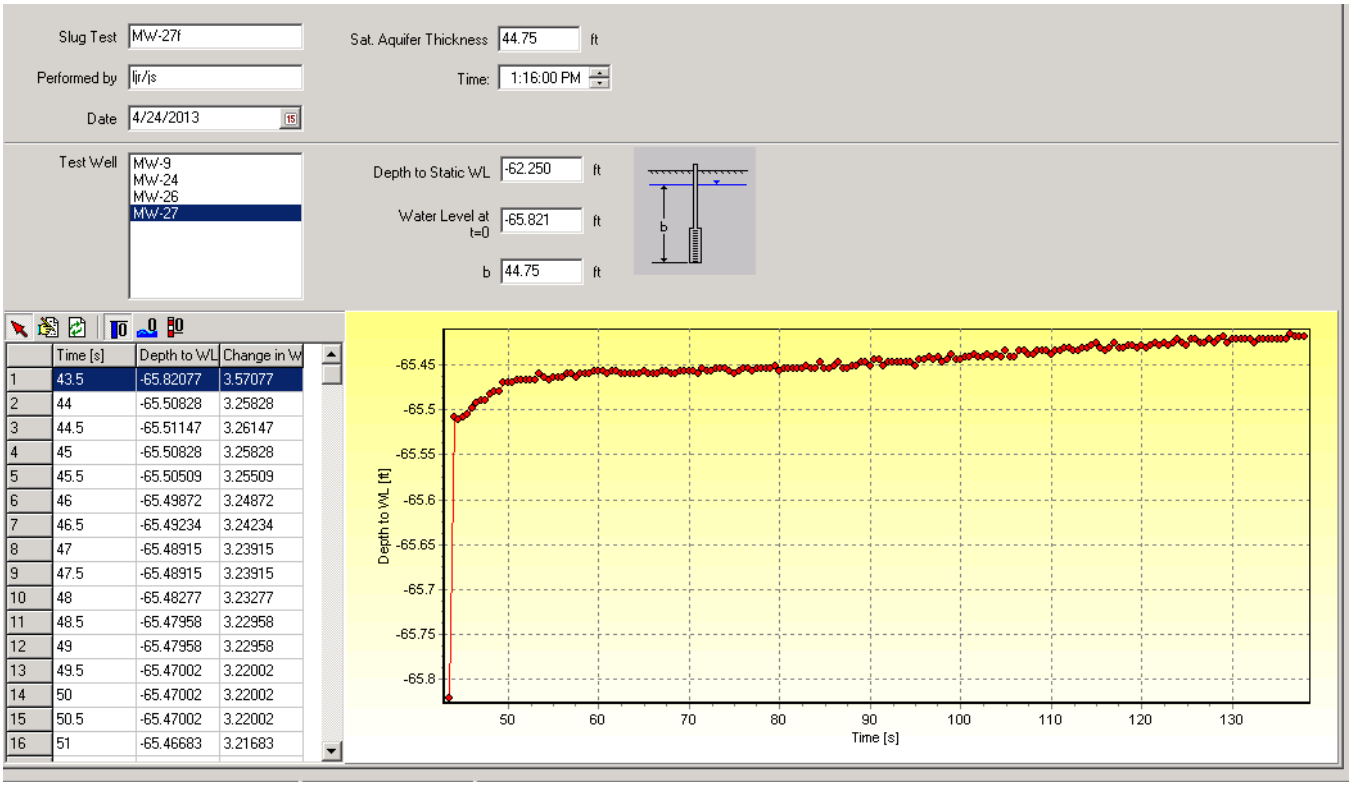
Output



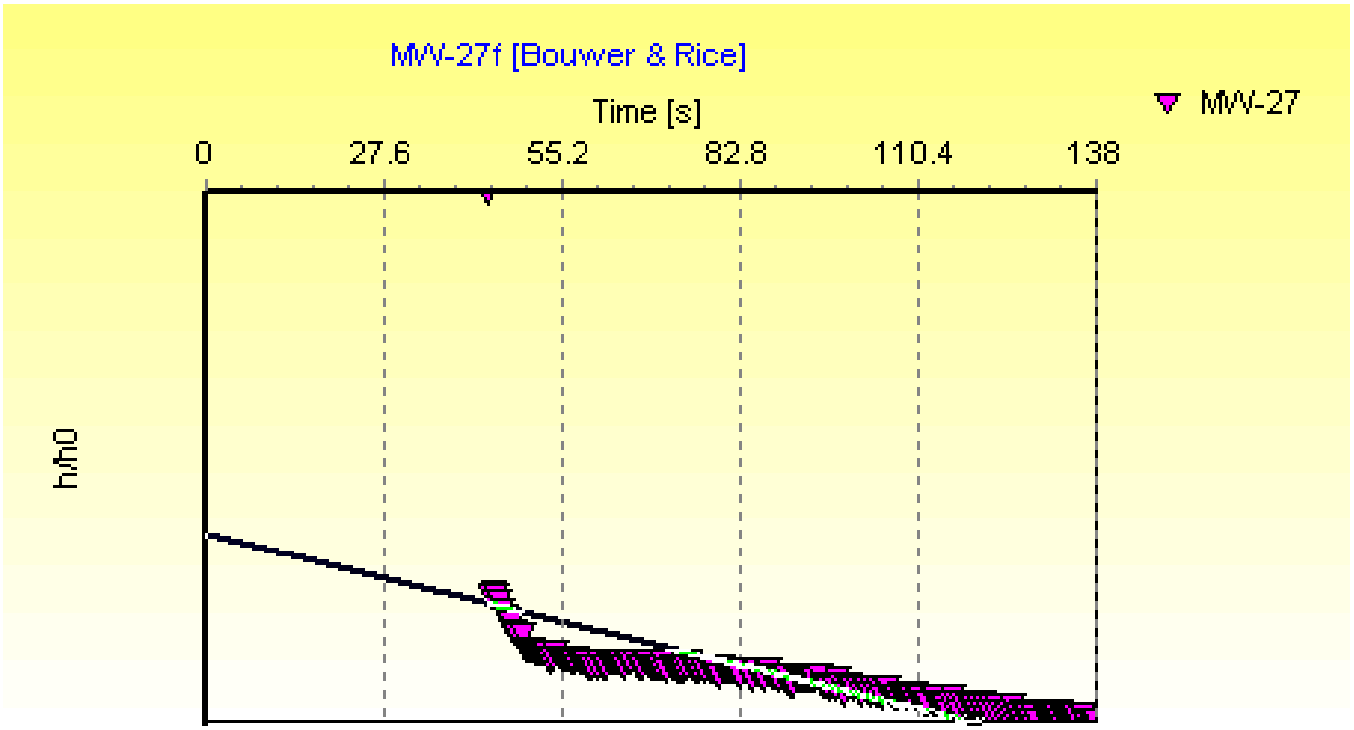
Conductivity: 3.15E-4 cm/s

Test MW-27f

Input



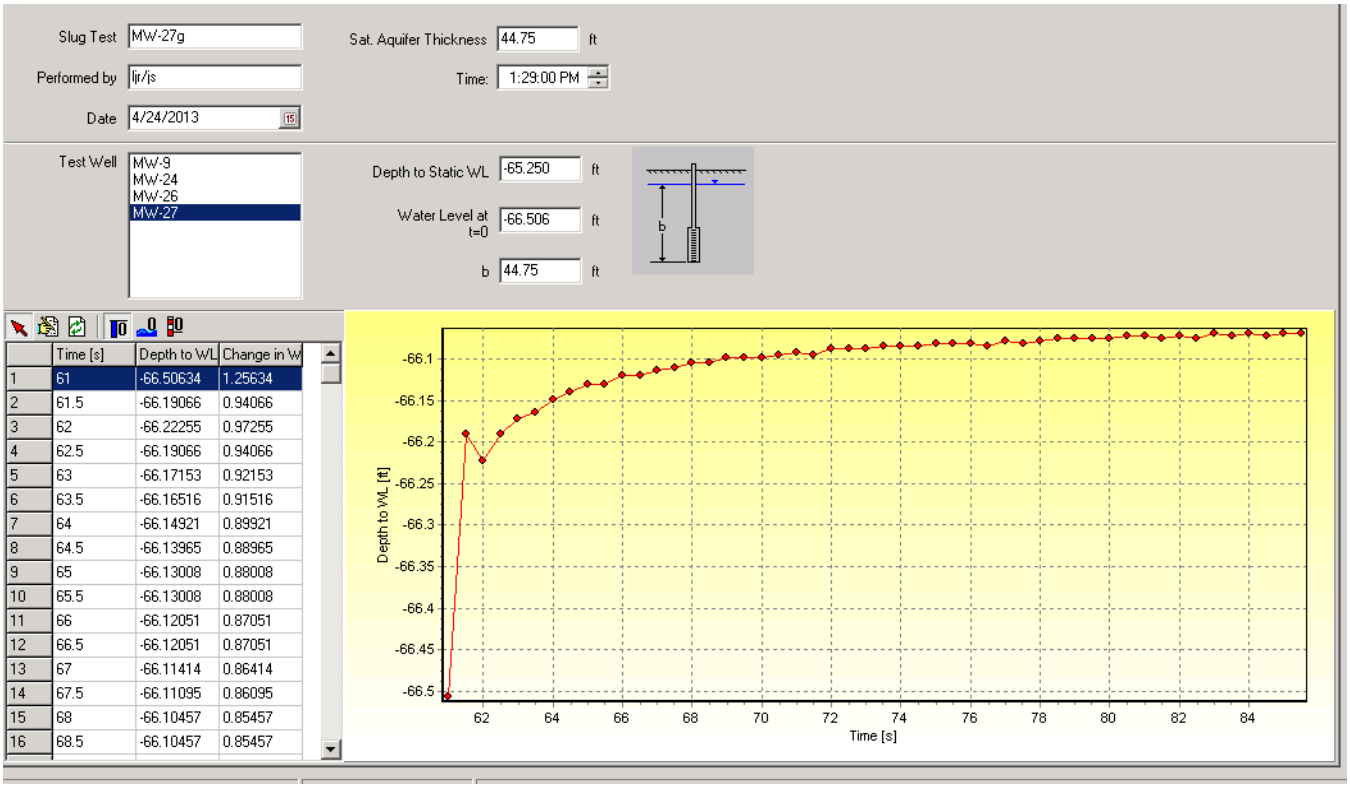
Output



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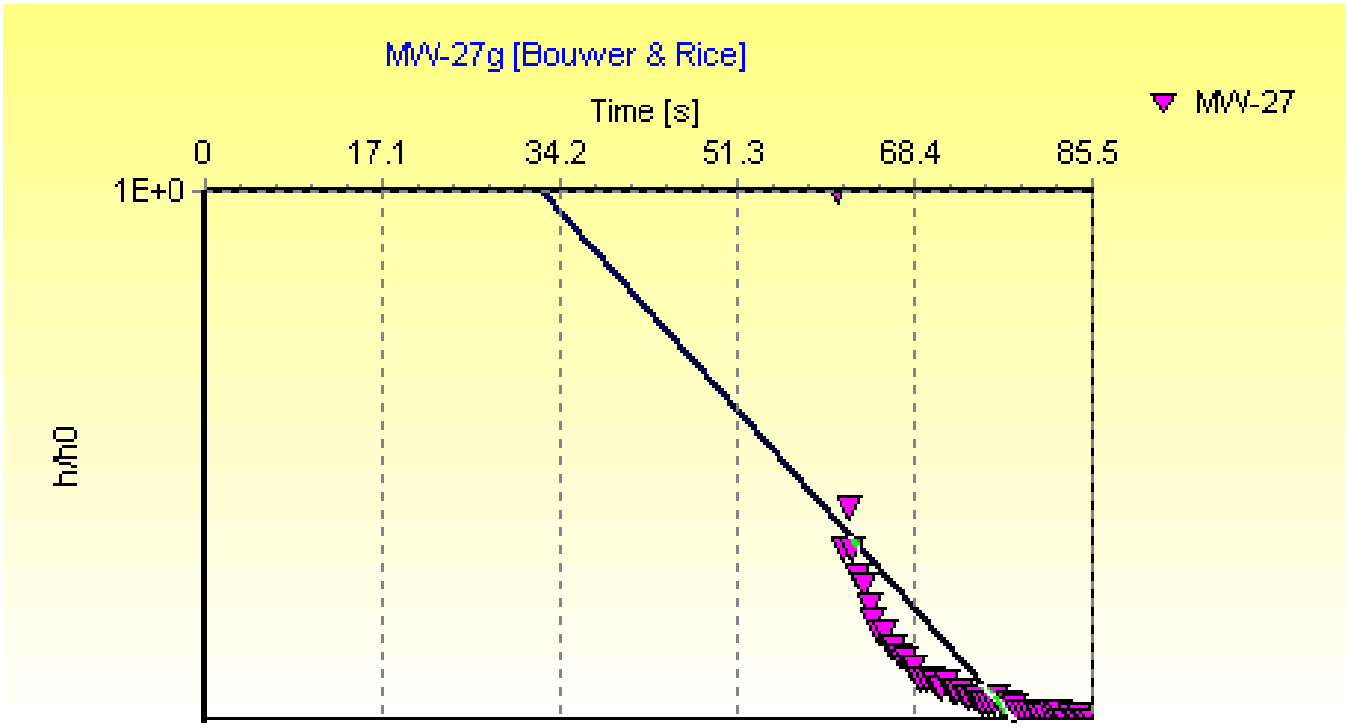
Test MW-27g

Input



	Time [s]	Depth to WL	Change in W
1	61	-66.50634	1.25634
2	61.5	-66.19066	0.94066
3	62	-66.22255	0.97255
4	62.5	-66.19066	0.94066
5	63	-66.17153	0.92153
6	63.5	-66.16516	0.91516
7	64	-66.14921	0.89921
8	64.5	-66.13965	0.88965
9	65	-66.13008	0.88008
10	65.5	-66.13008	0.88008
11	66	-66.12051	0.87051
12	66.5	-66.12051	0.87051
13	67	-66.11414	0.86414
14	67.5	-66.11095	0.86095
15	68	-66.10457	0.85457
16	68.5	-66.10457	0.85457

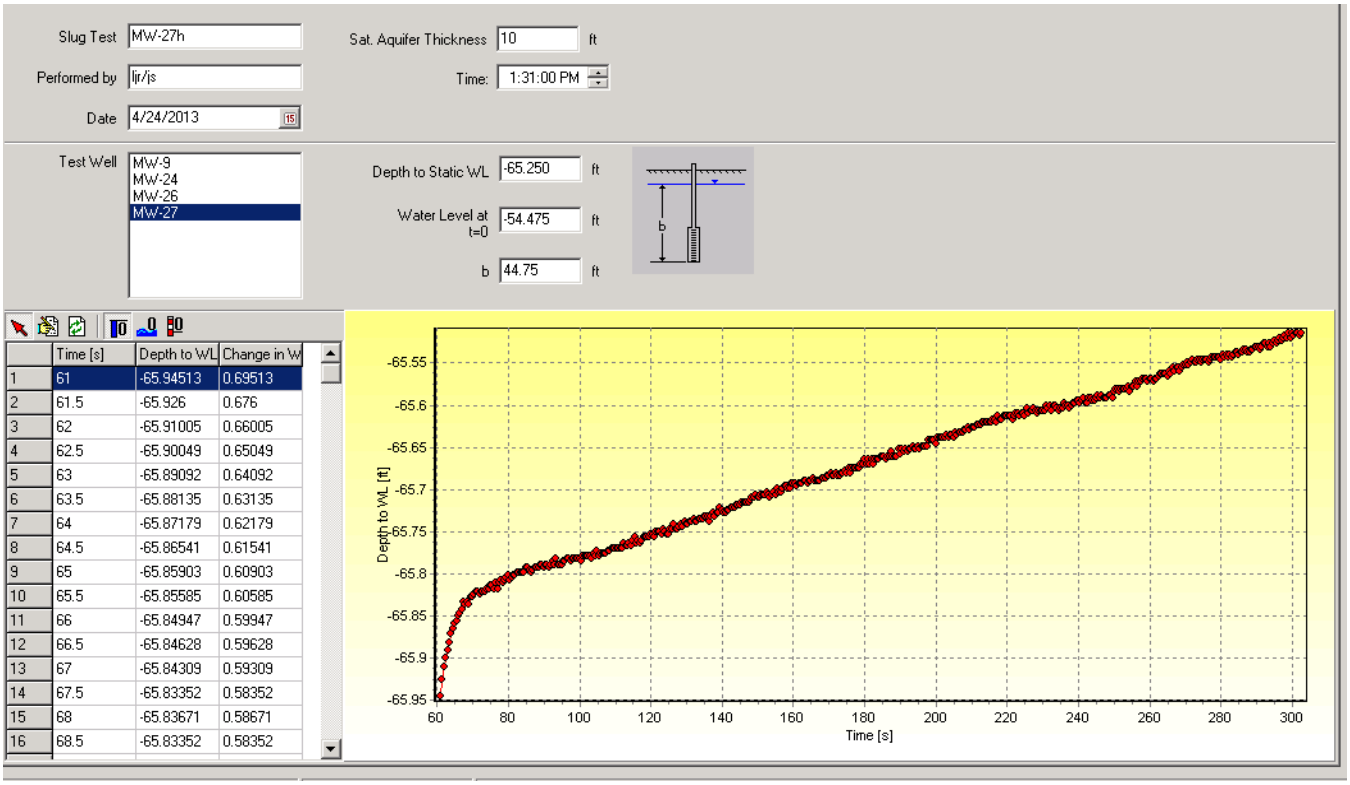
Output



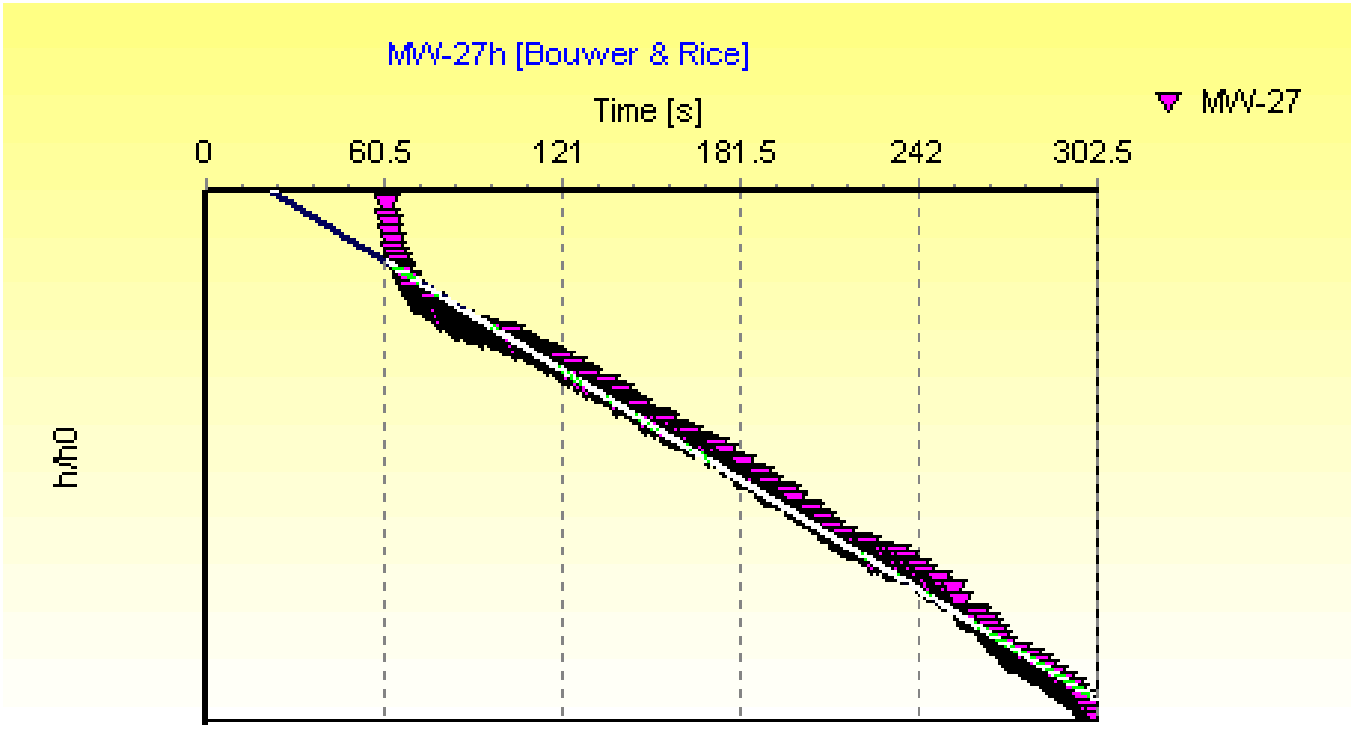
Conductivity: 4.06E-4 cm/s

Test MW-27h

Input



Output



Conductivity: 1.42E-4 cm/s

APPENDIX K: SIREM LABORATORY *TREATABILITY STUDY REPORT*, JUNE 2013

Prepared for:

Watermark Environmental, Inc.
175 Cabot Street
Lowell, MA 01854

Draft

Treatability Study Report

Column Study to Evaluate Remediation of Chlorinated Solvents in Groundwater Using Zero Valent Iron

Scotia Naval Depot Project, Glenville, NY

Prepared by:

130 Research Lane, Suite 2
Guelph, Ontario N1G 5G3

SiREM Ref: TL0362

7 June 2013

siremlab.com

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LIST OF ABBREVIATIONS

cVOC	chlorinated volatile organic compound
°C	degrees Celsius
cm	centimeters
°F	degrees Fahrenheit
ft	feet
DHG	dissolved hydrocarbon gases
GC	gas chromatograph
g	grams
half life	$t_{½}$
IC	ion chromatograph
ICP-AES	inductively coupled plasma – atomic emission spectroscopy
MCLs	maximum contaminant levels
µg/L	micrograms per liter
µL	microliters
mg/L	milligrams per liter
mL	milliliters
min	minute
mm	millimeters
millimolar	mM
ORP	oxidation reduction potential
%	per cent
PRB	permeable reactive barrier
RPM	revolutions per minute
QL	quantitation limit
r^2	coefficient of determination
SiREM	SiREM Laboratories
GeoSierra	GeoSierra Environmental, Inc.
ZVI	zero valent iron
1,1-DCE	1,1-dichloroethene
cDCE	cis-1,2-dichloroethene
PCE	tetrachloroethene
TCE	trichloroethene
VC	vinyl chloride

1 Introduction

SiREM Laboratory (SiREM) was retained by Watermark Environmental, Inc. (Watermark) to perform a laboratory bench scale treatability column study. The study was conducted to compare the performance of two commercial zero valent iron (ZVI) products for a potential permeable reactive barrier (PRB) application for the remediation of chlorinated volatile organic compounds (cVOCs), namely tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cDCE) and vinyl chloride (VC) in groundwater at the Scotia Naval Depot Project site in Glenville, NY (the Site).

The remainder of this report contains:

- study objectives and scope of work (Section 2);
- experimental methods (Section 3);
- cVOC results and discussion including calculation of cVOC degradation half-lives (Section 4);
- estimation of residence time required for ZVI PRB design (Section 5);
- discussion of inorganic chemistry changes during the column study (Section 6);
- study conclusions (Section 7); and
- report references (Section 8).

2 Objectives and Scope of Work

The objectives and scope of work completed to satisfy the project objectives are provided in this section.

2.1 Objectives

The primary objectives of the laboratory ZVI column test were to:

- Determine degradation rates for the main compounds of potential concern (i.e., PCE, TCE, cDCE and VC) in site groundwater with two commercial granular ZVI products under flowing water conditions;
- Characterize chlorinated breakdown products of cVOCs detected in the site water and quantify the rates of degradation; and
- Evaluate changes in inorganic geochemistry caused by ZVI corrosion chemistry, including possible mineral precipitation.

2.2 Scope of Work

Two ZVI column tests were set up and performed using 100 per cent (%) granular ZVI and site groundwater containing cVOCs. Between 18 and 20 March 20, 2013, the granular ZVI materials were packed into the columns with care. The column and ZVI materials specifications are provided in Table 1. A schematic of the column is provided in Figure 1.

The groundwater for this study was collected by Stone Environmental personnel from the site and was received by SiREM on 5 March 2013. The initial site water cVOC concentrations in the site water were below the target concentrations. Based on recommendations from Watermark, the groundwater was spiked with PCE, TCE, cDCE and VC to target concentrations of 50 micrograms per liter (µg/L), 750 µg/L, 10 µg/L, and 5 µg/L respectively. On 25 March 2013 (Day 0) the site groundwater was transferred into the influent reservoir with care taken to minimize volatile losses to the extent practicable and the pump was started to feed the water from the influent reservoir vertically upward through the column for a period of seven weeks. A flow velocity of about 1.6 feet/day was selected in consultation with Watermark to allow the test to be completed in a reasonable time.

Water samples were collected from seven sampling ports located along the column length as well as from the column influent and effluent for analysis of pH, oxidation-reduction potential (ORP), cVOCs, dissolved hydrocarbon gases (DHGs), cations, anions and alkalinity according to the schedule presented in Table 2.

The cVOC concentration trends from the column test were used to calculate the degradation rates for each compound detected using a multicomponent first-order kinetic model. The degradation rates obtained, expressed as half-lives, were used to calculate the residence time required in the field to achieve the regulatory criteria for all compounds. Finally, the column water chemistry data were used to assess the potential effects of water chemistry on the long-term reactivity of ZVI under site conditions.

3 Test Methods and Materials

This section describes the methods used to construct and operate the ZVI columns, and to collect water samples for analysis during the ZVI column treatability study.

3.1 Column Construction

The column test consisted of two columns containing 100% granular ZVI materials obtained form Connelly GPM of Chicago, IL (source CC-1190) and Peerless Metal Powders of Detroit, MI (source 14D). Both commercial ZVI sources have been used for numerous ZVI PRB applications (Gillham et al., 2010). Based on the manufacturer's specifications, the granular ZVI materials used in the column test have a particle size range from 0.15 to 1.7 millimeters (mm; 12 to 100 US Mesh)

The columns were constructed of Plexiglas™ with a length of 1.64 feet (ft) (50 centimeters [cm]) and an internal diameter of 0.12 ft (1.5 inches, 3.8 cm) (Figure 1). Seven sampling ports were positioned vertically along the central axis of the column at distances of 0.08, 0.16, 0.33, 0.50, 0.66, 1.0 and 1.3 ft from the influent end. The column influent and effluent ports were also sampled. All sampling ports within the column (excluding influent and effluent) were constructed using a nylon Swagelok compression fitting tapped into the column. A 16 gauge needle was positioned through the fitting and secured by tightening the ferrule. Glass wool was threaded through the needle to ensure minimal particulates from entering the samples. Each sample port was then fitted with a Luer-Lock™ fitting so that a glass syringe could be attached to the port for collection of water samples.

The ZVI materials were mixed with a highly viscous food grade guar gum-based gel carrier used in ZVI placement with vertical hydrofracturing. The proprietary procedure for ZVI gel preparation provided by GeoSierra was followed. After preparation the gel-ZVI mixtures was immediately placed into each column and was allowed to sit overnight to allow the gel to break and the ZVI to settle out. Each column was filled with two gel batches to ensure the ZVI material filled at least 75% of the column. The remainder was filled with the appropriate dry ZVI material. The ZVI gel preparation and column construction was conducted at SiREM. The columns were transported to the University of Waterloo for operation, sampling and analysis under temperature controlled conditions at 12 degrees Celsius (^{o}C).

Values of bulk density, porosity, and pore volume were determined by weight and are provided in Table 1. The column experiment was performed at temperature of 12°C to simulate field groundwater temperature.

A Masterflex® peristaltic pump was used to feed site water vertically through the column. The pump tubing consisted of Viton® 2-stop tubing. All other tubing was 1/16 inch inside diameter Teflon® tubing.

3.2 Site Groundwater Storage and Usage

Twelve 1-gallon (4 Liter) bottles were received by SiREM personnel and stored in cold storage (4°C) until study commencement. A Chain of Custody for the water received from the site is provided in Appendix A. Site water was siphoned into the influent reservoir (i.e., a Tedlar® bag) with minimal headspace. The influent reservoir contained two Swagelok fittings with Teflon® septa. This allowed for sampling, as required, while minimizing cVOC losses during the test.

3.3 Sampling Procedure

After removing the stagnant water from the sampling needles, 4.0 milliliter (mL) samples were collected from the sampling ports using glass on glass syringes. A 1 mL water sample was removed from the glass syringe and transferred immediately into an autosampler vial for GC analysis of cVOCs/DHGs. The remaining 3 mL sample was transferred into a 5 mL plastic vial for ORP and pH measurement. When anion sample collection was required a 0.5 mL sample was transferred to 1.5 mL eppendorf tubes, which were stored frozen until time of analysis.

Water samples for cation and alkalinity analyses were collected from the column influent and effluent only. For cations, a 50 mL unfiltered sample was collected directly into a 100 mL bottle and acidified to a pH of 2 with nitric acid. For alkalinity a 100 mL unfiltered sample was collected directly into a 110 mL bottle and left unpreserved.

Water samples for cation and alkalinity analyses were placed in coolers with ice packs and shipped under chain of custody to Maxxam Analytics laboratory in Mississauga, Ontario for analysis.

3.4 Analytical Methods

This section describes the methods of analysis for pH, ORP, cVOCs, DHGs, cations, anions and alkalinity.

3.4.1 Analysis of ORP and pH

The ORP measurements were performed at using an Orion 250A meter with double junction ORP electrode (Ag/AgCl reference). A 2.5 mL sample was collected and the ORP probe was inserted into the sample vial on the lab bench. A single point calibration of the meter was performed at each sampling event with Zobell ORP calibration solution according to the manufacturer's instructions.

The pH measurements were performed using an Orion 250A meter with an Orion combination pH electrode. Immediately after ORP measurement the pH probe was inserted into the same sample vial on the lab bench for pH measurement. The pH meter was calibrated at the beginning of each sampling session using pH 4.0, 7.0 and 10 standards that were changed daily.

3.4.2 Analysis of cVOCs and Dissolved Hydrocarbon Gases

For VC and DCE isomers, a headspace is created in the aqueous samples with a ratio of 16 mL headspace to 4.0 mL aqueous sample. The samples are placed on a rotary shaker for 15 minutes to allow equilibration between the water phase and gas phase. For analysis, the sample is placed on a CombiPal autosampler. A 1mL sample is then injected onto an Agilent 7890 gas chromatograph (GC) equipped with an ECD detector and an Agilent 5975C triple axis Mass Spectrometer operating in EI mode. The column is an RTX-1ms capillary column (30m x 0.25mm ID x 1um). The GC has an initial temperature of 50°C, with a temperature program of 15°C/min reaching a final temperature of 150°C and then is held at 150°C for 1 minute. The MS ion source is 230°C while the MS quad is set for 150°C and the injector temperature is 200°C. The carrier gas is ultra-pure helium with a flow rate of 32 mL/min. The split ratio is 20:1 for the injector.

For PCE and TCE analysis a 2.0 mL sample was removed and added to 2 mL of internal standard solution (500 ug/L of 1,2-Dibromoethane in pentane) in a 5mL glass screw cap vial with Teflon-faced septum. The sample was placed on an orbital shaker for 15 minutes at 300 RPM. The supernatant was then removed, placed in a 2 mL glass crimp-top GC vial and put on a Hewlett Packard 5890 Series II gas chromatograph equipped with a Ni^{63} ECD detector. Using a HP 7673 liquid auto sampler a 1uL sample was injected onto a DB-624 capillary column. The detector temperature was 300°C, injection temperature was 200°C and the column temperature ramp is 50°C to 150°C at a rate of 15°C/min and then held for 1 min. The carrier gas is pre-purified helium with a total flow rate of 25 mL/min and the make-up gas is 5% methane, 95% argon.

For DHGs, a headspace is created in the aqueous samples with a ratio of 2.5 mL headspace to 2.5 mL aqueous sample. The samples are placed on a rotary shaker for 15 minutes to allow equilibration between the water phase and gas phase. For analysis, a 250uL sample is then injected onto a Hewlett Packard 5790 gas chromatograph (GC) equipped with an Flame ionization detector (FID) using an GS-Q plot capillary column. The GC has an initial temperature of 60°C, which is held for 3 minutes; the temperature is then increased at a rate of 15°C/min reaching a final temperature of 120°C and then is held at 125°C for 10 minutes. The detector is set for 280°C and the injector temperature is 200°C. The carrier gas is ultra-pure nitrogen with a flow rate of 20 mL/min.

The method detection limits (MDL) for the cVOCs and DHGs are shown below.

Organic Compound	MDL (ug/L)
Vinyl Chloride (VC)	0.8
1,1-Dichloroethene (11DCE)	1.3
trans-1,2-Dichloroethene (tDCE)	1.0
cis-1,2-Dichloroethene (cDCE)	1.1
Trichloroethene (TCE)	0.9
Tetrachloroethene (PCE)	0.8
Methane	0.9
Ethene	1.1
Ethane	1.1
Propene	1.3
Propane	1.0

3.4.3 Analysis of Major Anions

For anion (chloride, nitrate-nitrogen [nitrate], nitrite-nitrogen [nitrite], phosphate and sulfate) analyses, a 2.0 mL sample was removed and added to a plastic 5 mL Dionex IC autosampler vial. The sample is then place on a Dionex AS-40 autosampler. A 25 uL sample was then injected onto a Dionex ICS-2000 Ion Chromatograph equipped with an Ion-Eluent Generator and conductivity detector. A Dionex IonPac AS18 column (4x250mm) was used. The mobile phase used was 30mM KOH at a flow rate of 1.0 mL/min. The chromatograph was obtained on a Dell p4-3GHz computer using Dionex Chromeleon 6.5 software.

3.4.4 Analysis of Cations and Alkalinity

Water sample cation analyses (e.g., Fe, Na, Mg, Ca, K, Mn, etc.) were performed by Maxxam Analytics Inc. of Mississauga, Ontario using inductively coupled plasma atomic emission spectroscopy (ICP-AES) (US EPA Method 200.7). Carbonate alkalinity (expressed as milligrams $CaCO_3$ per liter) in water was determined by automated colorimetry (US EPA Method 210.2).

4 cVOC Results, Reaction Pathways and Degradation Parameters

This section discusses the observed water cVOC concentration trends. The column data are then quantified in terms of anticipated cVOC degradation pathways and kinetic rates.

4.1 cVOC Results

At a nominal flow velocity of 1.6 ft/day, approximately 43.1 pore volumes (PVs) and 47.5 PVs passed through the Connelly and Peerless columns respectively during the test. One pore volume corresponded to a residence time of approximately 1 day in both columns. Complete water sample cVOC concentration data for the Connelly and Peerless ZVI columns are provided in Tables 3 and 4 respectively. Analytical results for the cVOC compounds (PCE, TCE, cDCE and VC) as well as dechlorination products (ethene and ethane) from the last sampling event are presented in Figures 2 and 3.

At the end of the test, the influent PCE concentration of 74 µg/L was degraded to a non-detectable level within a residence time of 1.32 hours (hrs) in the Connelly column (Figure 2). Influent TCE concentration of 712 µg/L decreased to non-detectable levels within a residence time of 5.43 hrs. Approximately 10 ug/L of cDCE was degraded to non-detectable levels within 2.63 hrs and 6.9 µg/L of VC was degraded to non-detectable levels within 1.32 hrs. As a result of complete dechlorination of PCE, TCE, cDCE and VC, approximately 10 µg/L of ethene and 218 µg/L of ethane were created in the Connelly column effluent.

In the Peerless column, PCE and TCE influent concentrations decreased to non-detectable values in the column effluent at a residence time of 4.95 and 7.35 hrs, respectively (Figure 3). For cDCE and VC, concentration levels reached non-detect at 14.69 and 7.35 hrs, respectively. As a result of complete dechlorination of PCE, TCE, cDCE and VC, 46 µg/L of ethene and 144 µg/L of ethane were created in the Peerless column effluent.

4.2 cVOC Reaction Pathways and Kinetic Expressions

Two dominant pathways of degradation of chlorinated hydrocarbon compounds by ZVI include hydrogenolysis and reductive β-elimination (Gillham et al., 2010). In the hydrogenolysis reaction, a chlorine atom is replaced by a hydrogen atom, accompanied by the addition of two electrons (from the iron). Reductive β-elimination involves release of two chlorine atoms and the formation of an additional carbon-carbon bond. Both pathways are thought to occur simultaneously (Arnold and Roberts, 2000). Figure 4 illustrates those pathways for the chlorinated ethene sequence starting from PCE, through TCE, DCE-isomers, VC and finally ethene and ethane. Both of the chlorinated acetylenes are highly unstable and degrade rapidly, primarily through reductive dechlorination to acetylene (Arnold and Roberts, 2000). Another ZVI-mediated transformation mechanism, hydrogenation, involves the addition of two hydrogen atoms across two carbon atoms with the removal of a C-C bond (e.g., reduction of acetylene to ethane, and ethene to ethane as shown in Figure 3).

Based on previous research, the VOC degradation in contact with ZVI appears to be first-order with respect to the concentration of the contaminant (pseudo first-order) (Gillham et al., 2010):

$$\frac{\partial C}{\partial t} = -kt \tag{1}$$

After integration, the equation can be presented in the form of the exponential decay equation:

$$C = C_0 e^{-kt} \tag{2}$$

Where: C is the concentration in solution at a particular time (t),
C_o is the initial concentration, and
k is the first-order rate constant.

The rate constant (k) is a measure of the reaction rate and can be calculated directly from Equation 2. The time at which the initial concentration declines by one-half, (C/C_o = 0.5), is the half-life ($t_{1/2}$).

$$t_{1/2} = \frac{\ln(2)}{k} \tag{3}$$

4.3 Determination of Degradation Parameters from Column Data

Due to the complexity of the ZVI-induced dechlorination mechanisms (Figure 4), the laboratory data were interpreted using a multi-component kinetic model to quantify degradation rates of compounds that are present in the water initially, as well as potential degradation products. In the model, potential breakdown products are concurrently produced and degraded as described by first-order kinetic equations. Each pathway is characterized by a rate constant (k) and the mole fraction of the compound that follows that particular path (f). Since chlorinated acetylenes are unstable, short-lived, intermediates are rapidly reduced to ethene (Arnold and Roberts, 2000). These compounds are not typically detected in the solution phase and are therefore not explicitly contained in the degradation model. Therefore, first-order rate equations for each VOC included in the model are as follows:

$$\frac{\partial PCE}{\partial t} = -k_{PCE} PCE \tag{4}$$

$$\frac{\partial TCE}{\partial t} = f_{PCE1} k_{PCE} PCE - k_{TCE} TCE \tag{5}$$

$$\frac{\partial cDCE}{\partial t} = f_{PCE2} k_{PCE} PCE + f_{TCE1} k_{TCE} TCE - k_{cDCE} cDCE \tag{6}$$

$$\frac{\partial VC}{\partial t} = f_{PCE3} k_{PCE} PCE + f_{TCE2} k_{TCE} TCE + f_{cDCE} k_{cDCE} cDCE - k_{VC} VC \tag{7}$$

These equations were adapted for the computer program Scientist® Version 3.0 (Micromath Research, 2008). The program can be used to fit the first-order equations to experimental data using the least squares best-fit method. The degradation rate and molar conversion are determined for each compound sequentially starting with the most chlorinated VOC.

The results from the model fitting of column data include half-lives for all VOCs present and statistical fit data including coefficient of determination (r^2) values. The half-lives determined from the cVOC profiles from the last three sampling events (Weeks 5, 6 and 7) are shown in Tables 5a and 5b, along with the corresponding r^2 values. The degradation model provided good fits to the cVOC concentration profiles in both columns. In general, the half-lives were much lower in the Connelly column compared to the Peerless column. The VOC degradation half-lives values obtained in the Connelly column at 12ºC were at the lower end of the ranges achieved in previous commercial ZVI testing at room temperature for the compounds reported by Gillham et al. (2010).

5 Field Scale PRB Design Considerations

The laboratory half-lives were obtained at a temperature of 12°C (54°F) which approximates the minimum field temperature at the site. Therefore, those degradation half-lives were used in the field residence time calculations for the PRB without the need for temperature correction.

The residence time calculations for the field ZVI PRB were performed assuming the initial VOC concentration values in the water used for the bench scale test (Table 6). The Scientist® program described in Section 4.3 was used to simulate the change in VOC concentrations over time using the first-order kinetic equations. In simulation mode, the model calculates the VOC concentrations over time, from which the time required for the VOCs to degrade to their regulatory criteria can be determined.

Based on the simulations performed, the residence time required to achieve Federal drinking water maximum contaminant levels (MCLs) in a PRB at the site is 2 hrs and 4 hrs for using Connelly ZVI and Peerless ZVI, respectively (Table 6). This residence time value does not include any safety factor to account for the potential decrease in ZVI reactivity over time. The required ZVI thickness can be obtained by multiplying the residence time required by the groundwater flow rate anticipated in the location of the proposed PRB.

6 Inorganic Chemistry Results and Discussion

Previous research has shown that the inorganic composition of the treated groundwater can have a profound influence on the reactivity of commercial granular ZVI materials. Most of these effects are related to long-term performance. Therefore, evaluation of changes in inorganic chemistry along the flow path through the ZVI column is a crucial component of design considerations for a ZVI PRB.

6.1 Column Data

Samples from the column influent and effluent were collected at baseline and the end of the test. The water sample inorganic chemical concentration data for the column influent and effluent are summarized in Tables 7, 8 and 9. Laboratory reports of analysis for the cations and alkalinity are compiled in Appendix B.

When iron is exposed to water, several reactions occur as a result of iron corrosion:

$$Fe^{\circ} \rightarrow Fe^{2+} + 2e^{-} \quad (8)$$

This iron corrosion drives the geochemical changes that occur as groundwater flows through the PRB. When groundwater first contacts the granular iron, any dissolved oxygen present is consumed via iron corrosion:

$$4Fe^{\circ} + 3O_{2(aq)} + 12H^{+} \rightarrow 4Fe^{3+} + 6H_2O \quad (9)$$

After the initial, rapid depletion of any dissolved oxygen and other oxidizers (e.g., nitrate which was not present in the site water), the water corrosion of iron dominates to produce hydrogen and hydroxide resulting in an increase in pH and decline in Eh:

$$Fe^{\circ} + 2H_2O \rightarrow Fe^{2+} + H_{2(aq)} + 2OH^{-} \quad (10)$$

The ORP and pH profiles within the columns are presented in Tables 7 and 8, and Figures 5 and 6. At the end of the test, the ORP in both columns decreased from an influent value of approximately +300 millivolts (mV) to below -500 mV and -700 mV in the Connelly and Peerless columns, respectively. The pH increased from an influent value of approximately 7.5 to 9.0 within both columns. Creation of reducing and alkaline conditions is the expected effect of ZVI corrosion chemistry shown in Eq. 10.

The influent calcium concentration of approximately 65 mg/L decreased to 15 mg/L and 14 mg/L in the Connelly and Peerless columns, respectively (Table 9). Typically, calcium concentration decreases within the ZVI zone as a result of calcium carbonate precipitation under an increased pH (Eq. 11). The influent alkalinity concentration of 200 mg/L decreased to 11 mg/L and 48 mg/L in the Connelly and Peerless columns, respectively. Based on the ratio of Ca and akalinity consumed with respect to the stoichiometry of Eq. 11, iron carbonate was also created (E.q. 12).

Aragonite/Calcite: $Ca^{2+} + CO_3^{2-} \rightarrow CaCO_{3(s)}$ (11)

Siderite: $Fe^{2+} + CO_3^{2-} \rightarrow FeCO_{3(s)}$ (12)

Potassium, sodium and chloride behave as conservative tracers in iron systems and, as expected, their concentrations remained essentially unchanged within the column (Tables 8 and 9). Total iron was detected at 1.8 mg/L in the initial baseline characterization of site water provided, but it decreased to below 0.5 mg/L in the influent reservoir. Dissolved iron was not detected in the effluents of both columns at the endpoint of the test. The oxidized iron generated by the reaction illustrated in Eq. 10 was likely consumed by precipitation of iron (oxy) hydroxides which is a standard trend observed in packed ZVI systems.

The concentration of sulfate of approximately 26 mg/L the influent remained unchanged along column lengths within the test period. However, declines in sulfate concentrations have been observed at a number of field sites as groundwater passes through the ZVI PRBs.

Silicon was present in the column influent at a concentration of 4.3 mg/L which decreased to 0.19 mg/L and 0.51 mg/L in the Connelly and Peerless columns, respectively. Silica (SiO_3^{2-}) is thought to precipitate or adsorb on ZVI surfaces leading to the formation of a silica film or gel on the ZVI surface that may hinder contaminant access to active sites (Klausen et al., 2003).

6.2 Possible Mineral Precipitates and Their Effect

Iron corrosion reactions (Equations 8-10) promote the reductive dechlorination reactions, but at the same time are sources of ferrous iron and alkalinity. Because no dissolved iron was detected in the column effluents, iron (oxy) hydroxides are expected to form throughout a PRB. However, because these hydroxides ultimately transform to magnetite, which is electron-conducting, they do not substantially reduce the reactivity of the iron and the rate of formation is not expected to cause a significant decline in permeability (Gillham et al., 2010).

Based on the observed levels of calcium and carbonate in site groundwater, carbonate precipitation on ZVI grains is expected to be the main process influencing the ZVI longevity in PRB at the site. While there is little doubt that inorganic precipitates (mostly iron oxyhydroxides and carbonates) will form over time in a ZVI PRB at the site, their impact will be proportional to the groundwater velocity. In other words, it is anticipated that a ZVI PRB designed based on the cVOC degradation rates from this column test, including a reasonable safety factor, would be able to last for a long time without the need for rehabilitation.

7 Summary and Conclusions

Bench-scale column treatability testing using site water indicated that:

i) Connelly and Peerless ZVI products degraded the cVOCs present in the site water. Connelly ZVI showed significantly better degradation kinetics compared to Peerless ZVI. The degradation half-lives generated in the Connelly ZVI column were better than those reported in literature for this ZVI source (Gillham et al., 2010) and other groundwaters with comparable cVOC composition.

ii) Based on the obtained half-lives at field groundwater temperature (12ºC) and the cVOC concentrations tested, a residence time of 2 hrs and 4 hrs would be required in a Connelly ZVI and Peerless ZVI PRB, respectively to achieve the Federal MCL target levels.

iii) Although the total dissolved solids in the site groundwater are relatively low, formation of mineral precipitation such as carbonates is expected to affect the long-term performance of the PRB. Therefore, it is recommended that an engineering safety factor be included in ZVI volume design calculations for the proposed PRB to assure long-term efficiency.

8 References

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TABLES

TABLE 1
COLUMN AND ZVI MATERIALS SPECIFICATIONS
Scotia Naval Depot Project, Glenville, NY

Parameter	Connelly GPM	Peerless Metal Powders
ZVI Type	CC-1190	14D Type B
ZVI Size Range	US Mesh 12 to 100 (0.15 - 1.7 millimeters)	
ZVI Content	100 percent	
ZVI Dry Weight (g)	1663.6	1454
Column Length	1.64 feet (50 centimeters)	
Column Inside Diameter	0.12 feet (3.8 centimeters)	
Measured Pore Volume (mL)	248.3	234.6
Volume of Column	567 centimeter cubed	
Porosity	0.438	0.414
Bulk Density (g/cm^3)	2.934	2.564
ZVI:Solution Ratio	6.700	6.198
Average Flow Rate	1.6 feet per day	
Average Residence Time	24 hours	

Notes:

ZVI - zero valent iron

g - grams

mL - milliliters

g/cm^3 - grams per centimeter cubed

TABLE 2
ZVI COLUMN SAMPLING SCHEDULE
Scotia Naval Depot Project, Glenville, NY

Event		Baseline (Week 0)						Weekly (7 events)			Weeks 2, 5, 7 only	Week 7 only	
Sample Location		pH, ORP	cVOCs	DHGs	Anions	Cations	Alkalinity	pH, ORP	cVOCs	DHGs	Anions	Cations	Alkalinity
Column Influent		●	●	●	●	●	●	●	●	●	●	●	●
Sampling Ports	A							●	●	●	●		
	B							●	●	●	●		
	C							●	●	●	●		
	D							●	●	●	●		
	E							●	●	●	●		
	F							●	●	●	●		
	G							●	●	●	●		
Column Effluent								●	●	●	●	●	●

Notes:

ZVI - zero valent iron

ORP - oxidation-reduction potential

cVOCs - chlorinated volatile organic compounds

DHGs - dissolved hydrocarbon gases

● indicates sample collected

TABLE 3
WATER SAMPLE cVOC AND DHG RESULTS FOR CONNELLY ZVI COLUMN
Scotia Naval Depot Project, Glenville, NY

Sample Location		Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port G	Effluent
Column Distance (feet)		**0.00**	**0.08**	**0.16**	**0.33**	**0.49**	**0.66**	**0.98**	**1.31**	**1.64**
Residence Time (hours)		**0.00**	**1.32**	**2.63**	**5.43**	**8.07**	**10.86**	**16.13**	**21.56**	**27.0**
Compound	PV	Concentration (µg/L)								
PCE	Baseline	<0.84	--	--	--	--	--	--	--	--
	7.5	103	1.3	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
	12.6	96	2.2	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
	18.2	87	2.4	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
	23.3	79	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
	30.1	81	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
	36.6	85	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
	43.1	74	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
TCE	Baseline	50	--	--	--	--	--	--	--	--
	7.5	832.0	34.0	4.6	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
	12.6	784.0	5.5	4.1	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
	18.2	755.0	2.6	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
	23.3	700.0	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
	30.1	699.0	9.5	2.7	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
	36.6	701.0	5.6	1.9	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
	43.1	711.5	4.3	1.1	<0.89	<0.89	<0.89	<0.89	<0.89	<0.89
cis-1,2-DCE	Baseline	5.0	--	--	--	--	--	--	--	--
	7.5	14.9	4.2	1.3	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
	12.6	15.5	3.9	4.6	3.9	<1.1	<1.1	<1.1	<1.1	<1.1
	18.2	9.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
	23.3	11.2	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
	30.1	10.8	1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
	36.6	10.0	1.4	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
	43.1	10.1	1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
VC	Baseline	<0.96	--	--	--	--	--	--	--	--
	7.5	9.1	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	12.6	10.3	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	18.2	8.8	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	23.3	8.6	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	30.1	8.5	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	36.6	8.3	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	43.1	6.9	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
Ethene	Baseline	<1.3	--	--	--	--	--	--	--	--
	7.5	<1.3	109.0	95.4	92.0	84.7	47.8	67.3	46.3	55.5
	12.6	<1.3	67.0	32.8	15.0	18.3	22.9	31.8	38.3	46.4
	18.2	<1.3	49.9	46.2	30.9	12.0	16.2	13.2	14.1	16.1
	23.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	9.5	11.5	13.0
	30.1	<1.3	10.1	<1.3	<1.3	14.1	<1.3	9.1	10.5	12.4
	36.6	<1.3	10.9	<1.3	<1.3	<1.3	<1.3	<1.3	10.1	9.9
	43.1	<1.3	13.0	<1.3	10.7	<1.3	<1.3	<1.3	9.2	10.4

TABLE 3
WATER SAMPLE cVOC AND DHG RESULTS FOR CONNELLY ZVI COLUMN
Scotia Naval Depot Project, Glenville, NY

Sample Location		Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port G	Effluent
Column Distance (feet)		**0.00**	**0.08**	**0.16**	**0.33**	**0.49**	**0.66**	**0.98**	**1.31**	**1.64**
Residence Time (hours)		**0.00**	**1.32**	**2.63**	**5.43**	**8.07**	**10.86**	**16.13**	**21.56**	**27.0**
Compound	PV	Concentration (µg/L)								
Ethane	Baseline	<0.98	--	--	--	--	--	--	--	--
	7.5	<0.98	42.9	56.6	73.3	74.1	43.6	72.9	52.6	53.6
	12.6	<0.98	208	265	244	252	292	285	253	224
	18.2	<0.98	199	226	220	201	224	198	200	203
	23.3	<0.98	131	136	113	159	165	186	207	197
	30.1	<0.98	161	142	166	196	182	190	193	189
	36.6	<0.98	162	167	166	221	194	198	198	193
	43.1	<0.98	148	146	186	197	203	214	197	218
Methane	Baseline	<1.1	--	--	--	--	--	--	--	--
	7.5	<1.1	4.1	5.2	7.6	11.7	7.1	18.2	18.4	26.6
	12.6	<1.1	5.4	12	11	14	19	27	33	36
	18.2	<1.1	6.8	10	10	12	12	13	18	22
	23.3	<1.1	6.6	7.7	9.2	12	13	18	23	24
	30.1	<1.1	6.9	6.5	9.2	12	13	13	17	21
	36.6	<1.1	6.5	6.1	8.6	13	12	14	19	16
	43.1	<1.1	6.0	6.5	9.2	15	13	16	17	21

Notes:

PV - pore volumes

µg/L - micrograms per liter

< - compound not detected, the associated value is the quantitation limit

NA - sample not collected or not available

PCE - tetrachloroethene

TCE - trichloroethene

cDCE - cis-1,2-dichloroethene

VC - vinyl chloride

TABLE 4
WATER SAMPLE cVOC AND DHG RESULTS FOR PEERLESS ZVI COLUMN
Scotia Naval Depot Project, Glenville, NY

Sample Location		Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port G	Effluent
Column Distance (feet)		**0.00**	**0.08**	**0.16**	**0.33**	**0.49**	**0.66**	**0.98**	**1.31**	**1.64**
Residence Time (hours)		**0.00**	**1.20**	**2.40**	**4.95**	**7.35**	**9.90**	**14.69**	**19.64**	**24.6**
Compound	PV	Concentration (µg/L)								
PCE	Baseline	<0.84	--	--	--	--	--	--	--	--
	7.9	91	11	4.8	1.4	1.2	1.1	1.0	<0.84	<0.84
	13.8	96	31	14	4.0	2.7	2.0	<0.84	<0.84	<0.84
	21.1	89	31	17	5.9	3.4	2.4	1.9	<0.84	<0.84
	25.9	76	16	8.8	3.6	<0.84	<0.84	<0.84	<0.84	<0.84
	33.4	83	31	18	5.5	3.7	3.1	2.8	<0.84	<0.84
	40.5	85	27	18	5.5	2.4	1.1	<0.84	<0.84	<0.84
	47.5	77	20	8.5	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
TCE	Baseline	50	--	--	--	--	--	--	--	--
	7.9	832	403	294	124	90	55	17	7.4	<0.89
	13.8	784	349	201	89	60	41	16	9.7	4.8
	21.1	757	233	136	56	29	19	9.6	5.1	10
	25.9	638	55	29	13	6.7	4.4	2.1	1.7	1.1
	33.4	711	154	79	17	8.8	6.2	4.1	3.6	3.3
	40.5	701	95	72	14	4.9	2.5	<0.89	<0.89	<0.89
	47.5	741	129	63	5.6	<0.89	<0.89	<0.89	<0.89	<0.89
cis-1,2-DCE	Baseline	5	--	--	--	--	--	--	--	--
	7.9	16	11	8.9	5.3	<1.1	<1.1	<1.1	<1.1	<1.1
	13.8	17	23	22	19	17	15	10	7.9	6.1
	21.1	10	14	13	10	7.8	6.0	4.2	3.1	2.1
	25.9	11	6.5	4.4	3.1	1.3	1.4	<1.1	<1.1	<1.1
	33.4	11	13	11	7.4	5.1	3.9	2.9	<1.1	<1.1
	40.5	11	13	9.5	6.4	4.7	3.5	2.4	1.9	1.9
	47.5	10	9.3	7.2	4.9	2.7	1.5	<1.1	<1.1	<1.1
VC	Baseline	<0.96	--	--	--	--	--	--	--	--
	7.9	11	4.2	1.3	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	13.8	11	5.6	4.1	3.1	2.7	2.4	1.7	1.6	1.5
	21.1	9.4	5.1	4.4	3.7	3.4	3.2	3.0	3.0	2.9
	25.9	9.1	2.1	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	33.4	6.9	2.0	1.4	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	40.5	8.3	5.9	2.8	<0.96	<0.96	<0.96	<0.96	<0.96	<0.96
	47.5	6.5	2.1	1.8	1.6	<0.96	<0.96	<0.96	<0.96	<0.96
Ethene	Baseline	<1.3	--	--	--	--	--	--	--	--
	7.9	<1.3	34	54	77	77	45	75	59	53
	13.8	<1.3	93	96	157	131	143	97	125	122
	21.1	<1.3	77	60	130	130	99	98	110	101
	25.9	<1.3	29	39	55	50	62	61	61	68
	33.4	<1.3	67	74	65	60	64	51	47	53
	40.5	<1.3	66	74	66	56	62	49	52	54
	47.5	<1.3	52	64	61	65	61	48	38	46

TABLE 4
WATER SAMPLE cVOC AND DHG RESULTS FOR PEERLESS ZVI COLUMN
Scotia Naval Depot Project, Glenville, NY

Sample Location		Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port G	Effluent
Column Distance (feet)		**0.00**	**0.08**	**0.16**	**0.33**	**0.49**	**0.66**	**0.98**	**1.31**	**1.64**
Residence Time (hours)		**0.00**	**1.20**	**2.40**	**4.95**	**7.35**	**9.90**	**14.69**	**19.64**	**24.6**
Compound	PV	Concentration (µg/L)								
Ethane	Baseline	<0.98	--	--	--	--	--	--	--	--
	7.9	<0.98	11	17	27	29	17	31	25	21
	13.8	<0.98	38.8	42	85	78	93	71	90	84
	21.1	<0.98	70	116	121	140	159	161	159	141
	25.9	<0.98	84	143	115	126	158	147	136	118
	33.4	<0.98	52	63	93	85	94	116	117	141
	40.5	<0.98	51	69	83	84	120	120	133	155
	47.5	<0.98	42	63	81	106	128	124	103	144
Methane	Baseline	<1.1	--	--	--	--	--	--	--	--
	7.9	<1.1	7.7	13	26	27	16	27	28	28
	13.8	<1.1	15	17	44	41	45	39	53	51
	21.1	<1.1	16	19	37	42	40	41	46	45
	25.9	<1.1	17	21	24	30	38	41	45	39
	33.4	<1.1	13	13	21	17	19	26	28	36
	40.5	<1.1	11	13	15	15	21	21	27	35
	47.5	<1.1	9	12	13	16	21	21	19	29

Notes:

PV - pore volumes

µg/L - micrograms per liter

< - compound not detected, the associated value is the quantitation limit

NA - sample not collected or not available

PCE - tetrachloroethene

TCE - trichloroethene

cDCE - cis-1,2-dichloroethene

VC - vinyl chloride

TABLE 5a
CALCULATED cVOC HALF-LIFE VALUES FOR CONNELLY ZVI COLUMN
Scotia Naval Depot Project, Glenville, NY

Compound	Pore Volume	Influent Concentration (µg/L)	Half-life[a] (hours)	Molar Conversion	r^2
Tetrachloroethene	30.7	81	0.16	--	0.999
	37.3	85	0.16		0.999
	43.9	74	0.16		0.999
Trichoroethene	30.7	699	0.19	0%	0.999
	37.3	701	0.17		0.999
	43.9	712	0.16		0.999
cis 1,2-Dichloroethene	30.7	10.8	0.38	0%	0.998
	37.3	10.0	0.38		0.984
	43.9	10.1	0.41		0.988
Vinyl Chloride	30.7	8.5	0.31	--	0.995
	37.3	8.3	0.31		0.995
	43.9	6.9	0.22		0.993

Notes:

nd - compound not detected

NA - not available because the compound was not detected in the column influent and within the column

-- not applicable

TABLE 5b
CALCULATED cVOC HALF-LIFE VALUES FOR PEERLESS ZVI COLUMN
Scotia Naval Depot Project, Glenville, NY

Compound	Pore Volume	Influent Concentration (µg/L)	Half-life[a] (hours)	Molar Conversion	r^2
Tetrachloroethene	33.0	83	0.91	–	0.985
	40.1	85	0.81		0.980
	47.1	77	0.61		0.996
Trichoroethene	33.0	711	0.54	0%	0.993
	40.1	701	0.41		0.990
	47.1	741	0.46		0.996
cis 1,2-Dichloroethene	33.0	11	3.9	1%	0.987
	40.1	11	3.9		0.974
	47.1	10	2.8		0.935
Vinyl Chloride	33.0	7.0	0.68	--	0.996
	40.1	8.0	1.7		0.976
	47.1	7.0	1.1		0.800

Notes:

nd - compound not detected

NA - not available because the compound was not detected in the column influent and within the column

-- not applicable

TABLE 6
RESIDENCE TIME CALCULATIONS FOR PRB DESIGN
Scotia Naval Depot Project, Glenville, NY

Compound	Anticipated Influent Concentration[a] (µg/L)	Target Level [b] (µg/L)	Connelly ZVI		Peerless	
			Field Anticipated Half-lives [c] (hrs)	Design Residence Time (hrs)	Field Anticipated Half-lives [c] (hrs)	Design Residence Time (hrs)
Tetrachloroethene	100	5	0.16	2	0.61	4
Trichloroethene	800	5	0.16		0.46	
cis-1,2-Dichloroethene	10	70	0.41		2.8	
Vinyl Chloride	10	2	0.22		1.1	

Notes:

µg/L - micrograms per liter

< - not detected, associated value is quantitation limit

[a] Baseline cVOC concentrations in column test water

[b] US EPA Federal Drinking Water Maximum Contaminant Levels (MCLs) assumed

[c] Laboratory values at end of the test

TABLE 7
WATER SAMPLE ORP, pH RESULTS AND ANION RESULTS FOR CONNELLY ZVI COLUMN

Scotia Naval Depot Project, Glenville, NY

Sample Location		Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port G	Effluent
Column Distance (feet)		**0.00**	**0.08**	**0.16**	**0.33**	**0.49**	**0.66**	**0.98**	**1.31**	**1.64**
Residence Time (hours)		**0.00**	**1.32**	**2.63**	**5.43**	**8.07**	**10.86**	**16.13**	**21.56**	**27.0**
Analyte	PV	Instrument Readings								
pH	8.3	7.4	7.9	8.4	8.8	8.6	8.6	8.5	8.6	8.2
	13.2	7.5	8.1	8.2	8.6	8.8	8.9	8.9	9.3	8.6
	19.1	7.5	8.1	8.3	8.6	8.7	8.8	8.6	8.6	8.3
	26.4	7.5	8.2	8.4	8.6	8.8	8.8	8.9	8.9	9.0
	31.9	7.7	8.4	8.5	9.0	8.9	9.0	9.2	8.9	8.6
	40.3	7.6	8.2	8.7	8.8	9.0	8.9	9.0	9.0	8.7
	46.2	7.5	8.1	8.4	8.7	8.9	8.9	9.1	9.2	9.0
ORP (mV)	8.3	245	56	62	65	74	75	96	143	235
	13.2	159	-26	-76	-82	-57	55	96	392	80
	19.1	260	-48	-125	-57	65	92	175	78	154
	26.4	251	-69	-156	-184	-132	-56	54	56	29
	31.9	299	-131	-111	-149	-81	-17	9	16	60
	40.3	305	-440	-143	-477	-483	-57	20	65	92
	46.2	271	-469	-509	-506	-526	-88	83	68	75
Analyte	PV	Concentration (mg/L)								
Chloride	8.3	26	27	29	29	30	31	34	37	39
	31.9	27	29	27	29	29	30	31	30	31
	40.3	26	27	27	28	28	28	28	29	33
Nitrite-Nitrogen	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	31.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	40.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nitrate-Nitrogen	8.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	31.9	0.1	0.2	0.0	0.1	0.3	1.5	1.2	0.4	0.2
	40.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sulfate	8.3	26	26	28	28	33	36	14	3	3
	31.9	26	26	26	27	27	27	34	45	39
	40.3	27	26	26	26	27	27	33	39	44

Notes:

mV - millivolts

ORP - Oxidation Reduction Potential

PV - pore volumes

mg/L - milligrams per liter

ZVI - zero volent iron

< - not detected, associated value is quantitation limit

TABLE 8
WATER SAMPLE ORP, pH RESULTS AND ANION RESULTS FOR PEERLESS ZVI COLUMN

Scotia Naval Depot Project, Glenville, NY

Sample Location		Influent	Port A	Port B	Port C	Port D	Port E	Port F	Port G	Effluent
Column Distance (feet)		**0.00**	**0.08**	**0.16**	**0.33**	**0.49**	**0.66**	**0.98**	**1.31**	**1.64**
Residence Time (hours)		**0.00**	**1.20**	**2.40**	**4.95**	**7.35**	**9.90**	**14.69**	**19.64**	**24.6**
Analyte	PV	Instrument Readings								
pH	8.9	7.4	7.9	8.3	9.0	8.9	8.9	8.9	9.2	9.1
	14.6	7.4	8.0	8.2	8.6	8.8	8.9	8.9	9.0	9.0
	22.1	7.5	8.2	7.3	8.7	8.7	8.9	8.9	8.7	8.9
	29.2	7.5	8.7	8.7	8.8	8.7	8.8	8.9	8.8	8.9
	35.3	7.6	8.8	8.6	8.9	8.9	9.1	9.1	8.4	9.0
	44.5	7.6	8.5	8.6	8.9	9.0	9.1	9.2	9.3	9.3
	50.7	7.5	8.5	8.7	8.7	8.9	9.0	9.2	9.1	9.0
ORP (mV)	8.9	245	64	36	75	58	41	47	43	141
	14.6	257	-124	-101	-92	-59	-69	-57	100	42
	22.1	269	-150	-118	-147	-124	-103	-110	-59	-40
	29.2	251	-159	-169	-189	-201	-200	-184	-122	-67
	35.3	244	-150	-192	-177	-193	-217	-200	-132	-137
	44.5	205	-414	-359	-444	-418	-440	-460	-458	-305
	50.7	271	-424	-432	-706	-447	-433	-451	-478	-335
Analyte	PV	Concentration (mg/L)								
Chloride	8.9	28	28	27	29	29	29	31	30	32
	35.3	27	30	27	28	27	28	29	28	29
	47.5	26	28	28	27	27	29	28	28	29
Nitrite-Nitrogen	8.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	35.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	47.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nitrate-Nitrogen	8.9	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	35.3	0.1	0.4	0.0	0.0	0.0	0.0	1.7	1.5	0.0
	44.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sulfate	8.9	26	26	25	26	24	24	25	25	28
	35.3	27	27	26	26	25	27	27	27	28
	44.5	26	28	27	26	26	27	27	27	28

Notes:

mV - millivolts

ORP - Oxidation Reduction Potential

PV - pore volumes

mg/L - micrograms per liter

ZVI - zero volent iron

< - not detected, associated value is quantitation limit

TABLE 9
WATER SAMPLE CATION AND ALKALINITY RESULTS
Scotia Naval Depot Project, Glenville, NY

Analyte	RDL (µg/L)	Baseline	Endpoint		
		Influent	Influent	Enfluent Connelly Column	Effluent Peerless Column
Total Aluminum (Al)	5.0	1700	21	6.6	<5.0
Total Antimony (Sb)	0.50	<0.5	<0.5	<0.5	0.5
Total Arsenic (As)	1.0	<1.0	<1.0	<1.0	<1.0
Total Barium (Ba)	2.0	46	26	3.8	22
Total Beryllium (Be)	0.50	<0.5	<0.5	<0.5	<0.5
Total Bismuth (Bi)	1.0	<1.0	<1.0	<1.0	<1.0
Total Boron (B)	10	26	32	2,500	670
Total Cadmium (Cd)	0.10	<0.1	<0.1	1.3	<0.1
Total Calcium (Ca)	200	65,000	64,000	15,000	14,000
Total Chromium (Cr)	5.0	<5.0	<5.0	<5.0	<5.0
Total Cobalt (Co)	0.50	1.0	<0.5	<0.5	<0.5
Total Copper (Cu)	1.0	7.6	1.1	<1.0	<1.0
Total Iron (Fe)	100	1800	<50	<50	<50
Total Lead (Pb)	0.50	27	<0.5	<0.5	<0.5
Total Lithium (Li)	5.0	5.2	6.1	<5	9.5
Total Magnesium (Mg)	50	17,000	18,000	3,300	9,700
Total Manganese (Mn)	2.0	89	48	72	34
Total Molybdenum (Mo)	0.50	1.2	1.2	82	87
Total Nickel (Ni)	1.0	2.0	<1.0	1.7	<1.0
Total Potassium (K)	200	1,900	1,300	1,300	1,500
Total Silicon (Si)	50	7800	4300	190	510
Total Selenium (Se)	2.0	<2.0	<2.0	<2.0	<2.0
Total Silver (Ag)	0.1	<0.1	<0.1	<0.1	<0.1
Total Sodium (Na)	100	19000	20000	20000	20000
Total Strontium (Sr)	1.0	170	150	55	55
Total Tellurium (Te)	1.0	<1.0	<1.0	<1.0	<1.0
Total Thallium (Tl)	0.050	<0.05	<0.05	<0.05	<0.05
Total Tin (Sn)	1.0	<1.0	<1.0	<1.0	<1.0
Total Titanium (Ti)	5.0	72	5.3	<5.0	<5.0
Total Tungsten (W)	1.0	1.9	2.5	<1.0	1.2
Total Uranium (U)	0.10	0.51	0.44	<0.1	<0.1
Total Vanadium (V)	0.50	4.0	<0.5	0.92	<0.5
Total Zinc (Zn)	5.0	7.8	<5	5.3	<5
Total Zirconium (Zr)	1.0	1.4	<1.0	<1.0	<1.0
Alkalinity (as mg/L $CaCO_3$)	1.0	200	190	11	48

Notes:

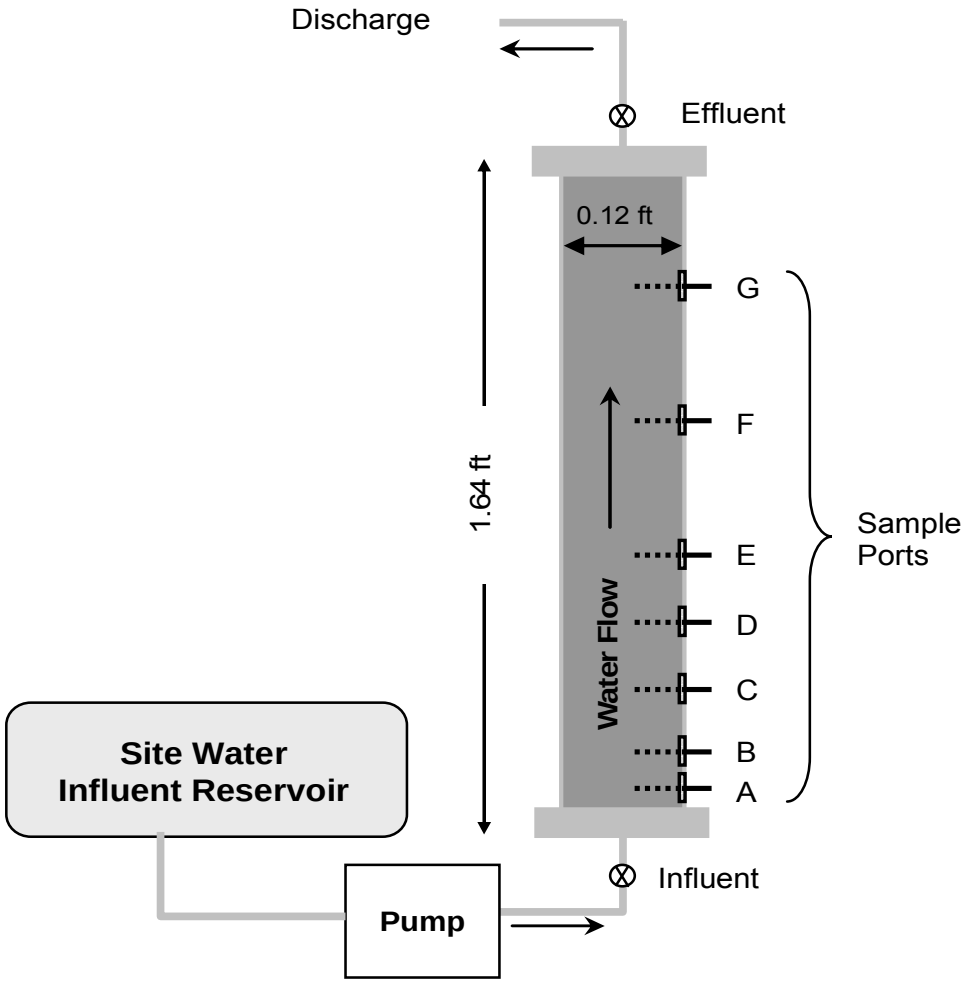
µg/L - micrograms per liter

PVs - pore volumes

RDL - reportable detection limit

< - not detected, associated value is quantitation limit

FIGURES



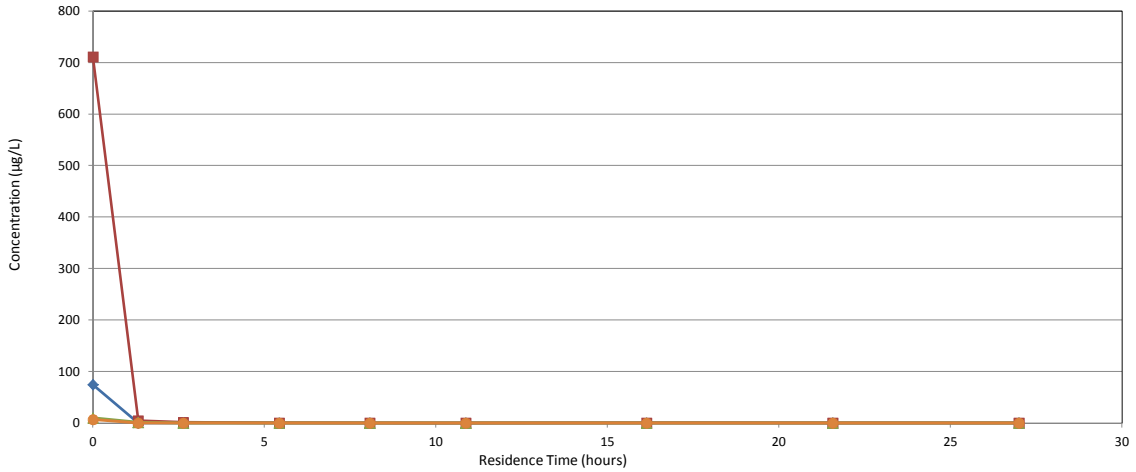
Notes:
ft - feet

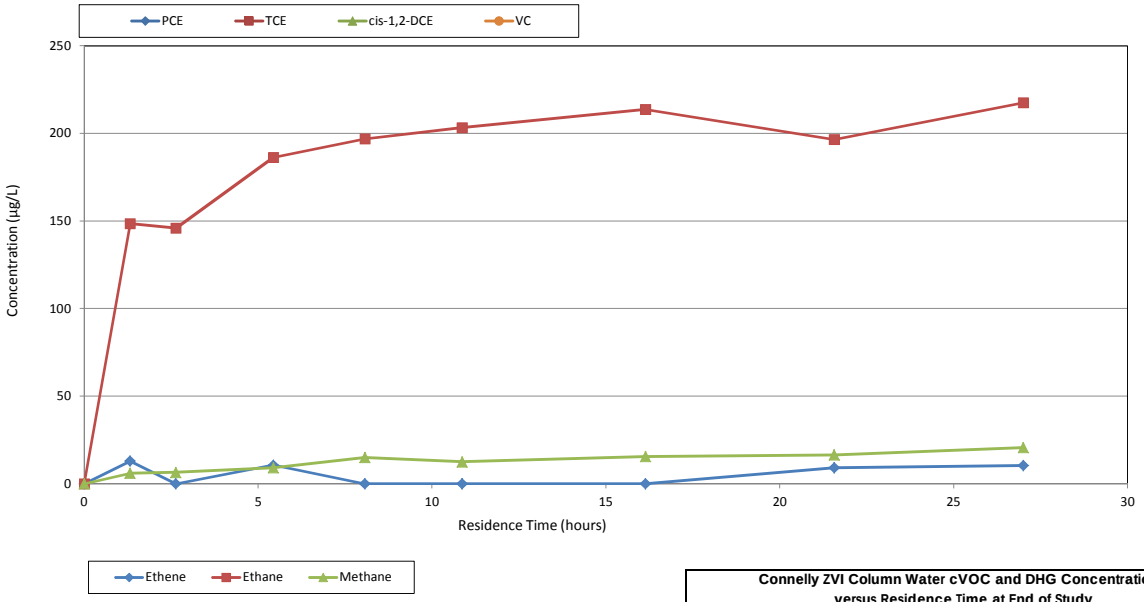
Schematic of Column Test Set Up

SiREM

June 2013

Figure: **1**





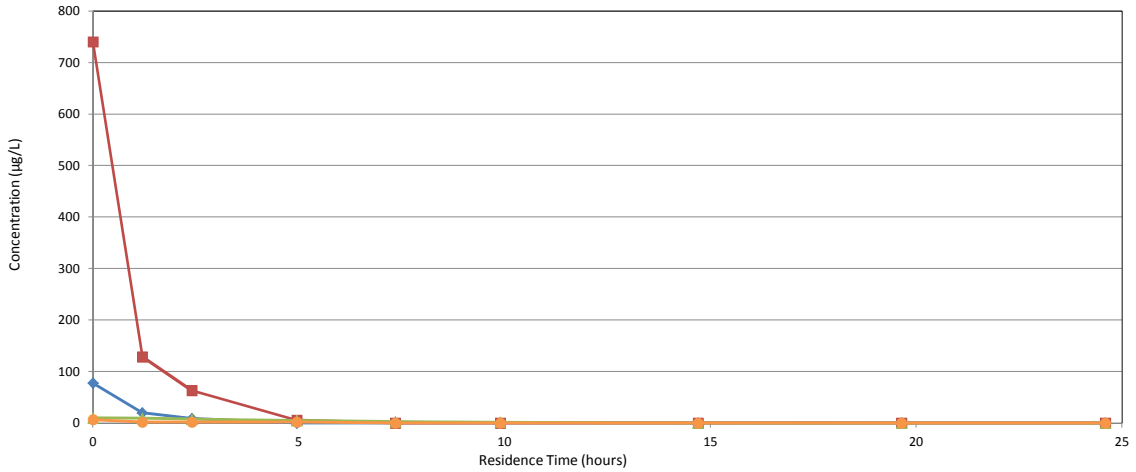
Connelly ZVI Column Water cVOC and DHG Concentrations versus Residence Time at End of Study

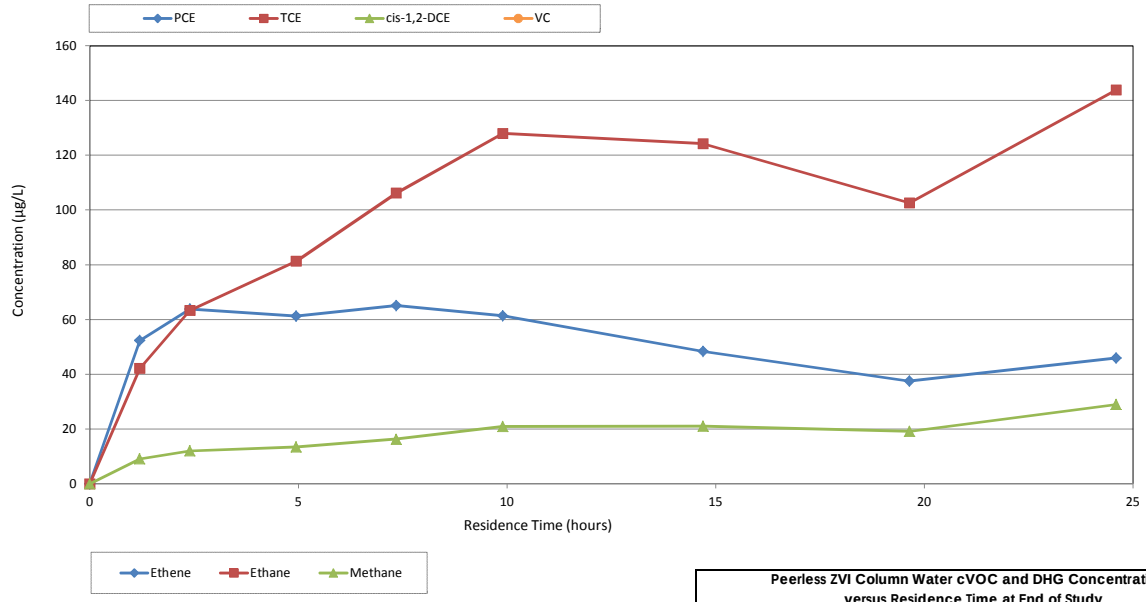
Scotia Naval Depot Project, Glenville, NY

SiREM

June 2013

Figure: **2**





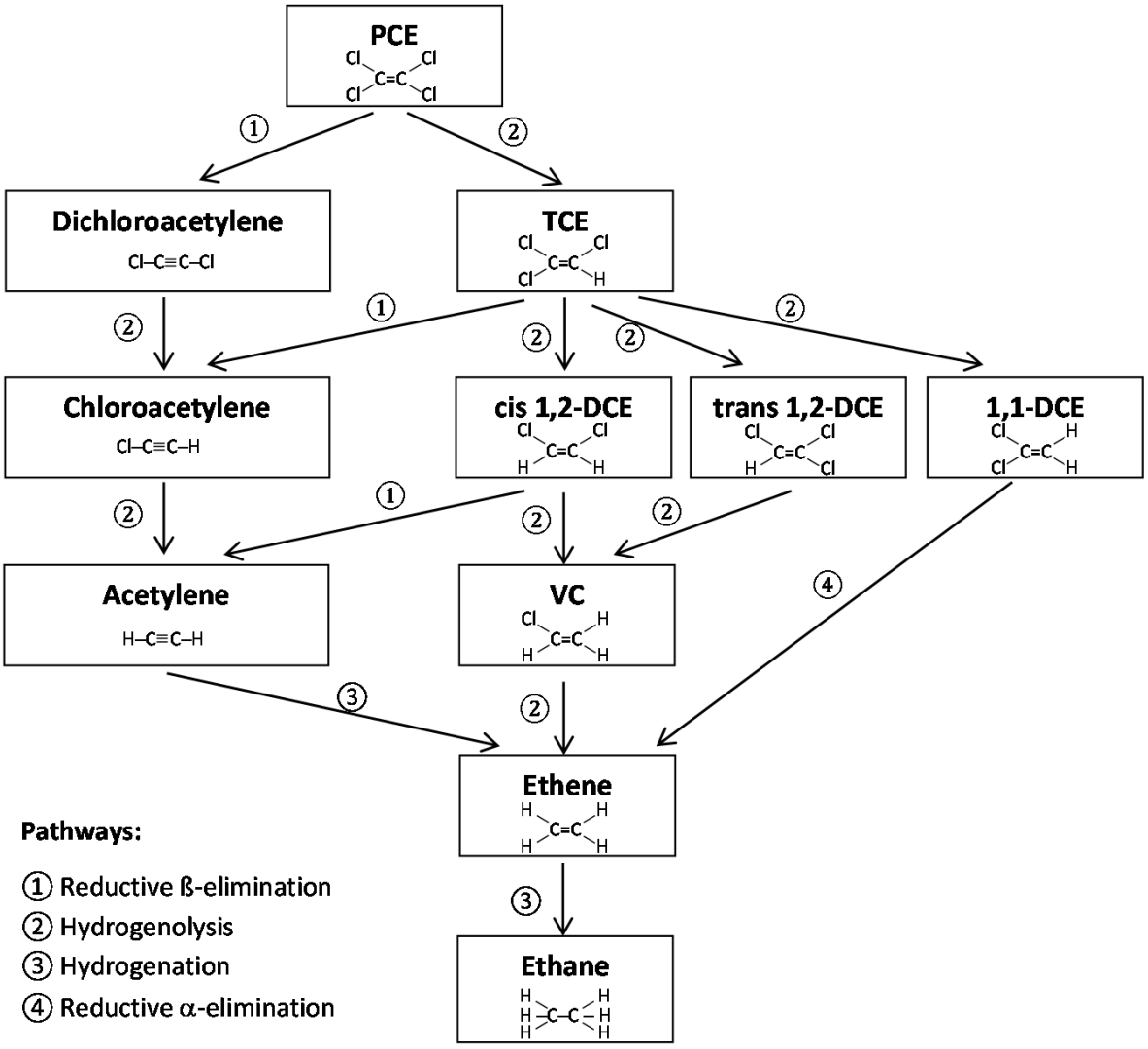
Peerless ZVI Column Water cVOC and DHG Concentrations versus Residence Time at End of Study

Scotia Naval Depot Project, Glenville, NY

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June 2013

Figure: **3**



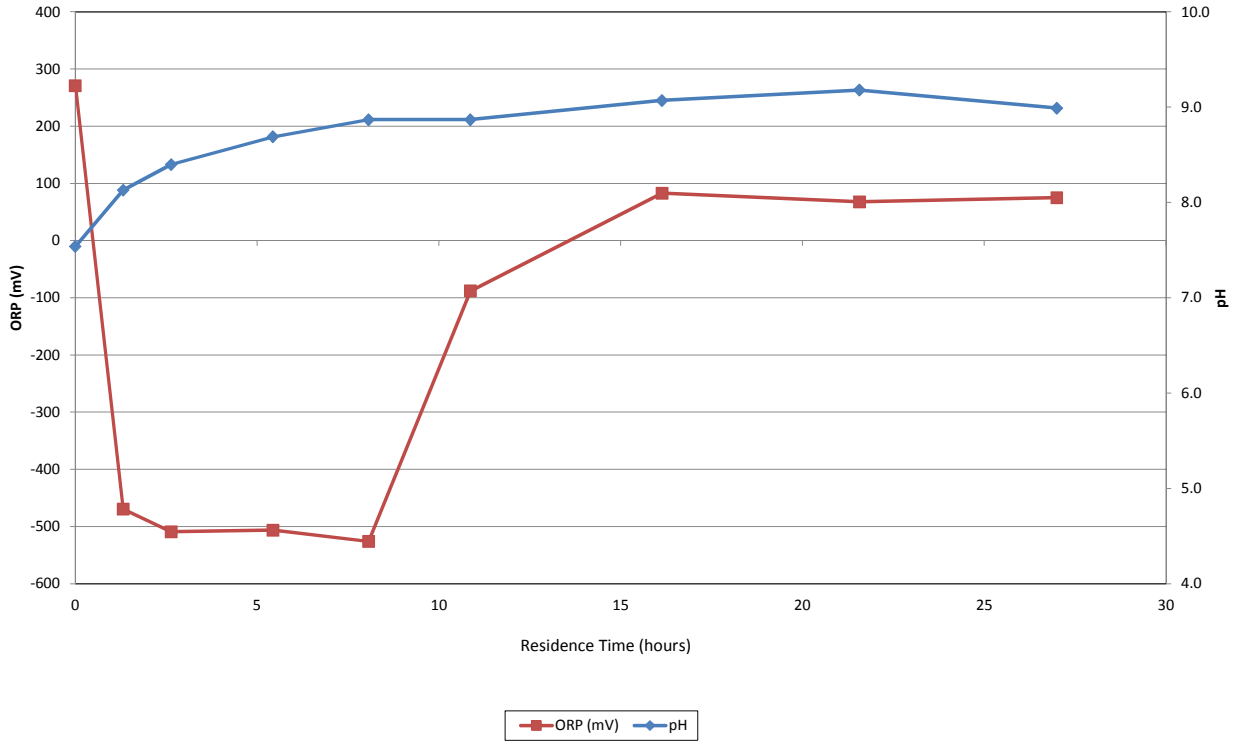
(modified from Arnold and Roberts, 2000)

Chlorinated Ethene Degradation Pathways with ZVI

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Figure: **4**



Notes:

mV - millivolts

ORP - oxidation reduction potential

ZVI - zero valent iron

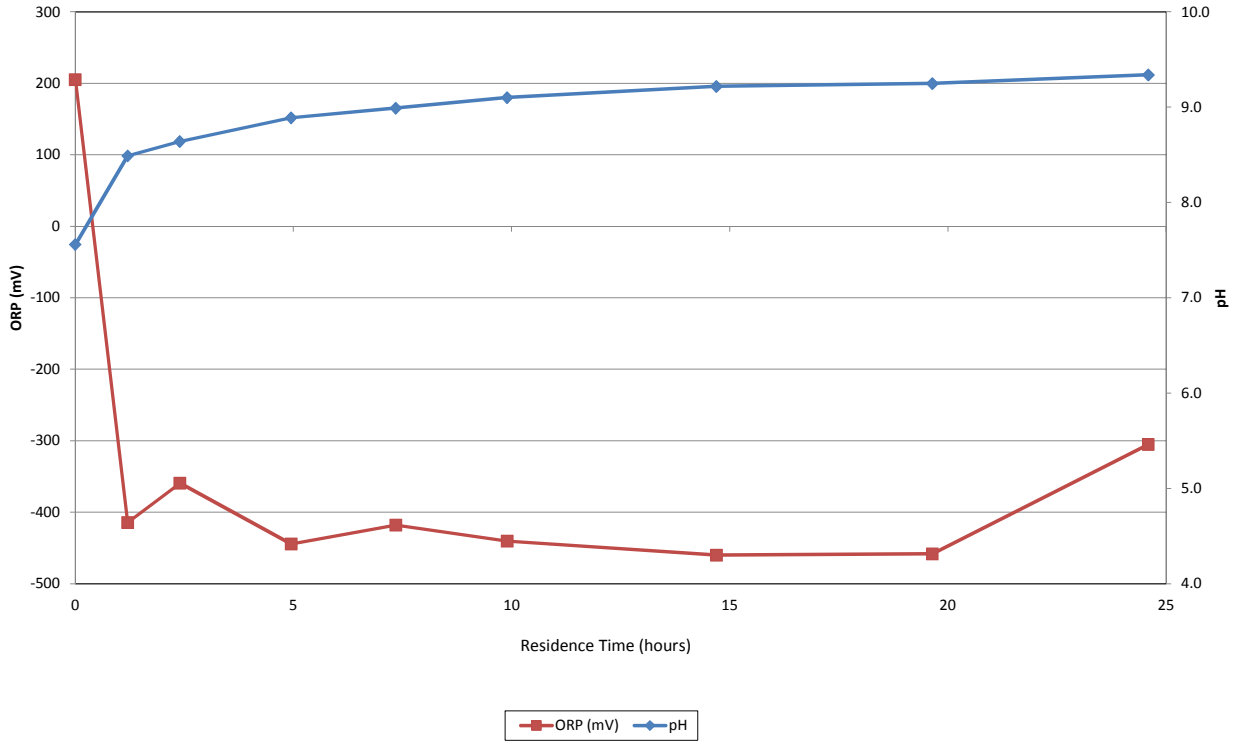
Connelly ZVI Column Water ORP and pH versus Residence Time at End of Study

Scotia Naval Depot Project, Glenville, NY

SiREM

June 2013

Figure: **5**



Notes:

mV - millivolts

ORP - oxidation reduction potential

ZVI - zero valent iron

Peerless ZVI Column Water ORP and pH versus Residence Time at End of Study

Scotia Naval Depot Project, Glenville, NY

SiREM

June 2013

Figure: **6**

APPENDIX A
CHAIN OF CUSTODY DOCUMENTATION

SiREM
Leading Science · Lasting Solutions

Chain-of-Custody Form

130 Research Lane, Suite 2 · Guelph, Ontario, Canada N1G 5G3 · Phone (519) 822-2265 or toll free 1-866-251-1747 Fax (519) 822-3151
www.siremlab.com

№ 2362

Page 1 of 1

Lab # 5-2763

Project Name	Scotia Naval Depot	Project #	102305-R-C
Project Manager	Joe Schmidl		
Email.Address	jschmidl@stone-env.com		
Company	STONE ENV		
Address	535 STONE Cutters Way		
Phone #	802 229 5377	Fax #	802-229-5417
Sampler's Signature		Sampler's Printed Name	Dave Unwin

Analysis

Preservative: O

Preservative Key
0. None
1. HCl
2. Other _____
3. Other _____

Customer Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Gene-Trac Dhc	Gene-Trac VC	Gene-Trac Dhb	Dechlorinase Analysis	Other Information
MW-24	3/4/13	1615	GW	4			X		

Sample Receipt
Cooler Condition: Good.
Cooler Temperature: 6°C
Custody Seals: Yes ☐ No ☒

Billing Information
P.O. # 102305-R-C
Bill To: STONE ENV.

Turnaround Time Requested
Normal ☐
Rush ☐

For Lab Use Only
3 coolers received.
Proposal #: _____

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Dave Unwin	Printed Name: D. Nespoli	Printed Name	Printed Name	Printed Name	Printed Name
Firm: STONE ENV	Firm: SiREM	Firm	Firm	Firm	Firm
Date/Time: 3/4/13 1700	Date/Time: March 5'13 1:30pm	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator: Yellow - Lab Copy: Pink - Retained by Client

№ 2456

Chain-of-Custody Form

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Page 2 of 2

Lab # 135-2763

Project Name	Scotia Naval Depot	Project #	102305-R-C
Project Manager	Joe Schmidl		
Email Address	JSchmidl@Stone-env.com		
Company	Stone Env.		
Address	535 STONE Cutters Way		
Phone #	802 229 5377	Fax #	
Sampler's Signature		Sampler's Printed Name	Dave Linard

Analysis

Preservative

Gene-Trac Dhc | Gene-Trac VC | Gene-Trac Dhb | Destructive Anal. C

Preservative Key
0. None
1. HCl
2. Other _____
3. Other _____

Customer Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Gene-Trac Dhb	Other Information
MW-24	3/4/13	1615	GW	4	X	

Sample Receipt
Cooler Condition: Good.
Cooler Temperature: 6°C
Custody Seals: Yes ☐ No ☒

Billing Information
P.O. # 102305-R-C
Bill To: STONE ENV.

Turnaround Time Requested
Normal ☐
Rush ☐

For Lab Use Only
3 coolers received.
Proposal #: _____

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: David S. Linard	Printed Name: D. Crespoli	Printed Name	Printed Name	Printed Name	Printed Name
Firm: STONE ENV.	Firm: SiREM	Firm	Firm	Firm	Firm
Date/Time: 3/4/13 1700	Date/Time: 3/5/13 1:30pm	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator: Yellow - Lab Copy: Pink - Retained by Client

№ 2455

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www.siremlab.com

Lab # 5-2763

Project Name	Scotia Naval Depot
Project #	102305-R-C
Project Manager	Joe Schmidl
Email Address	jschmidl@stone-env.com
Company	STONE ENV.
Address	535 STONE Cutters Way
Phone #	902-829-5377
Fax #	
Sampler's Signature	
Sampler's Printed Name	David Lhard

Analysis

Preservative					HCl							
	Gene-Trac Dhc	Gene-Trac VC	Gene-Trac Dhb	Destruct. Analysis	VOC							
				4	3							
MW-24				X	X							

Preservative Key
0. None
1. HCl
2. Other _____
3. Other _____

Customer Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Other Information
MW-24	3/4/13	1615	GW	7	

Sample Receipt
Cooler Condition: GOOD.
Cooler Temperature: 6°C
Custody Seals: Yes ☐ No ☒

Billing Information
P.O. # 102305-R-C
Bill To: STONE ENV.

Turnaround Time Requested
Normal ☐
Rush ☐

For Lab Use Only
3 coolers received.
Proposal #: _____

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: David T. Lhard	Printed Name: D. Despot	Printed Name	Printed Name	Printed Name	Printed Name
Firm: STONE ENV	Firm: SiREM	Firm	Firm	Firm	Firm
Date/Time: 3/4/13 1700	Date/Time: March 5'13 1:30pm	Date/Time	Date/Time	Date/Time	Date/Time

Distribution: White - Return to Originator: Yellow - Lab Copy: Pink - Retained by Client

APPENDIX B:
EXTERNAL LABORATORY REPORTS

Your Project #: S-2763 BENCH TEST
Your C.O.C. #: 2459

Attention: Jeff Roberts

SiREM - Site Recovery & Management
130 Research Lane
Suite 2
Guelph, ON
CANADA N1G 5G3

Report Date: 2013/03/07

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B332871
Received: 2013/03/06, 10:15

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Alkalinity	1	N/A	2013/03/06	CAM SOP-00448	SM 2320B
Total Metals Analysis by ICPMS	1	N/A	2013/03/07	CAM SOP-00447	EPA 6020

Remarks:

Maxxam Analytics has performed all analytical testing herein in accordance with ISO 17025 and the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act. All methodologies comply with this document and are validated for use in the laboratory. The methods and techniques employed in this analysis conform to the performance criteria (detection limits, accuracy and precision) as outlined in the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act. Reporting results to two significant figures at the RDL is to permit statistical evaluation and is not intended to be an indication of analytical precision.

The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following the 'Alberta Environment Draft Addenda to the CWS-PHC, Appendix 6, Validation of Alternate Methods'. Documentation is available upon request. Maxxam has made the following improvements to the CWS-PHC reference benchmark method: (i) Headspace for F1; and, (ii) Mechanical extraction for F2-F4. Note: F4G cannot be added to the C6 to C50 hydrocarbons. The extraction date for samples field preserved with methanol for F1 and Volatile Organic Compounds is considered to be the date sampled.

Maxxam Analytics is accredited for all specific parameters as required by Ontario Regulation 153/04. Maxxam Analytics is limited in liability to the actual cost of analysis unless otherwise agreed in writing. There is no other warranty expressed or implied. Samples will be retained at Maxxam Analytics for three weeks from receipt of data or as per contract.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your Project #: S-2763 BENCH TEST
Your C.O.C. #: 2459

Attention: Jeff Roberts

SiREM - Site Recovery & Management
130 Research Lane
Suite 2
Guelph, ON
CANADA N1G 5G3

Report Date: 2013/03/07

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Jolanta Goralczyk, Project Manager
Email: JGoralczyk@maxxam.ca
Phone# (905) 817-5700

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 2

Maxxam Job #: B332871
Report Date: 2013/03/07

SiREM - Site Recovery & Management
Client Project #: S-2763 BENCH TEST

RESULTS OF ANALYSES OF WATER

Maxxam ID		QT2998		
Sampling Date		2013/03/05		
COC Number		2459		
	Units	**S-2763-050313**	**RDL**	**QC Batch**
Inorganics				
Alkalinity (Total as CaCO3)	mg/L	200	1.0	3142902

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B332871
Report Date: 2013/03/07

SiREM - Site Recovery & Management
Client Project #: S-2763 BENCH TEST

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		QT2998		
Sampling Date		2013/03/05		
COC Number		2459		
	Units	**S-2763-050313**	**RDL**	**QC Batch**
Metals				
Total Aluminum (Al)	ug/L	1700	5.0	3143629
Total Antimony (Sb)	ug/L	0.50 U	0.50	3143629
Total Arsenic (As)	ug/L	1.0 U	1.0	3143629
Total Barium (Ba)	ug/L	46	2.0	3143629
Total Beryllium (Be)	ug/L	0.50 U	0.50	3143629
Total Bismuth (Bi)	ug/L	1.0 U	1.0	3143629
Total Boron (B)	ug/L	26	10	3143629
Total Cadmium (Cd)	ug/L	0.10 U	0.10	3143629
Total Calcium (Ca)	ug/L	65000	200	3143629
Total Chromium (Cr)	ug/L	5.0 U	5.0	3143629
Total Cobalt (Co)	ug/L	1.0	0.50	3143629
Total Copper (Cu)	ug/L	7.6	1.0	3143629
Total Iron (Fe)	ug/L	1800	100	3143629
Total Lead (Pb)	ug/L	27	0.50	3143629
Total Lithium (Li)	ug/L	5.2	5.0	3143629
Total Magnesium (Mg)	ug/L	17000	50	3143629
Total Manganese (Mn)	ug/L	89	2.0	3143629
Total Molybdenum (Mo)	ug/L	1.2	0.50	3143629
Total Nickel (Ni)	ug/L	2.0	1.0	3143629
Total Potassium (K)	ug/L	1900	200	3143629
Total Silicon (Si)	ug/L	7800	50	3143629
Total Selenium (Se)	ug/L	2.0 U	2.0	3143629
Total Silver (Ag)	ug/L	0.10 U	0.10	3143629
Total Sodium (Na)	ug/L	19000	100	3143629
Total Strontium (Sr)	ug/L	170	1.0	3143629
Total Tellurium (Te)	ug/L	1.0 U	1.0	3143629
Total Thallium (Tl)	ug/L	0.050 U	0.050	3143629
Total Tin (Sn)	ug/L	1.0 U	1.0	3143629
Total Titanium (Ti)	ug/L	72	5.0	3143629
Total Tungsten (W)	ug/L	1.9	1.0	3143629
Total Uranium (U)	ug/L	0.51	0.10	3143629
Total Vanadium (V)	ug/L	4.0	0.50	3143629

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B332871
Report Date: 2013/03/07

SiREM - Site Recovery & Management
Client Project #: S-2763 BENCH TEST

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		QT2998		
Sampling Date		2013/03/05		
COC Number		2459		
	Units	**S-2763-050313**	**RDL**	**QC Batch**
Total Zinc (Zn)	ug/L	7.8	5.0	3143629
Total Zirconium (Zr)	ug/L	1.4	1.0	3143629

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B332871
Report Date: 2013/03/07

SiREM - Site Recovery & Management
Client Project #: S-2763 BENCH TEST

Test Summary

Maxxam ID QT2998
Sample ID S-2763-050313
Matrix Water

Collected 2013/03/05
Shipped
Received 2013/03/06

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Alkalinity	PH	3142902	N/A	2013/03/06	Surinder Rai
Total Metals Analysis by ICPMS	ICP/MS	3143629	N/A	2013/03/07	Arefa Dabhad

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Maxxam Job #: B332871
Report Date: 2013/03/07

SiREM - Site Recovery & Management
Client Project #: S-2763 BENCH TEST

GENERAL COMMENTS

Results relate only to the items tested.

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SiREM - Site Recovery & Management
Attention: Jeff Roberts
Client Project #: S-2763 BENCH TEST
P.O. #:
Site Location:

Quality Assurance Report

Maxxam Job Number: MB332871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
3142902	SAU	QC Standard	Alkalinity (Total as CaCO3)	2013/03/06		96	%	85 - 115
		Method Blank	Alkalinity (Total as CaCO3)	2013/03/06	1.7, MDL=0.20		mg/L	
		RPD	Alkalinity (Total as CaCO3)	2013/03/06	0.2		%	25
3143629	ADA	Matrix Spike	Total Aluminum (Al)	2013/03/07		100	%	80 - 120
			Total Antimony (Sb)	2013/03/07		111	%	80 - 120
			Total Arsenic (As)	2013/03/07		105	%	80 - 120
			Total Barium (Ba)	2013/03/07		100	%	80 - 120
			Total Beryllium (Be)	2013/03/07		103	%	80 - 120
			Total Bismuth (Bi)	2013/03/07		100	%	80 - 120
			Total Boron (B)	2013/03/07		100	%	80 - 120
			Total Cadmium (Cd)	2013/03/07		104	%	80 - 120
			Total Calcium (Ca)	2013/03/07		NC	%	80 - 120
			Total Chromium (Cr)	2013/03/07		104	%	80 - 120
			Total Cobalt (Co)	2013/03/07		104	%	80 - 120
			Total Copper (Cu)	2013/03/07		104	%	80 - 120
			Total Iron (Fe)	2013/03/07		101	%	80 - 120
			Total Lead (Pb)	2013/03/07		101	%	80 - 120
			Total Lithium (Li)	2013/03/07		101	%	80 - 120
			Total Magnesium (Mg)	2013/03/07		NC	%	80 - 120
			Total Manganese (Mn)	2013/03/07		103	%	80 - 120
			Total Molybdenum (Mo)	2013/03/07		109	%	80 - 120
			Total Nickel (Ni)	2013/03/07		102	%	80 - 120
			Total Potassium (K)	2013/03/07		NC	%	80 - 120
			Total Silicon (Si)	2013/03/07		93	%	80 - 120
			Total Selenium (Se)	2013/03/07		103	%	80 - 120
			Total Silver (Ag)	2013/03/07		99	%	80 - 120
			Total Sodium (Na)	2013/03/07		NC	%	80 - 120
			Total Strontium (Sr)	2013/03/07		106	%	80 - 120
			Total Tellurium (Te)	2013/03/07		102	%	80 - 120
			Total Thallium (Tl)	2013/03/07		103	%	80 - 120
			Total Tin (Sn)	2013/03/07		107	%	80 - 120
			Total Titanium (Ti)	2013/03/07		106	%	80 - 120
			Total Tungsten (W)	2013/03/07		108	%	80 - 120
			Total Uranium (U)	2013/03/07		104	%	80 - 120
			Total Vanadium (V)	2013/03/07		107	%	80 - 120
			Total Zinc (Zn)	2013/03/07		103	%	80 - 120
			Total Zirconium (Zr)	2013/03/07		107	%	80 - 120
		Spiked Blank	Total Aluminum (Al)	2013/03/07		100	%	80 - 120
			Total Antimony (Sb)	2013/03/07		109	%	80 - 120
			Total Arsenic (As)	2013/03/07		103	%	80 - 120
			Total Barium (Ba)	2013/03/07		103	%	80 - 120
			Total Beryllium (Be)	2013/03/07		101	%	80 - 120
			Total Bismuth (Bi)	2013/03/07		105	%	80 - 120
			Total Boron (B)	2013/03/07		100	%	80 - 120
			Total Cadmium (Cd)	2013/03/07		104	%	80 - 120
			Total Calcium (Ca)	2013/03/07		97	%	80 - 120
			Total Chromium (Cr)	2013/03/07		102	%	80 - 120
			Total Cobalt (Co)	2013/03/07		104	%	80 - 120
			Total Copper (Cu)	2013/03/07		105	%	80 - 120
			Total Iron (Fe)	2013/03/07		104	%	80 - 120
			Total Lead (Pb)	2013/03/07		104	%	80 - 120
			Total Lithium (Li)	2013/03/07		101	%	80 - 120
			Total Magnesium (Mg)	2013/03/07		95	%	80 - 120
			Total Manganese (Mn)	2013/03/07		106	%	80 - 120
			Total Molybdenum (Mo)	2013/03/07		105	%	80 - 120

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SiREM - Site Recovery & Management
Attention: Jeff Roberts
Client Project #: S-2763 BENCH TEST
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: MB332871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
3143629	ADA	Spiked Blank	Total Nickel (Ni)	2013/03/07		104	%	80 - 120
			Total Potassium (K)	2013/03/07		92	%	80 - 120
			Total Silicon (Si)	2013/03/07		93	%	80 - 120
			Total Selenium (Se)	2013/03/07		101	%	80 - 120
			Total Silver (Ag)	2013/03/07		100	%	80 - 120
			Total Sodium (Na)	2013/03/07		93	%	80 - 120
			Total Strontium (Sr)	2013/03/07		101	%	80 - 120
			Total Tellurium (Te)	2013/03/07		101	%	80 - 120
			Total Thallium (Tl)	2013/03/07		106	%	80 - 120
			Total Tin (Sn)	2013/03/07		105	%	80 - 120
			Total Titanium (Ti)	2013/03/07		104	%	80 - 120
			Total Tungsten (W)	2013/03/07		108	%	80 - 120
			Total Uranium (U)	2013/03/07		105	%	80 - 120
			Total Vanadium (V)	2013/03/07		107	%	80 - 120
			Total Zinc (Zn)	2013/03/07		105	%	80 - 120
			Total Zirconium (Zr)	2013/03/07		103	%	80 - 120
		Method Blank	Total Aluminum (Al)	2013/03/07	5.0 U, MDL=5.0		ug/L	
			Total Antimony (Sb)	2013/03/07	0.50 U, MDL=0.50		ug/L	
			Total Arsenic (As)	2013/03/07	1.0 U, MDL=1.0		ug/L	
			Total Barium (Ba)	2013/03/07	2.0 U, MDL=2.0		ug/L	
			Total Beryllium (Be)	2013/03/07	0.50 U, MDL=0.50		ug/L	
			Total Bismuth (Bi)	2013/03/07	1.0 U, MDL=1.0		ug/L	
			Total Boron (B)	2013/03/07	10 U, MDL=10		ug/L	
			Total Cadmium (Cd)	2013/03/07	0.10 U, MDL=0.10		ug/L	
			Total Calcium (Ca)	2013/03/07	200 U, MDL=200		ug/L	
			Total Chromium (Cr)	2013/03/07	5.0 U, MDL=5.0		ug/L	
			Total Cobalt (Co)	2013/03/07	0.50 U, MDL=0.50		ug/L	
			Total Copper (Cu)	2013/03/07	1.0 U, MDL=1.0		ug/L	
			Total Iron (Fe)	2013/03/07	50 U, MDL=50		ug/L	
			Total Lead (Pb)	2013/03/07	0.50 U, MDL=0.50		ug/L	
			Total Lithium (Li)	2013/03/07	5.0 U, MDL=5.0		ug/L	
			Total Magnesium (Mg)	2013/03/07	50 U, MDL=50		ug/L	
			Total Manganese (Mn)	2013/03/07	2.0 U, MDL=2.0		ug/L	
			Total Molybdenum (Mo)	2013/03/07	0.55, MDL=0.50		ug/L	
			Total Nickel (Ni)	2013/03/07	1.0 U, MDL=1.0		ug/L	
			Total Potassium (K)	2013/03/07	200 U, MDL=200		ug/L	
			Total Silicon (Si)	2013/03/07	50 U, MDL=50		ug/L	
			Total Selenium (Se)	2013/03/07	2.0 U, MDL=2.0		ug/L	
			Total Silver (Ag)	2013/03/07	0.10 U, MDL=0.10		ug/L	
			Total Sodium (Na)	2013/03/07	100 U, MDL=100		ug/L	
			Total Strontium (Sr)	2013/03/07	1.0 U, MDL=1.0		ug/L	
			Total Tellurium (Te)	2013/03/07	1.0 U, MDL=1.0		ug/L	
			Total Thallium (Tl)	2013/03/07	0.050 U, MDL=0.050		ug/L	
			Total Tin (Sn)	2013/03/07	1.0 U, MDL=1.0		ug/L	
			Total Titanium (Ti)	2013/03/07	5.0 U, MDL=5.0		ug/L	
			Total Tungsten (W)	2013/03/07	1.0 U, MDL=1.0		ug/L	
			Total Uranium (U)	2013/03/07	0.10 U, MDL=0.10		ug/L	
			Total Vanadium (V)	2013/03/07	0.50 U, MDL=0.50		ug/L	
			Total Zinc (Zn)	2013/03/07	5.0 U, MDL=5.0		ug/L	
			Total Zirconium (Zr)	2013/03/07	1.0 U, MDL=1.0		ug/L	
		RPD	Total Aluminum (Al)	2013/03/07	2.7		%	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

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SiREM - Site Recovery & Management
Attention: Jeff Roberts
Client Project #: S-2763 BENCH TEST
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: MB332871

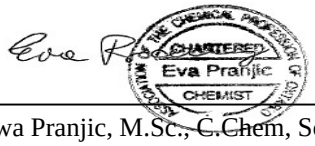
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.

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Validation Signature Page

Maxxam Job #: B332871

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

==========

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Your C.O.C. #: 41083301, 410833-01-01

Attention: Jeff Roberts

SiREM - Site Recovery & Management
130 Research Lane
Suite 2
Guelph, ON
CANADA N1G 5G3

Report Date: 2013/05/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B374366
Received: 2013/05/15, 15:49

Sample Matrix: Water
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Alkalinity	6	N/A	2013/05/23	CAM SOP-00448	SM 2320B
Total Metals Analysis by ICPMS	6	N/A	2013/05/23	CAM SOP-00447	EPA 6020

Remarks:

Maxxam Analytics has performed all analytical testing herein in accordance with ISO 17025 and the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act. All methodologies comply with this document and are validated for use in the laboratory. The methods and techniques employed in this analysis conform to the performance criteria (detection limits, accuracy and precision) as outlined in the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act. Reporting results to two significant figures at the RDL is to permit statistical evaluation and is not intended to be an indication of analytical precision.

The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following the 'Alberta Environment Draft Addenda to the CWS-PHC, Appendix 6, Validation of Alternate Methods'. Documentation is available upon request. Maxxam has made the following improvements to the CWS-PHC reference benchmark method: (i) Headspace for F1; and, (ii) Mechanical extraction for F2-F4. Note: F4G cannot be added to the C6 to C50 hydrocarbons. The extraction date for samples field preserved with methanol for F1 and Volatile Organic Compounds is considered to be the date sampled.

Maxxam Analytics is accredited for all specific parameters as required by Ontario Regulation 153/04. Maxxam Analytics is limited in liability to the actual cost of analysis unless otherwise agreed in writing. There is no other warranty expressed or implied. Samples will be retained at Maxxam Analytics for three weeks from receipt of data or as per contract.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your C.O.C. #: 41083301, 410833-01-01

Attention: Jeff Roberts

SiREM - Site Recovery & Management
130 Research Lane
Suite 2
Guelph, ON
CANADA N1G 5G3

Report Date: 2013/05/24

CERTIFICATE OF ANALYSIS

-2-

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Jolanta Goralczyk, Project Manager
Email: JGoralczyk@maxxam.ca
Phone# (905) 817-5751

==========

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Total cover pages: 2

SiREM - Site Recovery & Management

Maxxam Job #: B374366
Report Date: 2013/05/24

RESULTS OF ANALYSES OF WATER

Maxxam ID		RN8048	RN8049	RN8050	RN8051		
Sampling Date		2013/05/06 13:00	2013/05/06 13:00	2013/05/06 13:00	2013/05/10 13:00		
COC Number		410833-01-01	410833-01-01	410833-01-01	410833-01-01		
	Units	**807-EFF-1 2013/05/06**	**808-EFF-1 2013/05/06**	**COL-INF-1 2013/05/06**	**807-EFF-2**	**RDL**	**QC Batch**
Inorganics							
Alkalinity (Total as CaCO3)	mg/L	11	48	190	10	1.0	3217884

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		RN8052		RN8053		
Sampling Date		2013/05/10 13:00		2013/05/10 13:00		
COC Number		410833-01-01		410833-01-01		
	Units	**808-EFF-2**	**QC Batch**	**COL-INF-2**	**RDL**	**QC Batch**
Inorganics						
Alkalinity (Total as CaCO3)	mg/L	50	3217884	190	1.0	3218126

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B374366
Report Date: 2013/05/24

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		RN8048	RN8049	RN8050	RN8051	RN8052		
Sampling Date		2013/05/06 13:00	2013/05/06 13:00	2013/05/06 13:00	2013/05/10 13:00	2013/05/10 13:00		
COC Number		410833-01-01	410833-01-01	410833-01-01	410833-01-01	410833-01-01		
	Units	**807-EFF-1 2013/05/06**	**808-EFF-1 2013/05/06**	**COL-INF-1 2013/05/06**	**807-EFF-2**	**808-EFF-2**	**RDL**	**QC Batch**
Metals								
Total Aluminum (Al)	ug/L	6.6	5.0 U	21	5.0 U	5.0 U	5.0	3220698
Total Antimony (Sb)	ug/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50	3220698
Total Arsenic (As)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	3220698
Total Barium (Ba)	ug/L	3.8	22	26	4.3	26	2.0	3220698
Total Beryllium (Be)	ug/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50	3220698
Total Bismuth (Bi)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	3220698
Total Boron (B)	ug/L	2500	670	32	2400	580	10	3220698
Total Cadmium (Cd)	ug/L	1.3	0.10 U	0.10 U	1.3	0.10 U	0.10	3220698
Total Calcium (Ca)	ug/L	15000	14000	64000	16000	14000	200	3220698
Total Chromium (Cr)	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0	3220698
Total Cobalt (Co)	ug/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50	3220698
Total Copper (Cu)	ug/L	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0	3220698
Total Iron (Fe)	ug/L	50 U	50 U	50 U	50 U	50 U	100	3220698
Total Lead (Pb)	ug/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50	3220698
Total Lithium (Li)	ug/L	5.0 U	9.5	6.1	5.0 U	9.1	5.0	3220698
Total Magnesium (Mg)	ug/L	3300	9700	18000	4200	9800	50	3220698
Total Manganese (Mn)	ug/L	72	34	48	78	35	2.0	3220698
Total Molybdenum (Mo)	ug/L	82	87	1.2	140	81	0.50	3220698
Total Nickel (Ni)	ug/L	1.7	1.0 U	1.0 U	1.5	1.0 U	1.0	3220698
Total Phosphorus (P)	ug/L	50 U	50 U	50 U	50 U	50 U	100	3220698
Total Potassium (K)	ug/L	1300	1500	1300	1400	1400	200	3220698
Total Silicon (Si)	ug/L	190	510	4300	200	510	50	3220698
Total Selenium (Se)	ug/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0	3220698
Total Silver (Ag)	ug/L	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10	3220698
Total Sodium (Na)	ug/L	20000	20000	20000	22000	20000	100	3220698
Total Strontium (Sr)	ug/L	55	55	150	59	53	1.0	3220698
Total Tellurium (Te)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	3220698
Total Thallium (Tl)	ug/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050	3220698
Total Tin (Sn)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	3220698
Total Titanium (Ti)	ug/L	5.0 U	5.0 U	5.3	5.0 U	5.0 U	5.0	3220698
Total Tungsten (W)	ug/L	1.0 U	1.2	2.5	1.0 U	1.2	1.0	3220698

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B374366
Report Date: 2013/05/24

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		RN8048	RN8049	RN8050	RN8051	RN8052		
Sampling Date		2013/05/06 13:00	2013/05/06 13:00	2013/05/06 13:00	2013/05/10 13:00	2013/05/10 13:00		
COC Number		410833-01-01	410833-01-01	410833-01-01	410833-01-01	410833-01-01		
	Units	**807-EFF-1 2013/05/06**	**808-EFF-1 2013/05/06**	**COL-INF-1 2013/05/06**	**807-EFF-2**	**808-EFF-2**	**RDL**	**QC Batch**
Total Uranium (U)	ug/L	0.10 U	0.10 U	0.44	0.10 U	0.10 U	0.10	3220698
Total Vanadium (V)	ug/L	0.92	0.50 U	0.50 U	0.81	0.50 U	0.50	3220698
Total Zinc (Zn)	ug/L	5.3	5.0 U	5.0 U	5.0 U	5.0 U	5.0	3220698
Total Zirconium (Zr)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	3220698

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B374366
Report Date: 2013/05/24

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		RN8053		
Sampling Date		2013/05/10 13:00		
COC Number		410833-01-01		
	Units	**COL-INF-2**	**RDL**	**QC Batch**
Metals				
Total Aluminum (Al)	ug/L	15	5.0	3220698
Total Antimony (Sb)	ug/L	0.50 U	0.50	3220698
Total Arsenic (As)	ug/L	1.0 U	1.0	3220698
Total Barium (Ba)	ug/L	26	2.0	3220698
Total Beryllium (Be)	ug/L	0.50 U	0.50	3220698
Total Bismuth (Bi)	ug/L	1.0 U	1.0	3220698
Total Boron (B)	ug/L	29	10	3220698
Total Cadmium (Cd)	ug/L	0.10 U	0.10	3220698
Total Calcium (Ca)	ug/L	62000	200	3220698
Total Chromium (Cr)	ug/L	5.0 U	5.0	3220698
Total Cobalt (Co)	ug/L	0.50 U	0.50	3220698
Total Copper (Cu)	ug/L	1.1	1.0	3220698
Total Iron (Fe)	ug/L	50 U	100	3220698
Total Lead (Pb)	ug/L	0.50 U	0.50	3220698
Total Lithium (Li)	ug/L	5.0 U	5.0	3220698
Total Magnesium (Mg)	ug/L	17000	50	3220698
Total Manganese (Mn)	ug/L	46	2.0	3220698
Total Molybdenum (Mo)	ug/L	0.99	0.50	3220698
Total Nickel (Ni)	ug/L	1.0 U	1.0	3220698
Total Phosphorus (P)	ug/L	50 U	100	3220698
Total Potassium (K)	ug/L	1200	200	3220698
Total Silicon (Si)	ug/L	4100	50	3220698
Total Selenium (Se)	ug/L	2.0 U	2.0	3220698
Total Silver (Ag)	ug/L	0.10 U	0.10	3220698
Total Sodium (Na)	ug/L	19000	100	3220698
Total Strontium (Sr)	ug/L	140	1.0	3220698
Total Tellurium (Te)	ug/L	1.0 U	1.0	3220698
Total Thallium (Tl)	ug/L	0.050 U	0.050	3220698
Total Tin (Sn)	ug/L	1.0 U	1.0	3220698
Total Titanium (Ti)	ug/L	5.0 U	5.0	3220698
Total Tungsten (W)	ug/L	2.4	1.0	3220698
Total Uranium (U)	ug/L	0.39	0.10	3220698

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		RN8053		
Sampling Date		2013/05/10 13:00		
COC Number		410833-01-01		
	Units	**COL-INF-2**	**RDL**	**QC Batch**
Total Vanadium (V)	ug/L	0.50 U	0.50	3220698
Total Zinc (Zn)	ug/L	5.0 U	5.0	3220698
Total Zirconium (Zr)	ug/L	1.0 U	1.0	3220698

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B374366
Report Date: 2013/05/24

Test Summary

Maxxam ID RN8048 **Collected** 2013/05/06
Sample ID 807-EFF-1 2013/05/06 **Shipped**
Matrix Water **Received** 2013/05/15

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Alkalinity	PH	3217884	N/A	2013/05/23	Surinder Rai
Total Metals Analysis by ICPMS	ICP/MS	3220698	N/A	2013/05/23	Prempal Bhatti

Maxxam ID RN8049 **Collected** 2013/05/06
Sample ID 808-EFF-1 2013/05/06 **Shipped**
Matrix Water **Received** 2013/05/15

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Alkalinity	PH	3217884	N/A	2013/05/23	Surinder Rai
Total Metals Analysis by ICPMS	ICP/MS	3220698	N/A	2013/05/23	Prempal Bhatti

Maxxam ID RN8050 **Collected** 2013/05/06
Sample ID COL-INF-1 2013/05/06 **Shipped**
Matrix Water **Received** 2013/05/15

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Alkalinity	PH	3217884	N/A	2013/05/23	Surinder Rai
Total Metals Analysis by ICPMS	ICP/MS	3220698	N/A	2013/05/23	Prempal Bhatti

Maxxam ID RN8051 **Collected** 2013/05/10
Sample ID 807-EFF-2 **Shipped**
Matrix Water **Received** 2013/05/15

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Alkalinity	PH	3217884	N/A	2013/05/23	Surinder Rai
Total Metals Analysis by ICPMS	ICP/MS	3220698	N/A	2013/05/23	Prempal Bhatti

Maxxam ID RN8052 **Collected** 2013/05/10
Sample ID 808-EFF-2 **Shipped**
Matrix Water **Received** 2013/05/15

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Alkalinity	PH	3217884	N/A	2013/05/23	Surinder Rai
Total Metals Analysis by ICPMS	ICP/MS	3220698	N/A	2013/05/23	Prempal Bhatti

Maxxam ID RN8053 **Collected** 2013/05/10
Sample ID COL-INF-2 **Shipped**
Matrix Water **Received** 2013/05/15

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Alkalinity	PH	3218126	N/A	2013/05/23	Surinder Rai
Total Metals Analysis by ICPMS	ICP/MS	3220698	N/A	2013/05/23	Prempal Bhatti

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GENERAL COMMENTS

Results relate only to the items tested.

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SiREM - Site Recovery & Management
Attention: Jeff Roberts
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report

Maxxam Job Number: WB374366

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
3217884	SAU	QC Standard	Alkalinity (Total as CaCO3)	2013/05/23		95	%	85 - 115
		Method Blank	Alkalinity (Total as CaCO3)	2013/05/23	0.27 J, MDL=0.20		mg/L	
		RPD	Alkalinity (Total as CaCO3)	2013/05/23	8.7		%	25
3218126	SAU	QC Standard	Alkalinity (Total as CaCO3)	2013/05/23		94	%	85 - 115
		Method Blank	Alkalinity (Total as CaCO3)	2013/05/23	0.22 J, MDL=0.20		mg/L	
		RPD	Alkalinity (Total as CaCO3)	2013/05/23	22.8		%	25
3220698	PBA	Matrix Spike	Total Aluminum (Al)	2013/05/23		124 (1)	%	80 - 120
			Total Antimony (Sb)	2013/05/23		115	%	80 - 120
			Total Arsenic (As)	2013/05/23		104	%	80 - 120
			Total Barium (Ba)	2013/05/23		103	%	80 - 120
			Total Beryllium (Be)	2013/05/23		107	%	80 - 120
			Total Bismuth (Bi)	2013/05/23		100	%	80 - 120
			Total Boron (B)	2013/05/23		107	%	80 - 120
			Total Cadmium (Cd)	2013/05/23		109	%	80 - 120
			Total Calcium (Ca)	2013/05/23		NC	%	80 - 120
			Total Chromium (Cr)	2013/05/23		106	%	80 - 120
			Total Cobalt (Co)	2013/05/23		104	%	80 - 120
			Total Copper (Cu)	2013/05/23		100	%	80 - 120
			Total Iron (Fe)	2013/05/23		105	%	80 - 120
			Total Lead (Pb)	2013/05/23		102	%	80 - 120
			Total Lithium (Li)	2013/05/23		103	%	80 - 120
			Total Magnesium (Mg)	2013/05/23		NC	%	80 - 120
			Total Manganese (Mn)	2013/05/23		106	%	80 - 120
			Total Molybdenum (Mo)	2013/05/23		112	%	80 - 120
			Total Nickel (Ni)	2013/05/23		102	%	80 - 120
			Total Phosphorus (P)	2013/05/23		108	%	80 - 120
			Total Potassium (K)	2013/05/23		105	%	80 - 120
			Total Silicon (Si)	2013/05/23		108	%	80 - 120
			Total Selenium (Se)	2013/05/23		105	%	80 - 120
			Total Silver (Ag)	2013/05/23		102	%	80 - 120
			Total Sodium (Na)	2013/05/23		NC	%	80 - 120
			Total Strontium (Sr)	2013/05/23		NC	%	80 - 120
			Total Tellurium (Te)	2013/05/23		105	%	80 - 120
			Total Thallium (Tl)	2013/05/23		101	%	80 - 120
			Total Tin (Sn)	2013/05/23		111	%	80 - 120
			Total Titanium (Ti)	2013/05/23		110	%	80 - 120
			Total Tungsten (W)	2013/05/23		107	%	80 - 120
			Total Uranium (U)	2013/05/23		104	%	80 - 120
			Total Vanadium (V)	2013/05/23		108	%	80 - 120
			Total Zinc (Zn)	2013/05/23		103	%	80 - 120
			Total Zirconium (Zr)	2013/05/23		113	%	80 - 120
		Spiked Blank	Total Aluminum (Al)	2013/05/23		108	%	80 - 120
			Total Antimony (Sb)	2013/05/23		112	%	80 - 120
			Total Arsenic (As)	2013/05/23		103	%	80 - 120
			Total Barium (Ba)	2013/05/23		104	%	80 - 120
			Total Beryllium (Be)	2013/05/23		108	%	80 - 120
			Total Bismuth (Bi)	2013/05/23		100	%	80 - 120
			Total Boron (B)	2013/05/23		110	%	80 - 120
			Total Cadmium (Cd)	2013/05/23		108	%	80 - 120
			Total Calcium (Ca)	2013/05/23		109	%	80 - 120
			Total Chromium (Cr)	2013/05/23		106	%	80 - 120
			Total Cobalt (Co)	2013/05/23		105	%	80 - 120
			Total Copper (Cu)	2013/05/23		104	%	80 - 120
			Total Iron (Fe)	2013/05/23		106	%	80 - 120
			Total Lead (Pb)	2013/05/23		102	%	80 - 120

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Attention: Jeff Roberts
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: WB374366

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
3220698	PBA	Spiked Blank	Total Lithium (Li)	2013/05/23		103	%	80 - 120
			Total Magnesium (Mg)	2013/05/23		105	%	80 - 120
			Total Manganese (Mn)	2013/05/23		109	%	80 - 120
			Total Molybdenum (Mo)	2013/05/23		109	%	80 - 120
			Total Nickel (Ni)	2013/05/23		105	%	80 - 120
			Total Phosphorus (P)	2013/05/23		107	%	80 - 120
			Total Potassium (K)	2013/05/23		105	%	80 - 120
			Total Silicon (Si)	2013/05/23		106	%	80 - 120
			Total Selenium (Se)	2013/05/23		106	%	80 - 120
			Total Silver (Ag)	2013/05/23		105	%	80 - 120
			Total Sodium (Na)	2013/05/23		107	%	80 - 120
			Total Strontium (Sr)	2013/05/23		108	%	80 - 120
			Total Tellurium (Te)	2013/05/23		105	%	80 - 120
			Total Thallium (Tl)	2013/05/23		101	%	80 - 120
			Total Tin (Sn)	2013/05/23		108	%	80 - 120
			Total Titanium (Ti)	2013/05/23		108	%	80 - 120
			Total Tungsten (W)	2013/05/23		105	%	80 - 120
			Total Uranium (U)	2013/05/23		105	%	80 - 120
			Total Vanadium (V)	2013/05/23		107	%	80 - 120
			Total Zinc (Zn)	2013/05/23		106	%	80 - 120
			Total Zirconium (Zr)	2013/05/23		109	%	80 - 120
		Method Blank	Total Aluminum (Al)	2013/05/23	5.0 U, MDL=5.0		ug/L	
			Total Antimony (Sb)	2013/05/23	0.65, MDL=0.50		ug/L	
			Total Arsenic (As)	2013/05/23	1.0 U, MDL=1.0		ug/L	
			Total Barium (Ba)	2013/05/23	2.0 U, MDL=2.0		ug/L	
			Total Beryllium (Be)	2013/05/23	0.50 U, MDL=0.50		ug/L	
			Total Bismuth (Bi)	2013/05/23	1.0 U, MDL=1.0		ug/L	
			Total Boron (B)	2013/05/23	10 U, MDL=10		ug/L	
			Total Cadmium (Cd)	2013/05/23	0.10 U, MDL=0.10		ug/L	
			Total Calcium (Ca)	2013/05/23	200 U, MDL=200		ug/L	
			Total Chromium (Cr)	2013/05/23	5.0 U, MDL=5.0		ug/L	
			Total Cobalt (Co)	2013/05/23	0.50 U, MDL=0.50		ug/L	
			Total Copper (Cu)	2013/05/23	1.0 U, MDL=1.0		ug/L	
			Total Iron (Fe)	2013/05/23	50 U, MDL=50		ug/L	
			Total Lead (Pb)	2013/05/23	0.50 U, MDL=0.50		ug/L	
			Total Lithium (Li)	2013/05/23	5.0 U, MDL=5.0		ug/L	
			Total Magnesium (Mg)	2013/05/23	50 U, MDL=50		ug/L	
			Total Manganese (Mn)	2013/05/23	2.0 U, MDL=2.0		ug/L	
			Total Molybdenum (Mo)	2013/05/23	0.50 U, MDL=0.50		ug/L	
			Total Nickel (Ni)	2013/05/23	1.0 U, MDL=1.0		ug/L	
			Total Phosphorus (P)	2013/05/23	50 U, MDL=50		ug/L	
			Total Potassium (K)	2013/05/23	200 U, MDL=200		ug/L	
			Total Silicon (Si)	2013/05/23	50 U, MDL=50		ug/L	
			Total Selenium (Se)	2013/05/23	2.0 U, MDL=2.0		ug/L	
			Total Silver (Ag)	2013/05/23	0.10 U, MDL=0.10		ug/L	
			Total Sodium (Na)	2013/05/23	100 U, MDL=100		ug/L	
			Total Strontium (Sr)	2013/05/23	1.0 U, MDL=1.0		ug/L	
			Total Tellurium (Te)	2013/05/23	1.0 U, MDL=1.0		ug/L	
			Total Thallium (Tl)	2013/05/23	0.050 U, MDL=0.050		ug/L	
			Total Tin (Sn)	2013/05/23	1.0 U, MDL=1.0		ug/L	
			Total Titanium (Ti)	2013/05/23	5.0 U, MDL=5.0		ug/L	
			Total Tungsten (W)	2013/05/23	1.0 U, MDL=1.0		ug/L	
			Total Uranium (U)	2013/05/23	0.12, MDL=0.10		ug/L	
			Total Vanadium (V)	2013/05/23	0.83, MDL=0.50		ug/L	
			Total Zinc (Zn)	2013/05/23	5.0 U, MDL=5.0		ug/L	

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Quality Assurance Report (Continued)

Maxxam Job Number: WB374366

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
3220698	PBA	Method Blank	Total Zirconium (Zr)	2013/05/23	1.0 U, MDL=1.0		ug/L	
		RPD	Total Arsenic (As)	2013/05/23	NC		%	20
			Total Barium (Ba)	2013/05/23	2.9		%	20
			Total Boron (B)	2013/05/23	NC		%	20
			Total Cadmium (Cd)	2013/05/23	NC		%	20
			Total Calcium (Ca)	2013/05/23	1.3		%	20
			Total Chromium (Cr)	2013/05/23	NC		%	20
			Total Copper (Cu)	2013/05/23	NC		%	20
			Total Iron (Fe)	2013/05/23	3.4		%	20
			Total Lead (Pb)	2013/05/23	NC		%	20
			Total Magnesium (Mg)	2013/05/23	2.2		%	20
			Total Manganese (Mn)	2013/05/23	1.6		%	20
			Total Potassium (K)	2013/05/23	2.5		%	20
			Total Selenium (Se)	2013/05/23	NC		%	20
			Total Sodium (Na)	2013/05/23	2.8		%	20
			Total Uranium (U)	2013/05/23	3.9		%	20
			Total Zinc (Zn)	2013/05/23	NC		%	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Validation Signature Page

Maxxam Job #: B374366

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Cristina Carriere, Scientific Services

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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APPENDIX L: PERMEABLE REACTIVE BARRIER DESIGN ESTIMATES

Main Transect Vertical Groundwater Profile Results And Alternative 1 Design Calculations

Scotia Naval Depot Site, Glenville, NY

STONE ENVIRONMENTAL INC

Depth	WP06	WP04	WP01	WP02	WP03	WP05	WP07	WP08	WP12	WP13
65							83	27		2.0 U
70	12	100	27	49	71	36	92	68	38	0.20 J
75	3.9	28	22	66	75	57	100	79	37	2.0 U
80	1.2 J	2.3	23	60	90	68	140	84	38	2.0 U
85	2.0 U	0.92 J	17	41	130	160	Low permeability zone	90	34	2.0 U
90	2.0 U	0.30 J	17	66	530 730	270	140	120	33	2.0 U
95	2.0 U	2.0 U	24	93	730	330	170	140	40	
100		2.0 U	3.1	110	10	7.8	1.6 J	180	40	
105		4.9	2.0 U	170	2.0 U	0.91 J	0.35 J	0.78 J	0.23 J	
110			2.0 U	0.76 J		0.55 J	0.27 J	0.10 J		
115		0.92 J 2.0 U	0.3 J	0.21 J	2.0 U 2.0 U	0.43 J	2.0 U	2.0 U	2.0 U 2.0 U	
120		2.0 U	2.0 U	2.0 U	2.0 U	0.37 J	Boring terminated		2.0 U	
125			0.59 J	2.0 U	2.0 U	2.0 U				
130			2.0 U	2.0 U 0.39 J	2.0 U	2.0 U				
135			0.27 J	2.0 U	2.0 U	2.0 U				
140			2.0 U 2.0 U	2.0 U	2.0 U	2.0 U				
145				2.0 U	2.0 U					
150				2.0 U						
155				2.0 U						
160					2.0 U 2.0 U					
165										
170										

Boring terminated (WP06)

Refusal at 120.5 ft (WP04)

Refusal at 141.5 ft (WP01)

Refusal at 129.0 ft (WP02)

Refusal at 153.0 ft (WP02)

Refusal at 94.0 ft (WP03)

Refusal at 146.1 ft (WP03)

Refusal at 164.8 ft (WP03)

Split spoon

Silty sand

Refusal at 142.0 ft (WP05)

Refusal at 113.0 ft (WP08)

Boring terminated (WP07)

Boring terminated (WP12)

Untreated	Treated
12	71
	75
100	90
28	130
	730
4.9	730
27	10
22	36
23	57
17	68
17	160
24	270
	330
49	7.8
66	197.5 Mean
60	14 Count
41	2764.8 Mass
66	
93	
110	5668.287 Total Mass
170	49 % Mass Eliminated
83	26 % Plume treated
92	
100	1.597778
140	
140	
140	
170	
27	
68	
79	
84	
90	
120	
140	
180	
38	
37	
38	
34	
33	
40	
40	
72.6 Mean	
40 Count	
2903.487 Mass	

Vertical Groundwater Profile Results And Alternative 2 Design Calculations
Scotia Naval Depot Site, Glenville, NY

STONE ENVIRONMENTAL INC

Depth	WP06	WP04	WP01	WP02	WP03	WP05	WP07	WP08	WP12	WP13
65							83	27		2.0 U
70	12	100	27	49	71	36	92	68	38	0.20 J
75	3.9	28	22	66	75	57	100	79	37	2.0 U
80	1.2 J	2.3	23	60	90	68	140	84	38	2.0 U
85	2.0 U	0.92 J	17	41	130	160	Low permeability zone	90	34	2.0 U
90	2.0 U	0.30 J	17	66	530 730	270	140	120	33	2.0 U
95	2.0 U	2.0 U	24	93	Refusal at 94.0 ft	330	170	140	40	
100	Boring terminated	2.0 U	3.1	110		7.8	1.6 J	180	40	
105		4.9	2.0 U	170	2.0 U	0.91 J	0.35 J	0.78 J	0.23 J	
110			2.0 U	0.76 J		0.55 J	0.27 J	0.10 J		
115		0.92 J 2.0 U	0.3 J	0.21 J	2.0 U 2.0 U	0.43 J	2.0 U	2.0 U	2.0 U 2.0 U	
120		2.0 U	2.0 U	2.0 U	2.0 U	0.37 J	Boring terminated	Refusal at 113.0 ft	2.0 U	Boring terminated
125		Refusal at 120.5 ft	0.59 J	2.0 U	2.0 U	2.0 U				
130			2.0 U	2.0 U 0.39 J	2.0 U	2.0 U				
135			0.27 J	2.0 U	2.0 U	2.0 U				
140			2.0 U 2.0 U	2.0 U	2.0 U	2.0 U				
145			Refusal at 141.5 ft	2.0 U	2.0 U	Refusal at 142.0 ft				
150				2.0 U 2.0 U	Refusal at 146.1 ft					
155				Refusal at 153.0 ft						
160					2.0 U 2.0 U					
165					2.0 U Refusal at 164.8 ft Split spoon Silty sand					
170										

Untreated	Treated
12	100
38	28
37	27
38	22
34	23
33	17
40	17
40	24
34.0 Mean	
8 Count	49
272 Mass	66
	60
	41
	66
	93
	110
	170
	71
	75
	90
	130
	730
	730
	10
	36
	57
	68
	160
	270
	330
	7.8
	83
	92
	100
	140
	140
	140
	170
	27
	68
	79
	84
	90
	120
	140
	180
	118.5 Mean
	45 Count
	5330.8 Mass

5602.8 Total Mass
95 % Mass Eliminated
85 % Plume treated

APPENDIX M: ZERO-VALENT IRON SPECIFICATION SHEETS

CONNELLY – GPM, INC.

ESTABLISHED 1875
3154 SOUTH CALIFORNIA AVENUE CHICAGO, ILLINOIS 60608-5176
PHONE: (773) 247-7231 • www.ConnellyGPM.com • FAX: (773) 247-7239

March 13, 2008

SCREEN SPECIFICATION
CC-1190

U.S. SCREEN NUMBER (Opening Size)			
8	(2.36 mm)	100%	PASSING
16	(1.18 mm)	98.5-100%	PASSING
30	(0.600 mm)	45-80%	PASSING
50	(0.300 mm)	15-40%	PASSING
100	(0.150 mm)	0-20%	PASSING
200	(0.075 mm)	0-10%	PASSING

MATERIAL WEIGHS APPROXIMATELY 175-195 POUNDS PER CUBIC FOOT

TYPICAL ANALYSIS OF IRON AGGREGATE

Metallic Iron	87-93%
Total Carbon	2.85-3.23
Manganese	0.14-0.60
Sulphur	0.067-0.107
Phosphorous	0.000-0.132
Silicon	1.0-1.85
Nickel	0.05-0.21
Chromium	0.03-0.23
Vanadium	ND
Molybdenum	0.08-0.15
Titanium	0.004-0.1
Copper	0.11-0.20
Aluminum	0-0.005
Cobalt	ND
Magnesium	0.01
Boron	0.01
Zinc	0.01
Zirconium	0.01

GALEN B. DIXON
Technical Director

PEERLESS™

PMP ZERO VALENT IRON AGGREGATE SIZE 14D
New Sieve Specification as of 3/1/13

TYPICAL 5 MINUTE ROTAP

SCREEN SIZE	% PASSING
8	100
16	95 - 100
30	55 - 95
50	15 - 80
100	0 - 20
200	0 - 6

TYPICAL BULK DENSITY 165 to 215 POUNDS PER CUBIC FOOT

PMP IRON AGGREGATES ARE 100% DRY AND OIL FREE

TYPICAL CHEMISTRY:

Element	Percentage
Iron	90+
Carbon	1.5 – 2.5
Silicon	2.00
Manganese	0.60
Sulfur	0.12
Phosphorus	0.14
Nickel	0.20
Chromium	0.20
Molybdenum	0.15
Copper	0.20

3/1/13

Peerless Metal Powders & Abrasive

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(313) 841-5400 Fax (313) 841-0240